218 3/6/69
ANL-7531

and
ACRH-106

688
ANL-7531

and
ACRH-106

MASTER

ARGONNE NATIONAL LABORATORY
and
ARGONNE CANCER RESEARCH HOSPITAL

THE ARGONNE RADIUM STUDIES
Summary of Fundamental Data

Charles E. Miller, Robert J. Hasterlik,
and Asher J. Finkel

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency Thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

The facilities of Argonne National Laboratory are owned by the United States Government. Under the terms of a contract (W-31-109-Eng-38) between the U. S. Atomic Energy Commission, Argonne Universities Association and The University of Chicago, the University employs the staff and operates the Laboratory in accordance with policies and programs formulated, approved and reviewed by the Association.

MEMBERS OF ARGONNE UNIVERSITIES ASSOCIATION

The University of Arizona	Kansas State University	The Ohio State University
Carnegie-Mellon University	The University of Kansas	Ohio University
Case Western Reserve University	Loyola University	The Pennsylvania State University
The University of Chicago	Marquette University	Purdue University
University of Cincinnati	Michigan State University	Saint Louis University
Illinois Institute of Technology	The University of Michigan	Southern Illinois University
University of Illinois	University of Minnesota	University of Texas
Indiana University	University of Missouri	Washington University
Iowa State University	Northwestern University	Wayne State University
The University of Iowa	University of Notre Dame	The University of Wisconsin

LEGAL NOTICE

This report was prepared as an account of Government sponsored work. Neither the United States, nor the Commission, nor any person acting on behalf of the Commission:

A. Makes any warranty or representation, expressed or implied, with respect to the accuracy, completeness, or usefulness of the information contained in this report, or that the use of any information, apparatus, method, or process disclosed in this report may not infringe privately owned rights; or

B. Assumes any liabilities with respect to the use of, or for damages resulting from the use of any information, apparatus, method, or process disclosed in this report.

As used in the above, "person acting on behalf of the Commission" includes any employee or contractor of the Commission, or employee of such contractor, to the extent that such employee or contractor of the Commission, or employee of such contractor prepares, disseminates, or provides access to, any information pursuant to his employment or contract with the Commission, or his employment with such contractor.

Printed in the United States of America

Available from

Clearinghouse for Federal Scientific and Technical Information

National Bureau of Standards, U. S. Department of Commerce

Springfield, Virginia 22151

Price: Printed Copy \$3.00; Microfiche \$0.65

ARGONNE NATIONAL LABORATORY
9700 South Cass Avenue
Argonne, Illinois 60439

and

ARGONNE CANCER RESEARCH HOSPITAL
950 East 59th Street
Chicago, Illinois 60637

THE ARGONNE RADIUM STUDIES
Summary of Fundamental Data

Charles E. Miller, Ph.D.
Argonne National Laboratory

Robert J. Hasterlik, M.D.
Argonne Cancer Research Hospital

Asher J. Finkel, M.D.
Argonne National Laboratory

LEGAL NOTICE

This report was prepared as an account of Government sponsored work. Neither the United States, nor the Commission, nor any person acting on behalf of the Commission:

A. Makes any warranty or representation, expressed or implied, with respect to the accuracy, completeness, or usefulness of the information contained in this report, or that the use of any information, apparatus, method, or process disclosed in this report may not infringe privately owned rights; or

B. Assumes any liabilities with respect to the use of, or for damages resulting from the use of any information, apparatus, method, or process disclosed in this report.

As used in the above, "person acting on behalf of the Commission" includes any employee or contractor of the Commission, or employee of such contractor, to the extent that such employee or contractor of the Commission, or employee of such contractor prepares, disseminates, or provides access to, any information pursuant to his employment or contract with the Commission, or his employment with such contractor.

January 1969

THE ARGONNE RADIUM STUDIES

Summary of Fundamental Data

For the past twenty years a continuing investigation of the long-term effects of radium deposition has been conducted at Argonne National Laboratory and Argonne Cancer Research Hospital. These studies were expanded greatly in 1957 after the discovery of a photograph of 98 dial painters taken in August 1924. The identification and tracing of these and many other persons occupationally exposed to radium, along with those iatrogenically exposed, made possible the collection of a substantial body of data regarding exposure, radium body content, retention patterns, and the medical consequences of such exposure. Essential portions of this information have been placed and stored on computer magnetic tape in a standard format in order to facilitate rapid retrieval of selected data.

The corpus of information condensed and summarized in this report represents an information retrieval dated January 1, 1969. The material summarized here has been developed primarily by the present investigators. Some information gathered on these same patients by other investigators (W. B. Looney, R. D. Evans, A. M. Brues, W. P. Norris, L. D. Marinelli, P. F. Gustafson, and A. F. Stehney) has been included, along with some more recent data from autoradiographic and microradiographic analyses of bone specimens (R. E. Rowland) and radiochemical analyses of bone and teeth (H. F. Lucas and R. B. Holtzman). The contributions of these investigators are clearly denoted. The work of each investigator is also cited by reference to the published literature.

The determinations of radium body content were made principally by Charles E. Miller, utilizing the human gamma-ray spectrometer of the Argonne National Laboratory Health Division and the measurement techniques that he developed. Each patient's radium content was measured by means of the tilting-chair technique and many were also measured with the 7-crystal-position technique. In some cases field measurements (so designated) had to be made in homes, hospitals, and mortuaries because the patient could not be transported to a total-body counter. Measurements on some patients were made in the whole-body counter either at Argonne Cancer Research Hospital or, through the kindness of Dr. W. Blahd, at the Veterans Administration Center, Los Angeles.

All radiographs reported herein were read and interpreted by Robert J. Hasterlik and Asher J. Finkel, who devised a method of evaluation and quantitative scoring of the skeletal radiographs. After some modifications mutually arrived at in consultations between our group and Dr. J. Gary, Boston, radiologist for the Massachusetts Institute of Technology Radioactivity Center, a uniform scoring system was adopted by both groups.

An interchange of selected sets of x-rays between the MIT and the Argonne groups demonstrated that agreement exists in the application of the scoring system and that it has, in fact, been uniformly applied to all radiographic studies by both groups of investigators. All radiographs were read without knowledge of the patient's radium content.

In presenting this summary of the raw data the authors trust that the information will be of value to other scientists, contemporary and future, who will be interested in the long-term consequences of internal radium deposition in a unique population whose exposure occurred 35 to 50 years ago. Publication in this format is timely even though the study may not be completed until perhaps another 20 or 25 years have elapsed. The present compilation will be followed shortly by an interpretive monograph dealing with the findings and their significance.

It should be noted that the present compilation includes only those persons about whom we have developed some scientific data. There is a list of names to whom numbers have been assigned that have not been studied because of refusal to cooperate or because they were occupationally exposed after 1930 and consequently acquired body contents in the domain of 10^{-9} curies of radium. These two groups account for the gaps in the serial numbering of the patients included in this report.

Finally, it should be recognized that the present report is the result of the patient and perspicacious work of Mrs. Irene D. Sweet who helped trace and interview the patients, who converted the raw data into a form adaptable for magnetic tape storage, and who was responsible for the organization and collation of the data.

Acknowledgments

The authors wish to thank the many persons who helped with this study. Foremost among these are the patients themselves, who graciously cooperated with the investigators, as well as their personal physicians and dentists, too numerous to mention. Special thanks are given to Dr. W. Tuteur of Elgin State Hospital and Dr. R. J. Graff of Manteno State Hospital, Illinois for their interest and cooperation, and to Mr. C. H. Wallhausen, U.S. Radium Corporation, New York City, for making old records available to us. Technical help was provided by O. J. Steingraber, J. B. Corcoran, and C. A. Priess who worked with the Argonne whole-body counter. Members of the Argonne National Laboratory Health Division staff, particularly Miss Wren Watkins, R.N., and Miss Alma Ruckdashel, R.N., along with the other nurses, medical technologists, and secretaries, were of enormous help. We acknowledge the interest and encouragement of Dr. A. M. Brues, Dr. J. E. Rose, and Mr. L. D. Marinelli in these studies. To these many persons we publicly acknowledge our debt and gratitude.

A STATEMENT ON FORMAT

The pertinent data for each case have been organized according to the format which follows. Each line of the printout has a code number in the last ten columns on the right to permit any particular piece of data on any patient to be retrieved quickly by computer technique.

The first two digits of the code number (i.e., 03) refer to patients that comprise the Argonne National Laboratory-Argonne Cancer Research Hospital series. The numerals 09 refer to a group of patients occupationally exposed to radium in Pittsburgh, Pennsylvania and studied either at the Massachusetts Institute of Technology Radioactivity Center or at Argonne.

The next three digits (i.e., 401, 402) are a specific identification number assigned to each individual patient. Patients administered radium iatrogenically as a therapeutic procedure at the Elgin State Hospital in 1931 are assigned numbers in the 100 series. Other patients administered radium orally or parenterally by their physicians, principally in the Chicago area, as a form of medical therapy during the period about 1920 to 1930 comprise the 200 series. The 300 series has been left unassigned for further iatrogenic patients as they are identified. All persons occupationally exposed, such as dial painters, radium chemists, janitors, and office workers, are assigned numbers in the 400 through 900 series. In the case of the Pittsburgh series the numbers were assigned sequentially beginning with 001 and include only occupationally exposed persons.

The last two digits of the code number and the letter following (i.e., 01, 02, 02A) refer to the particular categories of information outlined on the format sheet. Categories 01 through 05 are self-explanatory, and, of course, are listed only if the patient died (with identifying numbers omitted in this printout). Category 09 lists causes of death and may contain two entries. The first is always the causes of death as officially stated on the death certificate by the attending physician. In some instances this listing is at variance with the true causes of death, in which case another listing follows that gives causes of death proposed by us on the basis of additional information and interpretation, and is identified by the word, "actual."

Category 10 is concerned with the source of the case, i.e., the manner by which the patient came to our attention. In the case of the occupationally exposed, this will have been for the most part by our search; however, in some instances more than one source may appear. Category 11 lists the principal literature references to that patient. Category 12 gives the type of exposure. Category 13 outlines the details of radium acquisition by the patient. In the case of those administered radium therapeutically it will contain information concerning the physician involved, date of administration, type of medication, and, where known, amount of radium

administered. For those occupationally exposed, this category will contain information concerning the actual factory involved, alleged dates of employment, job activity, and work habits (tipping of brush with lips).

Category 14 lists pertinent items concerning the details of medical administration of radium to the Elgin State Hospital patients and a summary of their medical histories. Categories 15 through 20 should be self-explanatory. Categories 21 through 24 are reserved for elaboration of the medical history.

The date of a specific gamma-ray measurement and the amount of radium B and radium C present in the patient, as determined by total-body count, are given in category 25. The date of the radon breath determination and the amount of radium in the body from which radon escapes into the breath are given in category 26. The total amount of ^{226}Ra present in the body, as calculated from the gamma-ray measurement, is given in category 27, and as calculated from the breath measurement, in category 28. The assumed ratio of radium B and radium C in the body to total-body radium, which is used to calculate the total-body radium, is given in the last column of category 27, while the assumed ratio of radon in the breath to total-body radium, which is used to calculate the total-body radium from the breath measurement, is given in the last column of category 28. The date on which the calculated maximum body burden occurred in each patient and the magnitude of this body burden is assigned to category 29, but has been omitted from this printout.

Categories 30A-D yield a summary of the analysis of the skeletal radiographs and special mastoid or paranasal sinus laminagraphy. The radiographic interpretation has been written in detail and is on file at the Argonne National Laboratory. Categories 31 through 39 are reserved for repeat radiographic examinations. Categories 40 through 49 report hematologic studies.

Categories 50-50A contain an inventory of tissue samples on hand, which are available for future use and study. Categories 51 through 59 summarize other studies done on various specimens, for the most part osseous tissues, collected in the course of our studies.

Category 60 is of especial importance since it lists tumor diagnoses as established by competent authority. Categories 61 through 64 are at present unassigned. Category 65 lists blood dyscrasias as established by competent authority from examination of blood smears or tissue, or from the best interpretation of available clinical history and data. Categories 66 and 67 list all surgical procedures sustained by the patient or diseases previously or now present. The listing is according to that of the American Medical Association Standard Nomenclature of Diseases (1961), and the numerals to the left of the diagnosis refer to the Standard Nomenclature's

numerical coding of the condition. All diagnoses in which the condition is believed, on the basis of present knowledge, to be related to the patient's body content of radium are placed in category 66, and all diagnoses believed not to be related to radium deposition are in category 67.

Where an autopsy report is on file at Argonne National Laboratory or the Argonne Cancer Research Hospital, this is so stated in category 70, and where primary tumor diagnostic slides or the slides from the autopsy are filed at these institutions, this is so stated under categories 71 and 72. Categories 73 through 88 are reserved for studies of radium content of teeth.

Category 89 lists the notation "not studied." This publication, however, contains data on only those patients who have been studied. In addition, there exists a number of individuals who were former dial painters who have been assigned code numbers but are not listed in this study because of the fragmentary nature of the data available.

Categories 91 through 98 are reserved for additional data derived during the course of these studies, and category 99 completes the tabulation with the last date on which data were added or revised. A listing of all abbreviations used in this compilation follows.

LIST OF ABBREVIATIONS

A, B, C, D, etc. in category 27 refer to literature citations in category 11.

ACRH	Argonne Cancer Research Hospital
AJF	Asher J. Finkel
AMBH	Albert Merritt Billings Hospital (The University of Chicago)
AMP	Amputated
ANL	Argonne National Laboratory
B	Basophils
BIM	Division of Biological and Medical Research, ANL
BR RADON	Breath radon
CALC	Calculated
CEM	Charles E. Miller
CVA	Cerebrovascular accident
DEC	Deceased
DIFF	Differential white cell count
E	Eosinophils
HD	Health Division, ANL
HFL	Henry F. Lucas, Jr.
HG	Hemoglobin
HGS	Human gamma-ray spectrometer
HTC	Hematocrit = packed cell volume
INVEST	Investigator
L	Lymphocytes
LASL	Los Alamos Scientific Laboratory
LW	Living and well
LOC	Location
M	Monocytes
MISC	Miscarriage
MIT	Massachusetts Institute of Technology Radioactivity Center
MONG	Mongolism
MVD	Marvin Van Dilla

NCI	Nanocurie = 10^{-9} curie
P	Polymorphonuclear leucocytes
PCI	Picocurie = 10^{-12} curie
PFG	Philip F. Gustafson
PPF	Pertinent positive findings
RA RET	Radon retention factor
RBC	Red blood cell count
RBH	Richard B. Holtzman
RER	Robert E. Rowland
RJH	Robert J. Hasterlik
RPY	Radiological Physics Division, ANL
7-CRYST- POS	Seven-crystal-position technique for whole-body gamma-ray spectrometry
ST	Stab cells = white blood cells in band stage
TL	Thorium C"
TS	Thomas Speckman
U OF C	The University of Chicago Clinics
U OF ILL RES. HOSP.	Research & Educational Hospital, University of Illinois
U OF MO	University of Missouri
UCI	μCi = microcurie
UUCI/G	$\mu\mu\text{Ci/g}$ = micromicrocurie/gram
UUG/G	$\mu\mu\text{g/g}$ = micromicrogram/gram
VA LA	Veterans Administration, Los Angeles, Radioisotope Service whole-body counter
WBC	White blood cell count
WPN	William P. Norris

FORMAT

03-000	NAME	BIRTHDATE	03-000-01
	ADDRESS, OR DECEASED	TELEPHONE	02
	IF DECEASED, FORMER ADDRESS		02A
	MAIDEN NAME		03
	OTHER NAMES		04
	SEX		05
	SOC.SEC.NO.		
OTHER PERTINENT NOS.			05A
DECEASED DATE	AT HOSPITAL OR HOME, CITY, STATE		06
DEATH CERT.NO.	AUTOPSY		07
INTERMENT			08
CAUSES OF DEATH			09
SOURCE OF CASE	SEARCH BY		10
	SYMPTOMS		
	REFERRED BY		
	KNOWN FROM LITERATURE ONLY		
	OTHER (SPECIFY)		
LITERATURE CITATION			11
EXPOSURE	DIAL PAINTER	01	12
	RA CHEMIST OR LAB WORKER	02	
	OTHER OCCUP., SPECIFY	03	
	THERAPEUTIC--ORAL	04	
	THERAPEUTIC--INJECTION	05	
	THERAPEUTIC--OTHER	06	
	UNKNOWN	07	
SOURCE			13
SOURCE AND MEDICAL RECORD	(ELGIN GROLP)		14
FAMILY HISTORY			15
MARRIED	PARA	GRAVIDA	15A
HUSBAND	BIRTH	HEALTH	15B
CHILDREN	SEX	BIRTH	HEALTH
			16
MEDICAL HISTORY			20
GAMMA-RAY MEASUREMENTS			25
DATE	NUCLIDE	AMOUNT	TECHNIQUE
			INVEST.
			25A
BREATH MEASUREMENTS			26
DATE	NUCLIDE	AMOUNT	TECHNIQUE
			INVEST.
			26A
COMPUTED TOTAL-BODY RADIUM			27
DATE	GAMMA-RAY	BR. RADON	TOTAL
			RA.RET.
			27A
TOTAL-BCDY RADIUM COMPUTED FROM BREATH RADON			28
DATE	BR. RADON	TOTAL	RA.RET.
			28A
ESTIMATED DATE AND AMOUNT OF MAXIMUM BODY BURDEN			29

X-RAY EXAMINATION		30
TYPE		30A
DATE	WHERE	30B
GENERAL IMPRESSION	X-RAY NO.	30C
PERTINENT POSITIVE FINDINGS	LOC.	30D
CLINICAL LABORATORY FINDINGS		40
DATE	HG	40A
WBC	HTC	40B
DIFF. P	ST	40C
OTHER PROCEDURES OR REMARKS	L	
	RBC	
	M	
	E	
	B	
SPECIMENS AVAILABLE		50
TISSUE	AMOUNT	50A
	LOC.	
	CUSTODIAN	
RADIOCHEMICAL ANALYSIS		51
DATE	TISSUE	51A
G ASH	UUG/G ASH RA-226	51B
	UUCI/G ASH TH-228	
MICRORADIOGRAPHIC ANALYSIS		52
DATE	TISSUE	52A
	RESULTS	
	INVEST.	
AUTORADIOGRAPHIC ANALYSIS		53
DATE	TISSUE	53A
MAXIMUM HOT SPOT	PCI RA-226/MG BONE	53B
CYTOGENETIC ANALYSIS		54
DATE	TISSUE	54A
	RESULTS	
	INVEST.	
OTHER ANALYSES		55
MALIGNANT TUMOR		60
BLOOD DYSCRASIAS		65
000 -0000 DISEASE	(RADIUM)	66
000 -0000 DISEASE	(NON-RADIUM)	67
AUTOPSY REPORT AT ANL		70
PRIMARY TUMOR SLIDE AT ANL		71
AUTOPSY SLIDE AT ANL		72
TOOTH MEASUREMENT		73
SAMPLE	TOOTH	73A
TOTAL WT.	CALC.GMS.CA.	73B
ADDITIONAL INFORMATION		91
DATA REVISED (DATE)		99

PATIENT C3-101	BCRN 11-04-08	03-101-01
FEMALE		03-101-02
		03-101-05
OTHER PERTINENT NOS.	CASE A	03-101-05A
SOURCE OF CASE	ELGIN 05	03-101-10
LITERATURE CITATION		03-101-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE A.		03-101-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE A.		03-101-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE A.		03-101-11C
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA, VIENNA (1962). CASE C3-101.		03-101-11D
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 279, IAEA, VIENNA (1962). CASE A.		03-101-11E
MILLER, ANL-6839 (1964) PP. 18-39. CASE 03-101.		03-101-11F
MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE 03-101.		03-101-11G
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-101.		03-101-11H
		03-101-11I
		03-101-11J
EXPOSURE	THERAPEUTIC--INJECTION 05	03-101-12
SOURCE AND HOSPITAL RECORD		03-101-14
ADMITTED ELGIN STATE HOSPITAL 05-16-30. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL 150 UCI, BETWEEN MARCH AND JULY, 1931.		03-101-14A
AGE 23 AT INJECTION. HOSPITAL RECORD--		03-101-14B
01-12-31 IN ANNEX 4.		03-101-14C
06-24-31 IN WING COTTAGE.		03-101-14D
09-08-31 WING COTTAGE 2. RECEIVING RADIUM CHLORIDE WEEKLY.		03-101-14E
09-28-31 IS RECEIVING RADIUM CHLORIDE INTRAVENOUSLY.		03-101-14F
11-17-31 WING COTTAGE, RECEIVING RADIUM CHLORIDE.		03-101-14G
(NOTE THAT ABOVE DATES CONTRADICT PUBLISHED MARCH TO JULY INJECTION DATES.)		03-101-14H
		03-101-14I
		03-101-14J
FAMILY HISTORY		03-101-15
NEVER MARRIED		03-101-15A
MEDICAL RECORD		03-101-20
DIAGNOSED DEMENTIA PRAECOX AT ELGIN STATE HOSPITAL. PATIENT		03-101-20A
REMAINED WELL UNTIL 1940, AT WHICH TIME BECAUSE OF ORTHOPEDIC		03-101-20B
DIFFICULTIES RADIOGRAPHS WERE MADE AT ELGIN STATE HOSP. OF BOTH		03-101-20C
FEMORA AND WERE REPORTED AS SHOWING OLD OSTEOCHONDritis. OVER THE		03-101-20D
YEARS PATIENT HAS DEVELOPED A WADDLING GAIT.		03-101-20E
GAMMA-RAY MEASUREMENTS		03-101-25
07-30-59 RAB,RAC C.495 UCI HGS 1 TILTING CHAIR CEM		03-101-25E
03-10-60 RAB,RAC C.521 UCI HGS 1 TILTING CHAIR CEM		03-101-25F
12-17-63 RAB,RAC C.384 UCI HGS 1 TILTING CHAIR CEM		03-101-25G
12-17-63 RAB,RAC C.490 UCI HGS 1 7-CRYST-POS CEM		03-101-25H
BREATH MEASUREMENTS		03-101-26
03-10-60 EM-222 1.0 UCI BREATH RACON HELMET HFL		03-101-26F

COMPUTED TOTAL-BODY RADIUM

12-31	1.00 UCI	7.20 UCI	8.20 UCI TOTAL	SCHLUNDT A	03-101-27
06-32	0.90 UCI	2.50 UCI	3.40 UCI TOTAL	SCHLUNDT A	03-101-27A
05-51	0.57 UCI	1.04 UCI	1.61 UCI TOTAL	NORRIS B	03-101-27B
07-53	0.60 UCI	1.15 UCI	1.75 UCI TOTAL	NORRIS B	03-101-27C
07-30-59	0.495 UCI		1.596 UCI TOTAL		03-101-27D
03-10-60	0.521 UCI		1.680 UCI TOTAL		03-101-27E
12-17-63	0.384 UCI		1.242 UCI TOTAL		03-101-27F
12-17-63	0.490 UCI		1.580 UCI TOTAL		03-101-27G

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON

03-10-60	1.0 UCI	1.449 UCI TOTAL	0.69	03-101-28
				03-101-28F

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

05-11-51	ELGIN STATE HOSP.	LOC. ACRH		03-101-30
			SCORE 10	03-101-30A
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.			03-101-30B
	PPF PATCHY BONE SCLEROSIS IN NECK OF RIGHT HUMERUS, NECK OF LEFT HUMERUS, AT SITE OF OLD PROXIMAL EPIPHYSEAL LINES. ASEPTIC NECROSIS OF HEADS OF BOTH FEMORA WITH MARKED SECONDARY HYPERTROPHIC OSTEOARTHRITIC CHANGES ABOUT BOTH HIP JOINTS.			03-101-30C
				03-101-30D
				03-101-30E
				03-101-30F
				03-101-30G

PARTIAL SKELETAL SURVEY

07-23-53	ELGIN STATE HOSP.	LOC. ACRH		03-101-31A
			SCORE 12	03-101-31B
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.			03-101-31C
	PPF MULTIPLE UP TO 5 MM SIZE LINEAR AREAS OF BONE RESORPTION PRESENT IN THE CORTICES OF BOTH TIBIAE AND FIBULAE. MARKED PROGRESSION IN FRAGMENTATION, COMPRESSION, AND RESORPTION OF HEADS OF BOTH FEMORA.			03-101-31D
				03-101-31E
				03-101-31F
				03-101-31G

PARTIAL SKELETAL SURVEY

12-05-55	ELGIN STATE HOSP.	LOC. ACRH		03-101-32A
			SCORE 12	03-101-32B
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.			03-101-32C
	PPF COARSENING OF TRABECULAR PATTERN OF PELVIS, TIBIAE AND FIBULAE UNCHANGED, FURTHER PROGRESSION IN RESORPTION OF HEADS OF THE FEMORA. SOME INCREASES IN PATCHY SCLEROSIS IN REGION OF NECK AND GREATER TROCHANTER OF RIGHT FEMUR AND A FEW UP TO 8 MM SIZE AREAS OF BONE RESORPTION IN THE PROXIMAL THIRD OF SHAFT OF LEFT FEMUR. PATCHY SCLEROSIS IN HEAD OF LEFT HUMERUS.			03-101-32D
				03-101-32E
				03-101-32F
				03-101-32G
				03-101-32H
				03-101-32I

COMPLETE SKELETAL SURVEY

08-22-58	ELGIN STATE HOSP.	LOC. ACRH		03-101-33A
			SCORE 14	03-101-33B
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.			03-101-33C
	PPF PROGRESSION OF SCLEROTIC CHANGES IN HEAD OF RIGHT HUMERUS WITH ROUGHENING AND FLATTENING OF SUPERIOR ARTICULAR SURFACE OF THIS HUMERUS. SIMILAR CHANGES IN HEAD OF LEFT HUMERUS. FURTHER RESORPTION OF HEAD OF RIGHT AND LEFT FEMORA WHICH ARE NOW ALMOST COMPLETELY RESORBED. INCREASE IN PATCHY SCLEROSIS IN NECK AND GREATER TROCHANTER REGIONS OF BOTH FEMORA. NO FURTHER CHANGES IN TIBIAE AND FIBULAE.			03-101-33D
				03-101-33E
				03-101-33F
				03-101-33G
				03-101-33H
				03-101-33I
				03-101-33J

COMPLETE SKELETAL SURVEY

12-18-63	ANL	X-RAY NO. R-229	LOC. ANL	03-101-34A
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18				03-101-34B
PPF PROGRESSIVE DESTRUCTIVE CHANGES IN HEAD OF RIGHT HUMERUS				03-101-34C
WITH LESSER CHANGES IN HEAD OF LEFT HUMERUS. COARSENING OF				03-101-34D
TRABECULAR PATTERN OF RIGHT AND LEFT RADIUS AND ULNA. SEVERAL				03-101-34E
AREAS OF BONE RESORPTION PRESENT IN THE CARPAL CAPITATE BONE.				03-101-34F
PROGRESSION IN RESORPTION OF HEADS OF BOTH FEMORA WITH MULTIPLE				03-101-34G
AREAS OF BONE RESORPTION PRESENT IN NECK OF BOTH FEMORA. MARKED				03-101-34H
COARSENING IN NUMBER OF AND SIZE OF LINEAR AREAS OF BONE RESORP-				03-101-34I
TION PRESENT IN THE MID. PORTION OF SHAFTS OF BOTH TIBIAE AND				03-101-34J
FIBULAE.				03-101-34K
				03-101-34L

CLINICAL LABORATORY FINDINGS

09-22-32	HG 98	HTC	RBC 4.9					03-101-40
WBC 9,500	DIFF. P 62	ST 2	L 35	M	E	B		03-101-40A
								03-101-40B
09-06-49	HG 14.5	HTC	RBC 3.94					03-101-41A
WBC 11,600	DIFF. P 43	ST 4	L	M	E	B		03-101-41B
1951	HG 12.5	HTC	RBC 4.50					03-101-42A
12-18-63	HG 13.3	HTC 43	RBC 4.48					03-101-43A
WBC 12,400	DIFF. P 76	ST	L 21	M 3	E	B		03-101-43B

2301 -4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE HUMERUS (LEFT,RIGHT)	03-101-66
23113-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE RADIUS	03-101-66A
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT,RIGHT)	03-101-66B

000 -X20	SCHIZOPHRENIC REACTION, NOT OTHERWISE SPECIFIED	03-101-67
----------	---	-----------

DATA REVISED 11-01-68	03-101-99
-----------------------	-----------

PATIENT 03-102	BORN	05	03-102-01
			03-102-02
			03-102-02A
MALE			03-102-05
OTHER PERTINENT NOS.	CASE B		03-102-05A
SOURCE OF CASE	ELGIN 05		03-102-10
LITERATURE CITATION			03-102-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE B.			03-102-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE B.			03-102-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE B.			03-102-11C
MILLER, ANL-6839 (1964) PP. 18-39. CASE 03-102.			03-102-11D
MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE 03-102.			03-102-11E
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-102.			03-102-11F
EXPOSURE	THERAPEUTIC--INJECTION	05	03-102-12
SOURCE AND HOSPITAL RECORD			03-102-14
ADMITTED ELGIN STATE HOSPITAL 10-10-30. RECEIVED RADIUM CHLORIDE			03-102-14A
INTRAVENOUSLY, TOTAL 150 UCI, BETWEEN MARCH AND JULY 1931. AGE			03-102-14B
26 AT INJECTION. TRANSFERRED MANTENC STATE HOSPITAL 08-15-35.			03-102-14C
RADIUM NEVER MENTIONED IN HOSPITAL RECORD.			03-102-14D
MEDICAL HISTORY			03-102-20
DIAGNOSED DEMENTIA PRAECOX, HEBEPHRENIC TYPE AT ELGIN STATE HOSP.			03-102-20A
GAMMA-RAY MEASUREMENTS			03-102-25
11-17-60 RAB,RAC 0.212 UCI HGS 1 TILTING CHAIR CEM			03-102-25D
02-18-64 RAB,RAC 0.207 UCI HGS 1 TILTING CHAIR CEM			03-102-25E
02-18-64 RAB,RAC 0.209 UCI HGS 1 7-CRYST-POS CEM			03-102-25F
COMPUTED TOTAL-BODY RADIUM			03-102-27
12-31 0.60 UCI 5.40 UCI 6.00 UCI TOTAL SCHLUNDT A			03-102-27A
06-32 0.30 UCI 2.80 UCI 3.10 UCI TOTAL SCHLUNDT A			03-102-27B
05-51 0.11 UCI 0.39 UCI 0.50 UCI TOTAL NORRIS B			03-102-27C
11-17-60 0.212 UCI 0.684 UCI TOTAL 0.31			03-102-27D
02-18-64 0.207 UCI 0.668 UCI TOTAL 0.31			03-102-27E
02-18-64 0.209 UCI 0.673 UCI TOTAL 0.31			03-102-27F
X-RAY EXAMINATION			03-102-30
PARTIAL SKELETAL SURVEY			03-102-30A
05-09-51 ELGIN STATE HOSP. NO. LOC. ACRH			03-102-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1			03-102-30C
PPF SOLITARY 7 MM SIZE AREA OF BONE RESORPTION PRESENT IN THE			03-102-30D
CORTEX OF THE DISTAL END OF THE LEFT TIBIA.			03-102-30E

COMPLETE SKELETAL SURVEY 03-102-31A
 11-17-60 ANL X-RAY NO. R-214 LOC. ANL 03-102-31B
 MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10 03-102-31C
 PPF MULTIPLE UP TO 3 MM SIZE AREAS OF BONE RESORPTION SCATTERED 03-102-31D
 THROUGHOUT THE CALVARIUM. MULTIPLE UP TO 15 MM SIZE AREAS OF BONE 03-102-31E
 RESORPTION SCATTERED THROUGHOUT THE SHAFTS OF RIGHT AND LEFT RA- 03-102-31F
 DIUS AND ULNA. COARSENING OF TRABECULAR PATTERN OF RIGHT AND LEFT 03-102-31G
 TIBIA. MULTIPLE UP TO 15 MM SIZE AREAS OF BONE RESORPTION THROUGH- 03-102-31H
 OUT BOTH FIBULAE. 03-102-31I

COMPLETE SKELETAL SURVEY 03-102-32A
 02-18-64 ANL X-RAY NO. R-214B LOC. ANL 03-102-32B
 MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 8 03-102-32C
 PPF MULTIPLE DENSELY CALCIFIED GRANULOMAS SCATTERED THROUGHOUT 03-102-32D
 BOTH UPPER PULMONARY LOBES AND RIGHT LOWER LOBE. LEFT HILAR 03-102-32E
 INFILTRATE. NO CHANGE IN BONY LESION SINCE LAST EXAMINATION 03-102-32F
 EXCEPT FOR SMALL AREA OF BONE RESORPTION IN RIGHT TARSAL SCAPHOID 03-102-32G
 AND THE ASTRAGALUS. 03-102-32H

CLINICAL LABORATORY FINDINGS 03-102-40
 11-17-60 HG 15.7 HTC 1 RBC 5.24 03-102-40A
 WBC 7900 DIFF. P 53 ST 1 L 36 M 7 E 3 B 03-102-40B
 02-18-64 HG 16.3 HTC 50 RBC 5.23 03-102-41A
 WBC 8400 DIFF. P 54 ST L 32 M 10 E 3 B 1 03-102-41B

2392 -4722.1 ASEPTIC NECROSIS OF THE ASTRAGALUS 03-102-66
 2394 -870F FIBROSARCOMA OF THE TARSAL SCAPHOID 03-102-66A

000 -X22 SCHIZOPHRENIC REACTION, HEBEPHRENIC TYPE 03-102-67

DATA REVISED 11-01-68 03-102-49

PATIENT 03-103	BORN	68	03-103-01
DECEASED			03-103-02
			03-103-02A
			03-103-02B
FEMALE			03-103-05
OTHER PERTINENT NOS.	CASE C		03-103-05A
DECEASED 05-24-52			03-103-06
DEATH CERT.NO.	AUTOPSY NONE		03-103-07
INTERMENT WHITE ROCK CEMETERY, OGLE COUNTY, ROCHELLE, ILL.			03-103-08
CAUSES OF DEATH	MYOCARDIAL DEGENERATION		03-103-09
SOURCE OF CASE	ELGIN 05		03-103-10
LITERATURE CITATION			03-103-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE C.			03-103-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE C.			03-103-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE C.			03-103-11C
EXPOSURE	THERAPEUTIC--INJECTION 05		03-103-12
SOURCE AND HOSPITAL RECORD			03-103-14
ADMITTED ELGIN STATE HOSPITAL 03-27, REMAINED UNTIL 08-27.			03-103-14A
SECOND ADMISSION 03-01-28. RECEIVED RADIUM INTRAVENOUSLY,			03-103-14B
TOTAL 150 UCI, BETWEEN MARCH AND JULY 1931. AGE 62 AT INJECTION.			03-103-14C
RADIUM NEVER MENTIONED IN HOSPITAL RECORD. TRANSFERRED TO			03-103-14D
MANTENO STATE HOSPITAL 06-24-37.			03-103-14E
FAMILY HISTORY			03-103-15
NEVER MARRIED			03-103-15A
MEDICAL HISTORY			03-103-20
DIAGNOSED INVOLUTIONAL PSYCHOSIS. SURGERY--CARCINOMA OF BREAST			03-103-20A
DIAGNOSED 10-31, RADICAL RESECTION PERFORMED 11-31. ON 10-11-51			03-103-20B
PHYSICAL EXAM REVEALED CATARACT OF LEFT LENS, ONLY 3 OR 4 JAGGED			03-103-20C
TOOTH STUMPS REMAINING, BP 200/120, MARKED OSTEOARTHRITIS OF			03-103-20D
HANDS, FEET, AND KNEE JOINTS. PATIENT DIED OF ARTERIOSCLEROTIC			03-103-20E
HEART DISEASE 05-24-52 AT MANTENO STATE HOSPITAL.			03-103-20F
COMPUTED TOTAL-BODY RADIUM			03-103-27
12-31 0.30 UCI 3.40 UCI 3.70 UCI TOTAL SCHLUNDT A			03-103-27A
06-32 0.17 UCI 1.40 UCI 1.60 UCI TOTAL SCHLUNDT A			03-103-27B
05-51 0.09 UCI 0.33 UCI 0.42 UCI TOTAL NORRIS B			03-103-27C

X-RAY EXAMINATION		03-103-30
PARTIAL SKELETAL SURVEY		03-103-30A
10-11-51	MANTENO STATE HOSP. X-RAY NO.	03-103-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		03-103-30C
	LCC. ACRH SCORE 0	03-103-30D
PPF	PROBABLE PAGET'S DISEASE AND/OR SENILE OSTEOPOROSIS. THICK-	03-103-30E
ENING OF CORTEX OF SHAFT, HEAD AND NECK OF BOTH FEMORA. MARKED		03-103-30F
COARSENING OF TRABECULAR PATTERN OF RIGHT AND LEFT RADIUS AND		03-103-30G
ULNA.		
MALIGNANT TUMOR CARCINOMA OF BREAST		03-103-60
000	-X15 INVOLUTIONAL PSYCHOTIC REACTION	03-103-67
X20	-797 SENILE CATARACT	03-103-67A
190	-14 RADICAL MASTECTOMY	03-103-67B
190	-8091 ADENOCARCINOMA OF THE BREAST	03-103-67C
240	-912 OSTEOARTHRITIS	03-103-67D
410	-516 ARTERIOSCLEROTIC HEART DISEASE	03-103-67E
DATA REVISED 11-04-68		03-103-99

PATIENT	03-104	03-104-01
DECEASED		03-104-02
		03-104-02A
FEMALE		03-104-05
OTHER PERTINENT NOS.	CASE D	03-104-05A
SOURCE OF CASE	ELGIN 05	03-104-10
LITERATURE CITATION		03-104-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE D.		03-104-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE D.		03-104-11B
EXPOSURE	THERAPEUTIC--INJECTION 05	03-104-12
SOURCE AND HOSPITAL RECORD		03-104-14
ADMITTED ELGIN STATE HOSPITAL 08-27-30. RECEIVED RADIUM CHLORIDE		03-104-14A
INTRAVENOUSLY, TOTAL 150 UCI, BETWEEN MARCH AND JULY 1931. AGE		03-104-14B
51 AT INJECTION. RADIUM NEVER MENTIONED IN HOSPITAL RECORDS.		03-104-14C
MEDICAL HISTORY		03-104-20
DIAGNOSED INVOLUTIONAL MELANCHOLIA AT ELGIN STATE HOSPITAL.		03-104-20A
COMPUTED TOTAL-BODY RADIUM		03-104-27
12-31 1.40 UCI 12.50 UCI 13.90 UCI TOTAL SCHLUNDT A		03-104-27A
000 -X15 INVOLUTIONAL PSYCHOTIC REACTION		03-104-67
DATA REVISED 04-29-68		03-104-99

PATIENT 03-105	BCRN 12-10-03	03-105-01
DECEASED		03-105-02
		03-105-02A
		03-105-02B
MALE		03-105-05
OTHER PERTINENT NOS.	CASE E	03-105-05A
DECEASED 12-19-57		03-105-06
DEATH CERT.NO.	AUTOPSY NONE	03-105-07
INTERMENT RESURRECTION CEMETERY, JUSTICE, ILLINOIS		03-105-08
CAUSES OF DEATH TUMOR OF SELLA TURCICA, TYPE UNDETERMINED		03-105-09
WITH PITUITARY CACHEXIA		03-105-09A
SOURCE OF CASE	ELGIN 05	03-105-10
LITERATURE CITATION		03-105-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE E.		03-105-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE E.		03-105-11B
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-105-11C
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-105-11D
EXPOSURE	THERAPEUTIC--INJECTION 05	03-105-12
SOURCE AND HOSPITAL RECORD		03-105-14
ADMITTED ELGIN STATE HOSPITAL 09-19-30. TRANSFERRED TO MANTENO		03-105-14A
STATE HOSPITAL 08-15-35. RADIUM NEVER MENTIONED IN HOSPITAL		03-105-14B
RECORD.		03-105-14C
FAMILY HISTORY		03-105-15
NEVER MARRIED		03-105-15A
MEDICAL HISTORY		03-105-20
IN ABOUT 1956 PATIENT DEVELOPED A LESION DESTRUCTIVE OF THE SKULL		03-105-20A
IN REGION OF SPHENOID OR ETHMOID AIR CELLS. LESION GREW RAPIDLY		03-105-20B
AND PATIENT EXPIRED 12-57. MOST PROBABLE DIAGNOSIS--CARCINOMA		03-105-20C
AND/OR SARCOMA ARISING IN SPHENOID OR ETHMOIDS.		03-105-20D
COMPUTED TOTAL-BODY RADIUM		03-105-27
12-31 1.30 UCI 12.50 UCI 13.80 UCI TOTAL SCHLUNDT A		03-105-27A
06-32 1.40 UCI 4.10 UCI 5.50 UCI TOTAL SCHLUNDT A		03-105-27B
05-51 0.75 UCI 2.60 UCI TOTAL NORRIS B		03-105-27C

X-RAY EXAMINATION				03-105-30
PARTIAL SKELETAL SURVEY				03-105-30A
1953 TO 1957	MANTENO STATE HOSP.	LOC. ANL		03-105-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.				03-105-30C
PPF SEE BELOW.				03-105-30D
 INTRAVENOUS PYLOGRAMS				03-105-31A
07-31-53	MANTENO STATE HOSP.	LOC. ANL		03-105-31B
PPF LUMBAR SPINE, PELVIS AND HEADS OF FEMORA DEMONSTRATE NO BONY				03-105-31D
CHANGES TYPICAL OF RADIUM DEPOSITION.				03-105-31E
 GI SERIES				03-105-32A
10-07-53	MANTENO STATE HOSP.	LOC. ANL		03-105-32B
PPF X-RAYS INCLUDE AP AND LATERAL VIEWS OF LOWER THORACIC AND				03-105-32D
LUMBAR SPINE WHICH DEMONSTRATE MINIMAL HYPERTROPHIC OSTEOARTH-				03-105-32E
RITIC LIPPING OF THE ANTERIOR BORDERS OF THE THORACIC VERTEBRAE.				03-105-32F
SEVERAL RIBS DEMONSTRATE NO ABNORMALITIES.				03-105-32G
 AP AND LATERAL VIEWS OF SKULL				03-105-33A
01-31-54	MANTENO STATE HOSP.	LOC. ANL		03-105-33B
PPF MULTIPLE UP TO 7 MM SIZE AREAS OF BONE RESORPTION SCATTERED				03-105-33D
THROUGHOUT CALVARIUM. COMPLETE DESTRUCTION OF SELLA TURCICA,				03-105-33E
SPHENOID AND ETHMOID SINUSES IS CLEARLY SEEN. PROBABLY TUMOR				03-105-33F
ARISING IN SPHENOID OR ETHMOID SINUS AND INVADING SELLA.				03-105-33G
 INTRAVENOUS PYLOGRAMS				03-105-34A
09-30-54	MANTENO STATE HOSP.	LOC. ANL		03-105-34B
PPF ADEQUATE VIEWS OF LUMBAR SPINE, PELVIS AND HEADS OF FEMORA				03-105-34D
ARE NEGATIVE FOR BONY LESIONS.				03-105-33E
 AP AND LATERAL VIEWS OF SKULL				03-105-35A
02-25-57	MANTENO STATE HOSP.	LOC. ANL		03-105-35B
PPF INCREASE IN SIZE OF DESTRUCTIVE LESION INVOLVING SPHENOID,				03-105-35D
ETHMOID AND SELLA. DESTRUCTIVE PROCESS HAS NOW EXTENDED INTO				03-105-35E
REGION OF BOTH ANTRA.				03-105-35F
 AP AND LATERAL VIEWS OF SKULL				03-105-36A
11-12-57	MANTENO STATE HOSP.	LOC. ANL		03-105-36B
PPF COMPLETE DESTRUCTION OF BONY STRUCTURE OF FACE. TUMOR HAS				03-105-36D
INVADDED AND DISPLACED ANTERIORLY THE BONY STRUCTURE OF FACE.				03-105-36E
COMPLETE DESTRUCTION OF SELLA, BASE OF SKULL AND FACIAL BONES.				03-105-36F
 CLINICAL LABORATORY FINDINGS				03-105-40
01-27-31	HG 84	HTC	RBC 4.43	03-105-40A
WBC 12,000 DIFF.	P 74	ST	L 23 M E 3 B	03-105-40B
 MALIGNANT TUMOR TUMOR OF SELLA TURCICA, TYPE UNDETERMINED				03-105-60
324 -8Y00	TUMOR OF THE SPHENOID SINUS, TYPE UNDETERMINED			03-105-66
000 -X20	SCHIZOPHRENIC REACTION, NOT OTHERWISE SPECIFIED			03-105-67
DATA REVISED 11-06-68				03-105-99

PATIENT 03-106	BORN 09-06-76	03-106-01
DECEASED		03-106-02
		03-106-02A
FEMALE		03-106-02B
		03-106-05
OTHER PERTINENT NOS.	CASE F	03-106-05A
SOURCE OF CASE	ELGIN 05	03-106-10
LITERATURE CITATION		03-106-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE F.		03-106-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE F.		03-106-11B
EXPOSURE	THERAPEUTIC--INJECTION 05	03-106-12
SOURCE AND HOSPITAL RECORD		03-106-14
ADMITTED ELGIN STATE HOSPITAL 07-24-30. RECEIVED RADIUM CHLORIDE		03-106-14A
INTRAVENOUSLY, TOTAL 160 UCI, BETWEEN MARCH AND JULY 1931. AGE		03-106-14B
55 AT INJECTION. HOSPITAL RECORD--		03-106-14C
04-23-31 HAS BEEN UNDER RADIUM TREATMENTS.		03-106-14D
08-04-35 PAROLED.		03-106-14E
MEDICAL HISTORY		03-106-20
PATIENT DIAGNOSED INVOLUTIONAL MELANCHOLIA AT ELGIN STATE HOSP.		03-106-20A
PHYSICAL EXAM NEGATIVE. 10-09-33 HALF OF LOWER TEETH REMAINING		03-106-20B
AND IN GOOD CONDITION.		03-106-20C
COMPUTED TOTAL-BODY RADIUM		03-106-27
12-31 0.90 UCI 3.70 UCI 4.60 UCI TOTAL	SCHLUNDT A	03-106-27A
06-32 0.70 UCI	SCHLUNDT A	03-106-27B
X-RAY EXAMINATION		03-106-30
COMPLETE SKELETAL SURVEY		03-106-30A
10-16-51 ELGIN STATE HOSP. NO.		03-106-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 0	03-106-30C
PPF NONE		03-106-30D
CLINICAL LABORATORY FINDINGS		03-106-40
07-29-30 AND 01-27-31 HG 8.0 HTC RBC 3.81		03-106-40A
WBC 10,900 DIFF. P ST L 39 M 3 E B		03-106-40B
000 -X15 INVOLUTIONAL PSYCHOTIC REACTION		03-106-67
DATA REVISED 11-04-68		03-106-99

PATIENT 03-107	BORN 01-14-84	03-107-01
DECEASED		03-107-02
		03-107-02A
		03-107-02B
		03-107-05
FEMALE		
OTHER PERTINENT NOS.	CASE G	03-107-05A
DECEASED 02-06-57		03-107-06
DEATH CERT. NO.	AUTOPSY NONE	03-107-07
INTERMENT	QUEEN OF HEAVEN CEMETERY, HILLSIDE, ILL.	03-107-08
CAUSES OF DEATH	ARTERIOSCLEROTIC HEART DISEASE	03-107-09
	GENERALIZED ARTERIOSCLEROSIS	03-107-09A
SOURCE OF CASE	ELGIN 05	03-107-10
LITERATURE CITATION		03-107-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE G.		03-107-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE G.		03-107-11B
EXPOSURE	THERAPEUTIC--INJECTION 05	03-107-12
SOURCE AND HOSPITAL RECORD		03-107-14
ADMITTED ELGIN STATE HOSPITAL 01-03-31. RECEIVED RADIUM CHLORIDE		03-107-14A
INTRAVENOUSLY, TOTAL 160 UCI, BETWEEN MARCH AND JULY 1931. AGE		03-107-14B
47 YEARS AT INJECTION. HOSPITAL RECCRD--		03-107-14C
06-11-31 AT A STAFF MEETING DR. RICKETTS MENTIONED THAT PATIENT		03-107-14D
HAD RECEIVED A COURSE OF RADIUM CHLORIDE INJECTIONS.		03-107-14E
11-05-56 PATIENT TRANSFERRED TO KANKAKEE STATE HOSPITAL.		03-107-14F
FAMILY HISTORY		03-107-15
NEVER MARRIED		03-107-15A
MEDICAL HISTORY		03-107-20
DIAGNOSED INVOLUTIONAL MELANCHOLIA.		03-107-20A
COMPUTED TOTAL-BODY RADIUM		03-107-27
12-31 0.70 UCI 2.90 UCI 3.60 UCI TOTAL SCHLUNDT A		03-107-27A
06-32 0.30 UCI 0.00 UCI 0.30 UCI TOTAL SCHLUNDT A		03-107-27B
000 -X15 INVOLUTIONAL PSYCHOTIC REACTION		03-107-67
410 -516 ARTERIOSCLEROTIC HEART DISEASE		03-107-67A
460 -942 GENERALIZED ARTERIOSCLEROSIS		03-107-67B
DATA REVISED 11-04-68		03-107-99

PATIENT 03-108	BORN	76	03-108-01
DECEASED			03-108-02
FEMALE			03-108-02A
			03-108-05
OTHER PERTINENT NOS.	CASE H		03-108-05A
DECEASED 12-30-41			03-108-06
SOURCE OF CASE	ELGIN 05		03-108-10
LITERATURE CITATION			03-108-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE H.			03-108-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE H.			03-108-11B
EXPOSURE	THERAPEUTIC--INJECTION 05		03-108-12
SOURCE AND MEDICAL RECORD			03-108-14
ADMITTED ELGIN STATE HOSPITAL 09-30. RECEIVED RADIUM CHLORIDE			03-108-14A
INTRAVENOUSLY, TOTAL 160 UCI, BETWEEN MARCH AND JULY 1931. AGE			03-108-14B
55 AT INJECTION. HOSPITAL RECORD--			03-108-14C
03-02-31 WAS RECEIVING RACL2.			03-108-14D
04-26-41 PAROLED.			03-108-14E
FAMILY HISTORY			03-108-15
MARRIED			03-108-15A
CHILDREN	MALE	DECEASED	03-108-16
MEDICAL HISTORY			03-108-20
DIAGNOSED INVOLUTIONAL MELANCHOLIA AT ELGIN STATE HOSPITAL.			03-108-20A
COMPUTED TOTAL-BODY RADIUM			03-108-27
12-31 0.40 UCI 3.40 UCI 3.80 UCI TOTAL SCHLUNDT A			03-108-27A
06-32 0.08 UCI 1.80 UCI 1.90 UCI TOTAL SCHLUNDT A			03-108-27B
000 -X15 INVOLUTIONAL PSYCHOTIC REACTION			03-108-67
DATA REVISED 11-04-68			03-108-99

PATIENT 03-109 DECEASED	BORN 01-27-04	03-109-01 03-109-02 03-109-02A 03-109-02B 03-109-02C 03-109-05
FEMALE		
OTHER PERTINENT NOS.	CASE I	03-109-05A
DECEASED 09-29-57		03-109-06
DEATH CERT. NO.	AUTOPSY YES	03-109-07
INTERMENT CREMATED, ACACIA PARK, NERWOOD PARK, ILL.		03-109-08
CAUSES OF DEATH MALIGNANT NEOPLASM OF BLADDER WITH METASTASES TO LUNG		03-109-09 03-109-09A
SOURCE OF CASE	ELGIN 05	03-109-10
LITERATURE CITATION		03-109-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE I.		03-109-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE I.		03-109-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE I.		03-109-11C
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959).		03-109-11D
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959).		03-109-11E
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN., MINNEAPOLIS (1960).		03-109-11F 03-109-11G
MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE 03-109.		03-109-11H
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-109.		03-109-11I
EXPOSURE	THERAPEUTIC--INJECTION 05	03-109-12
SOURCE AND HOSPITAL RECORD		03-109-14
ADMITTED ELGIN STATE HOSPITAL 11-15-30. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL 180 UCI, BETWEEN MARCH AND JULY 1931.		03-109-14A 03-109-14B
AGE 27 AT INJECTION. HOSPITAL RECORD--		03-109-14C
05-29-31 SUMMARY SHE RECEIVED 10 TREATMENTS OF RADIUM CHLORIDE AND 10 MICROGRAMS.		03-109-14D 03-109-14E
04-16-56 WE ARE AWARE THAT THIS PATIENT HAS RECEIVED RADIUM CHLORIDE.		03-109-14F 03-109-14G
07-01-57 THIS PATIENT HAS BEEN ON RADIUM CHLORIDE A LONG TIME AGO.		03-109-14H 03-109-14I
FAMILY HISTORY		03-109-15
NEVER MARRIED		03-109-15A
MEDICAL HISTORY		03-109-20
DIAGNOSED DEMENTIA PRAECOX, HEBEPHRENIC TYPE AT ELGIN STATE HOSPITAL. IN 1932 DEVELOPED RIGHT Lobar PNEUMONIA WITH EMPYEMA, NECESSITATING SURGICAL DRAINAGE OF CHEST. PATIENT WORKED IN OFFICE FOR FEW YEARS BUT DETERIORATED MENTALLY AND SINCE 1941 HAS BEEN INACTIVE. TEETH REMAINED IN GOOD REPAIR. ON 01-21-51 REPORT IN CHART STATES THAT A FEW CARRIES WERE PRESENT. PHYSICAL EXAM DONE 05-11-51--NEGATIVE. IN 1957 CARCINOMA OF THE BLADDER DEVELOPED WITH PULMONARY METASTASES, DECEASED 09-29-57. AUTOPSY DONE.		03-109-20A 03-109-20B 03-109-20C 03-109-20D 03-109-20E 03-109-20F 03-109-20G 03-109-20H

COMPUTED TOTAL-BODY RADIUM

12-31	0.80 UCI	5.90 UCI	6.70 UCI TOTAL	SCHLUNDT A	03-109-27
06-32	0.09 UCI	1.80 UCI	1.90 UCI TOTAL	SCHLUNDT A	03-109-27A
05-51	0.20 UCI	0.58 UCI	0.78 UCI TOTAL	NORRIS B	03-109-27B
07-53	0.20 UCI	0.43 UCI	0.63 UCI TOTAL	NORRIS B	03-109-27C

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

05-17-51	ELGIN STATE HOSP.	LOC. ACRH			03-109-30
					03-109-30A
	MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 2.5		03-109-30B
	PPF FEW AREAS OF BONE RESORPTION IN SHAFT OF RIGHT ULNA AND				03-109-30C
	RADIUS WITH COARSENING OF TRABECULAR PATTERN OF TIBIAE AND				03-109-30D
	FIBULAE. SCLEROSIS AT SITE OF THE OLD DISTAL EPIPHYSEAL LINE OF				03-109-30E
	BOTH TIBIAE.				03-109-30F

PARTIAL SKELETAL SURVEY

08-25-53	ELGIN STATE HOSP.	LOC. ACRH			03-109-31A
					03-109-31B
	MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 3		03-109-31C
	PPF NO CHANGE SINCE PREVIOUS EXAMINATION.				03-109-31D

PARTIAL SKELETAL SURVEY

10-31-55	ELGIN STATE HOSP.	LOC. ACRH			03-109-32A
					03-109-32B
	MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 9		03-109-32C
	PPF SIGNIFICANT INCREASE IN NUMBER AND SEVERITY OF LESIONS AT				03-109-32D
	SITES PREVIOUSLY DESCRIBED.				03-109-32E

CLINICAL LABORATORY FINDINGS

01-27-31	HG 65	HTC	RBC 3.84						03-109-40
WBC 10,800	DIFF. P 67	ST 0	L 29	M 3	E 1	B 0			03-109-40A
									03-109-40B
11-13-33	HG	HTC	RBC 4.0						03-109-41A
WBC 6,800	DIFF. P 65	ST 0	L 28	M 3	E 4	B 0			03-109-41B

SPECIMENS AVAILABLE

FEMUR	LOC. RPY, BIM	03-109-50
RIB	5 GMS	03-109-50A
TUMGR	5	03-109-50B
VERTEBRA	55	03-109-50C
BONE SECTIONS	60	03-109-50D
TOOTH	PFG, BIM	03-109-50E
		03-109-50F

RADIOCHEMICAL ANALYSIS

FEMUR, JOINT						03-109-51
02-58	5.58 G ASH	7390 UUG/G ASH RA-226	0.016 UUCI/G ASH	HFL TH-228		03-109-51A
RIB						03-109-51B
09-58	1.80 G ASH	242 UUG/G ASH RA-226	0.006 UUCI/G ASH	TH-228		03-109-51C
TIBIA						03-109-51D
12-59	0.36 G ASH	870 UUG/G ASH RA-226				03-109-51E
						03-109-51F

FEMUR, SHAFT

811 PCI/G ASH RA-226	214 PCI/G ASH PB-210	RBH	03-109-52A
			03-109-52B

AUTORADIOGRAPHIC STUDIES

10-61

TIBIA

MAXIMUM HOT SPOT

AVERAGE DIFFUSE LEVEL

CALCULATED UNIFORM LABEL

HOT SPOT TO DIFFUSE RATIO

DIFFUSE TO UNIFORM LABEL

13.

C.06

C.15

218.

C.40

PCI RA-226/MG BONE

PCI RA-226/MG BONE

PCI RA-226/MG BONE

RER

03-109-53

03-109-53A

03-109-53B

03-109-53C

03-109-53D

03-109-53E

03-109-53F

MALIGNANT TUMOR

NEOPLASM OF BLADDER WITH METASTASES TO LUNG

03-109-60

000 -X22

SCHIZOPHRENIC REACTION, HEBEPHRENIC TYPE

03-109-67

360 -100

PNEUMONIA, LOBAR

03-109-67A

370 -100

EMPYEMA

03-109-67B

730 -8191

CARCINOMA, NOT OTHERWISE SPECIFIED, OF URINARY BLADDER

03-109-67C

DATA REVISED 11-04-68

03-109-99

PATIENT 03-110	BORN 09-11-99	03-110-01
DECEASED		03-110-02
		03-110-02A
		03-110-03
FEMALE		03-110-05
OTHER PERTINENT NOS.	AMRH	03-110-05A
	CASE J	03-110-05B
DECEASED 04-07-67		03-110-06
DEATH CERT. NO.	AUTOPSY NONE	03-110-07
INTERMENT	MT. CARMEL CEMETERY, HILLSIDE, ILL.	03-110-08
CAUSES OF DEATH	MYOCARDIAL INFARCTION	03-110-09
SOURCE OF CASE	ELGIN 05	03-110-10
LITERATURE CITATION		03-110-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE J.		03-110-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE J.		03-110-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE J.		03-110-11C
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA,		03-110-11D
VIENNA (1962). CASE 03-110.		03-110-11E
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING,		03-110-11F
P. 279, IAEA, VIENNA (1962). CASE J.		03-110-11G
MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P.67 (IAEA,		03-110-11H
VIENNA (1964). CASE 03-110.		03-110-11I
MILLER, ANL-6839 (1964) PP. 18-39. CASE 03-110.		03-110-11J
MILLER AND FINKEL, ANL-7217, PP. 7-90. (1965). CASE 03-110.		03-110-11K
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-110.		03-110-11L
EXPOSURE	THERAPEUTIC--INJECTION 05	03-110-12A
SOURCE AND HOSPITAL RECORD		03-110-14
ADMITTED ELGIN STATE HOSPITAL 08-13-30. RECEIVED RADIUM CHLORIDE		03-110-14A
INTRAVENOUSLY, TOTAL 200 MICROCURIES, BETWEEN MARCH AND JULY,		03-110-14B
1931. AGE 32 AT INJECTION. HOSPITAL RECORD--		03-110-14C
01-24-31 PATIENT IS RECEIVING RADIUM TREATMENT.		03-110-14D
04-15-31 HAS BEEN GETTING RADIUM TREATMENTS.		03-110-14E
05-29-31 SHE HAS RECEIVED 10 INJECTIONS OF RA CL2, 3 MICROGRAMS.		03-110-14F
09-28-31 HAS HAD THIRTY DOSES OF RADIUM CHLORIDE. IS NOT		03-110-14G
RECEIVING MEDICATION AT THIS TIME.		03-110-14H
(NOTE THAT ABOVE DATES CONTRADICT PUBLISHED MARCH TO JULY INJECTION DATES.)		03-110-14I
		03-110-14J
MEDICAL HISTORY		03-110-20
DIAGNOSED DEMENTIA PRAECOX, PARANOID TYPE AT ELGIN STATE HOSP.		03-110-20A
SINCE 1938 THE CONDITION OF THE PATIENT'S TEETH GRADUALLY DETERIORATED. OTHERWISE, PATIENT HAS BEEN SYMPTOM-FREE.		03-110-20B
		03-110-20C
IN THE COMPLETE RADIOGRAPHIC SKELETAL SURVEY DONE ON 12-19-63 AN		03-110-21A
EXPANSILE LESION OF THE LEFT FIRST METACARPAL WAS NOTED. A		03-110-21B
REQUEST WAS MADE OF THE ELGIN STATE HOSPITAL THAT A BIOPSY OF THIS		03-110-21C
LESION BE DONE AS SOON AS IT WAS SUSPECTED THAT THIS REPRESENTED		03-110-21D
A SARCOMA. THE PATIENT'S HUSBAND, HOWEVER, REFUSED TO ALLOW THE		03-110-21E
BIOPSY. ON 08-06-64 THE LEFT HAND WAS AGAIN RADIOGRAPHED AND IT		03-110-21F
APPEARED THAT THERE WAS NO PROGRESSION IN THE SIZE OF THE LESION		03-110-21G
IN THE LEFT FIRST METACARPAL. THE FAMILY CONTINUED TO REFUSE		03-110-21H
BIOPSY ALTHOUGH THE CLINICAL IMPRESSION WAS THAT THIS WAS AN		03-110-21I
OSTEOSARCOMA. DURING THE FIRST WEEK OF 04-67 THE PATIENT		03-110-21J

DEVELOPED TYPICAL SYMPTOMS OF MYOCARDIAL INFARCTION AND DIED ON
04-07-67. THE PATIENT'S HUSBAND REFUSED TO ALLOW AN AUTOPSY TO
BE DONE. (10-68)

03-110-21K
03-110-21L
03-110-21M

GAMMA-RAY MEASUREMENTS

07-29-59	RAB,RAC	C.220 UCI	HGS 1 TILTING CHAIR	CEM
03-11-60	RAB,RAC	C.210 UCI	HGS 1 TILTING CHAIR	CEM
12-18-63	RAB,RAC	C.186 UCI	HGS 1 TILTING CHAIR	CEM
12-18-63	RAB,RAC	C.234 UCI	HGS 1 7-CRYST-POS	CEM
01-16-64	RAB,RAC	C.176 UCI	HGS 1 TILTING CHAIR	CEM
01-16-64	RAB,RAC	C.225 UCI	HGS 1 7-CRYST-POS	CEM
08-06-64	RAB,RAC	C.179 UCI	HGS 1 TILTING CHAIR	CEM

03-110-25
03-110-25E
03-110-25F
03-110-25G
03-110-25H
03-110-25I
03-110-25J
03-110-25K

BREATH MEASUREMENTS

03-11-60	EM-222	C.580 UCI	BREATH RADON HELMET	HFL
08-06-64	EM-222	C.405 UCI	BREATH RADON HELMET	HFL

03-110-26
03-110-26F
03-110-26K

COMPUTED TOTAL-BODY RADIUM

12-31	0.30 UCI	5.90 UCI	6.20 UCI TOTAL	SCHLUNDT A	0.31
06-32	0.07 UCI	4.10 UCI	4.20 UCI TOTAL	SCHLUNDT A	0.31
05-51	0.32 UCI	0.66 UCI	0.97 UCI TOTAL	NORRIS B	0.31
07-53	0.24 UCI	0.66 UCI	0.90 UCI TOTAL	NORRIS B	0.31
07-29-59	0.220 UCI		0.710 UCI TOTAL		0.31
03-11-60	0.210 UCI		0.677 UCI TOTAL		0.31
12-18-63	0.186 UCI		0.599 UCI TOTAL		0.31
12-18-63	0.234 UCI		0.756 UCI TOTAL		0.31
01-16-64	0.176 UCI		0.567 UCI TOTAL		0.31
01-16-64	0.225 UCI		0.725 UCI TOTAL		0.31
08-06-64	0.179 UCI		0.579 UCI TOTAL		0.31

03-110-27
03-110-27A
03-110-27B
03-110-27C
03-110-27D
03-110-27E
03-110-27F
03-110-27G
03-110-27H
03-110-27I
03-110-27J
03-110-27K

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON

03-11-60	0.580 UCI	0.841 UCI TOTAL	0.69
08-06-64	0.405 UCI	0.587 UCI TOTAL	0.69

03-110-28
03-110-28F
03-110-28K

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY
05-21-51 ELGIN STATE HOSP. LOC. ACRH
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 6
PPF PATCHY SCLEROSIS IN THE HEAD AND NECK OF BOTH HUMERI WITH
SCLEROSIS OF NECK OF RIGHT FEMUR AND HEAD AND NECK OF LEFT FEMUR.
SLIGHT COARSENING OF TRABECULAR PATTERN OF LONG BONES.

03-110-30
03-110-30A
03-110-30B
03-110-30C
03-110-30D
03-110-30E
03-110-30F

PARTIAL SKELETAL SURVEY
07-30-53 ELGIN STATE HOSP. LOC. ACRH
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10
PPF AS ON LAST EXAMINATION WITH A NOTICEABLE INCREASE IN THE
COARSENING OF TRABECULAR PATTERN OF LONG BONES.

03-110-31A
03-110-31B
03-110-31C
03-110-31D
03-110-31E

COMPLETE SKELETAL SURVEY
12-19-55 ELGIN STATE HOSP. LOC. ACRH
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 11.5
PPF MINIMAL INCREASE IN SEVERITY OF LESIONS SINCE LAST EXAMINATION.

03-110-32A
03-110-32B
03-110-32C
03-110-32D
03-110-32E

PARTIAL SKELETAL SURVEY
08-28-58 ELGIN STATE HOSP. LOC. ACRH
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10
PPF NO ESSENTIAL CHANGE SINCE LAST RADIOGRAPHY.

03-110-33A
03-110-33B
03-110-33C
03-110-33D

COMPLETE SKELETAL SURVEY

12-19-63	ANL	X-RAY NO. R-230	LOC. ANL	03-110-34A
MODERATE OR ADVANCED (MALIGNANT) CHANGES-TYPICAL OF RADIUM DEPOSITION.				03-110-34B
SCORE 16 (CR 28)				03-110-34C
PPF POSSIBLE CA MASTOID, POSSIBLE SARCOMA FIRST LT. METACARPAL,				03-110-34D
POSSIBLE ASEPTIC NECROSIS RIGHT TARSAL SCAPHOID.				03-110-34E
				03-110-34F

SPECIAL VIEW--LEFT HAND, AND RIGHT FOOT

08-06-64	ANL	X-RAY NO. R-230B	LOC. ANL	03-110-35A
NO CHANGE SINCE 12-19-63.				03-110-35B
PPF NO PROGRESSION OF LESION IN LEFT FIRST METACARPAL AND NO				03-110-35C
CHANGE IN THE COARSENING OF TRABECULATION IN THE RIGHT ANKLE AND				03-110-35D
FOOT NOR IN THE AREA OF BONE RESORPTION IN THE RIGHT TARSAL				03-110-35E
SCAPHOID.				03-110-35F
				03-110-35G

CLINICAL LABORATORY FINDINGS

08-17-50	HG 13.6	HTC	RBC 4.67	03-110-40
WBC	DIFF. NORMAL			03-110-40A
				03-110-40B
12-19-63	HG 11.6	HTC 36	RBC 3.75	03-110-41A
WBC 4700	DIFF. P 63	ST	L 33 M 4 E B	03-110-42B

MALIGNANT TUMOR

SUSPECTED TUMOR OF MASTOID	03-110-60
SUSPECTED OSTEOGENIC SARCOMA OF METACARPAL	03-110-60A

OCO -X24	SCHIZOPHRENIC REACTION, PARANOID TYPE	03-110-67
430 -516.7	MYOCARDIAL INFARCTION	03-110-67A

DATA REVISED 11-04-68	03-110-99
-----------------------	-----------

PATIENT C3-111	BCRN 10-22-09	03-111-01
		03-111-02
FEMALE		03-111-05
OTHER PERTINENT NOS.	CASE K	03-111-05A
SOURCE OF CASE	ELGIN 05	03-111-10
LITERATURE CITATION		03-111-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE K.		03-111-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE K.		03-111-11B
LGONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE K.		03-111-11C
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA, VIENNA (1962). CASE 03-111.		03-111-11D
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 279, IAEA, VIENNA (1962). CASE K.		03-111-11E
MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE 03-111.		03-111-11F
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-111.		03-111-11H
		03-111-11I
EXPOSURE	THERAPEUTIC--INJECTION 05	03-111-12
SOURCE AND HOSPITAL RECORD		03-111-14
ADMITTED ELGIN STATE HOSPITAL 01-08-30. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL 200 UCI, BETWEEN MARCH AND JULY 1931. AGE 21 AT INJECTION. HOSPITAL RECORD--		03-111-14A
08-08-31 THROUGH 10-51-31 PATIENT WAS IN ANNEX 4 LOCATION.		03-111-14B
05-29-31 SUMMARY HAS RECEIVED 10 INJECTIONS RADIUM CHLORIDE.		03-111-14C
02-02-57, 01-27-58, 02-02-58, 02-16-59, 10-01-59, 07-26-60		03-111-14D
THIS PATIENT HAS RECEIVED RADIUM CHLORIDE AND IN CASE OF DEMISE A POST MORTEM SHOULD BE OBTAINED.		03-111-14E
		03-111-14F
		03-111-14G
		03-111-14H
FAMILY HISTORY		03-111-15
NEVER MARRIED		03-111-15A
MEDICAL HISTORY		03-111-20
DIAGNOSED DEMENTIA PRAECOX, HEBEPHRENIC TYPE AT ELGIN STATE HOSP.		03-111-20A
GAMMA-RAY MEASUREMENTS		03-111-25
07-28-59 RAB,RAC C.360 UCI HGS 1 TILTING CHAIR CEM		03-111-25D
03-08-60 RAB,RAC C.319 UCI HGS 1 TILTING CHAIR CEM		03-111-25E
12-18-63 RAB,RAC C.280 UCI HGS 1 TILTING CHAIR CEM		03-111-25F
BREATH MEASUREMENTS		03-111-26
03-08-60 EM-222 C.810 UCI BREATH RADON HELMET HFL		03-111-26E
COMPUTED TOTAL-BODY RADIUM		03-111-27
12-31 0.50 UCI SCHLUNDT A		03-111-27A
05-51 0.22 UCI C.70 UCI 0.92 UCI TOTAL MCRRIS B		03-111-27B
07-53 0.22 UCI C.70 UCI 0.92 UCI TOTAL MCRRIS B		03-111-27C
07-28-59 0.360 UCI 1.161 UCI TOTAL C.31		03-111-27D
03-08-60 0.319 UCI 1.029 UCI TOTAL C.31		03-111-27E
12-18-63 0.280 UCI 0.905 UCI TOTAL C.31		03-111-27F
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-111-28
03-08-60 0.810 UCI 1.174 UCI TOTAL C.69		03-111-28E

X-RAY EXAMINATION				03-111-30
COMPLETE SKELETAL SURVEY				03-111-30A
06-08-51	ELGIN STATE HOSP.	LOC. ACRH		03-111-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 1	03-111-30C
PPF SEVERAL UP TO 8 MM SIZE AREAS OF BONE RESORPTION IN THE				03-111-30D
CORTEX OF SHAFT OF RIGHT RADIUS AND ULNA.				03-111-30E
COMPLETE SKELETAL SURVEY				03-111-31A
08-28-53	ELGIN STATE HOSP.	LOC. ACRH		03-111-31B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 7	03-111-31C
PPF MARKED RESORPTION OF ROOTS OF ALL REMAINING TEETH. SEVERAL				03-111-31D
UP TO 1 CM SIZE AREAS OF BONE RESORPTION IN CORTEX OF SHAFTS OF				03-111-31E
RIGHT AND LEFT RADIUS AND ULNA. COARSENING OF TRABECULAR PATTERN				03-111-31F
OF FEMUR, TIBIA AND FIBULA BILATERALLY.				03-111-31G
COMPLETE SKELETAL SURVEY				03-111-32A
01-26-56	ELGIN STATE HOSP.	LOC. ACRH		03-111-32B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 6	03-111-32C
PPF NO PROGRESSION IN LESIONS DESCRIBED PREVIOUSLY.				03-111-32D
COMPLETE SKELETAL SURVEY				03-111-33A
02-01-58	ELGIN STATE HOSP.	LOC. ACRH		03-111-33B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 6	03-111-33C
PPF NO PROGRESSION IN LESIONS DESCRIBED PREVIOUSLY.				03-111-33D
CLINICAL LABORATORY FINDINGS				03-111-40
05-07-37	HG	HTC	RBC 3.80	03-111-40A
WBC 6400	DIFF. P 65	ST	L 30 M 2 E 2 B	03-111-40B
01-28-49	HG 14	HTC	RBC 4.40	03-111-41A
WBC 9750	DIFF. P 58	ST	L 42 M E B	03-111-41B
05-09-51	HG 12.2	HTC	RBC	03-111-42A
6136 -4722.1 ASEPTIC NECROSIS OF THE ROOTS OF THE TEETH				03-111-66
000 -X22 SCHIZOPHRENIC REACTION, HEBEPHRENIC TYPE				03-111-67
DATA REVISED 11-04-68				03-111-99

PATIENT	C3-112	BORN	05-23-99	03-112-01
				03-112-02
				03-112-02A
				03-112-05
	FEMALE			
OTHER PERTINENT NOS.	CASE L			03-112-05A
SOURCE OF CASE	ELGIN 05			03-112-10
LITERATURE CITATION				03-112-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE L.				03-112-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE L.				03-112-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE L.				03-112-11C
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA, VIENNA (1962). CASE C3-112.				03-112-11D
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 279, IAEA, VIENNA (1962). CASE L.				03-112-11E
MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE C3-112.				03-112-11F
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE C3-112.				03-112-11H
				03-112-11I
EXPOSURE	ELGIN 07			03-112-12
SOURCE AND HOSPITAL RECORD				03-112-14
ADMITTED ELGIN STATE HOSP. 01-20-31, AGAIN C3-14-49. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL PROBABLY 260 UCI, BETWEEN MARCH AND SEPTEMBER 1931. AGE 32 YEARS AT INJECTION.				03-112-14A
HOSPITAL RECORD--				03-112-14B
03-30-32, 04-06-32 AT WING COTTAGE.				03-112-14C
10-27-32 WING 2--X-RAY MADE OF SELLA. FINDINGS--SELLA TURCICA SMALL IN SIZE. ANTERIOR AND POSTERIOR CLINOID PROCESSES NORMAL.				03-112-14D
11-18-32 IS TO RETURN TO WING COTTAGE.				03-112-14E
12-16-32 X-RAY MADE OF SELLA, KNEE AND ELBOW FOR EPIPHYSEAL LINES.				03-112-14F
02-12-34, 02-26-34 WING COTTAGE. FILMS AND . X-RAY MADE OF SELLA. FINDINGS--NO ENLARGEMENT OF SELLA TURCICA.				03-112-14G
01-18-56 TRANSFERRED TO GALESBURG.				03-112-14H
				03-112-14I
				03-112-14J
				03-112-14K
				03-112-14L
				03-112-14M
FAMILY HISTORY				03-112-15
NEVER MARRIED				03-112-15A
MEDICAL HISTORY				03-112-20
DIAGNOSED DEMENTIA PRAECOX, HEBEPHRENIC TYPE AT ELGIN STATE HOSP.				03-112-20A
GAMMA-RAY MEASUREMENTS				03-112-25
04-05-60 RAB,RAC 1.84 UCI HGS 1 TILTING CHAIR CEM				03-112-25E
BREATH MEASUREMENTS				03-112-26
04-05-60 EM-222 3.47 UCI BREATH RADON HELMET HFL				03-112-26E
COMPUTED TOTAL-BODY RADIUM				03-112-27
12-31 2.30 UCI 12.00 UCI 14.30 UCI TOTAL SCHLUNDT A				03-112-27A
06-32 1.80 UCI 3.30 UCI 5.10 UCI TOTAL SCHLUNDT A				03-112-27B
05-51 2.16 UCI 4.49 UCI 6.65 UCI TOTAL NORRIS B				03-112-27C
07-53 2.26 UCI 4.52 UCI 6.80 UCI TOTAL NORRIS B				03-112-27D
04-05-60 1.84 UCI 5.94 UCI TOTAL C.31				03-112-27E
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON				03-112-28
04-05-60 3.47 UCI 5.03 UCI TOTAL C.69				03-112-28E

X-RAY EXAMINATION			03-112-30
PARTIAL SKELETAL SURVEY			03-112-30A
05-24-51	ELGIN STATE HOSP.	LOC. ACRH	03-112-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 14			03-112-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN THE SCAPULAE, HUMERI,			03-112-30D
ULNAE, LEFT RADIUS, TIBIAE AND FIBULAE, METATARSALS. BONY			03-112-30E
SCLEROSIS IN THE ILIA AND FEMORAL HEADS. MARKED COARSENING OF THE			03-112-30F
TRABECULAR PATTERN OF THE PELVIS AND EXTREMITIES.			03-112-30G
PARTIAL SKELETAL SURVEY			03-112-31A
08-26-53	ELGIN STATE HOSP.	LOC. ACRH	03-112-31B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 21			03-112-31C
PPF INCREASE IN NUMBER AND SEVERITY OF BONY LESIONS DESCRIBED			03-112-31D
PREVIOUS EXAMINATION.			03-112-31E
PARTIAL SKELETAL SURVEY			03-112-32A
01-06-56	ELGIN STATE HOSP.	LOC. ACRH	03-112-32B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 21			03-112-32C
PPF NO CHANGE SINCE LAST EXAMINATION.			03-112-32D
COMPLETE SKELETAL SURVEY			03-112-33A
04-06-60	ANL	X-RAY NO. R-194 LOC. ANL	03-112-33B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 21			03-112-33C
PPF SLIGHT INCREASE IN NUMBER OF LESIONS WITH INCREASING			03-112-33D
SCLEROSIS OF HEADS OF FEMORA AND HUMERI.			03-112-33E
CLINICAL LABORATORY FINDINGS			03-112-40
05-11-51	HG 11.5	HTC RBC 3.8	03-112-40A
000 -X22	SCHIZOPHRENIC REACTION, HEBEPHRENIC TYPE		03-112-67
DATA REVISED 11-04-68			03-112-99

PATIENT 03-113	BORN 08-12-14	03-113-01
DECEASED		03-113-02
		03-113-02A
FEMALE		03-113-05
OTHER PERTINENT NOS.	CASE M	03-113-05A
DECEASED 10-14-46		03-113-06
DEATH CERT.NO.	AUTOPSY NONE	03-113-07
INTERMENT BNAI MOSHE CEMETERY, FOREST PARK, ILL.		03-113-08
CAUSES OF DEATH	PULMONARY TUBERCULOSIS	03-113-09
SOURCE OF CASE	ELGIN 05	03-113-10
LITERATURE CITATION		03-113-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE M.		03-113-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE M.		03-113-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE M.		03-113-11C
EXPOSURE	THERAPEUTIC--INJECTION 05	03-113-12
SOURCE AND HOSPITAL RECORD		03-113-14
ADMITTED ELGIN STATE HOSPITAL 01-09-31. RECEIVED RADIUM CHLORIDE		03-113-14A
INTRAVENOUSLY, TOTAL 380 UCI, BETWEEN MARCH AND SEPTEMBER 1931.		03-113-14B
AGE 17 AT INJECTION. HOSPITAL RECORD--		03-113-14C
06-11-31 GOOD CANDIDATE FOR RACL2.		03-113-14D
09-28-31 IS RECEIVING RACL2, 10 UCI WEEKLY. RECEIVED 380 UCI,		03-113-14E
MARCH TO SEPTEMBER 1931.		03-113-14F
12-16-32 AND 01-04-33 X-RAYS MADE OF SELLA, KNEE, AND ANKLE FOR		03-113-14G
STUDY OF EPIPHYSEAL LINES BY DR. STEINBERG.		03-113-14H
FAMILY HISTORY		03-113-15
NEVER MARRIED		03-113-15A
MEDICAL HISTORY		03-113-20
DIAGNOSED DEMENTIA PRAECOX CATATONIC TYPE AT ELGIN STATE HOSPITAL.		03-113-20A
COMPUTED TOTAL-BODY RADIUM		03-113-27
12-31 1.00 UCI	SCHLUNDT A	03-113-27A
06-32 1.30 UCI	SCHLUNDT A	03-113-27B
X-RAY EXAMINATION		03-113-30
03-15-43 CHICAGO STATE HOSP.		03-113-30B
PPF LEFT HIP, OLD INFECTIOUS ARTHRITIS.		03-113-30D
10-08-46 CHICAGO STATE HOSPITAL		03-113-31B
PPF EXAMINATION OF LEFT HIP SHOWS MARKED PROLIFERATIVE CHANGES		03-113-31D
INVOLVING BOTH ACETABULUM AND HEAD OF FEMUR WHICH MAY BE DUE TO		03-113-31E
OLD INJURY OR OLD HEALED SLIPPED EPIPHYSIS. NO EVIDENCE OF JOINT		03-113-31F
DESTRUCTION. CYSTIC CHANGES IN HEAD AND NECK OF RIGHT FEMUR.		03-113-31G

CLINICAL LABORATORY FINDINGS

07-18-33 HG 80 HTC RBC 5.2
WBC 5,000 DIFF. P 42 ST L 55 M 2 E 1 B

09-22-33 HG HTC RBC
WBC 8,800 DIFF. P 50 ST L 36 M 10 E 3 B

23513-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR

000 -X23 SCHIZOPHRENIC REACTION, CATATONIC TYPE
360 -123 PULMONARY TUBERCULOSIS

DATA REVISED 11-04-68

03-113-40
03-113-40A
03-113-40B

03-113-41A
03-113-41B

03-113-66

03-113-67
03-113-67A

03-113-99

PATIENT 03-114	BCRN 06-12-01	03-114-01
DECEASED		03-114-02
		03-114-02A
FEMALE		03-114-05
OTHER PERTINENT NCS.	CASE N	03-114-05A
DECEASED 03-22-68		03-114-06
DEATH CERT.NO.	AUTOPSY NONE	03-114-07
INTERMENT	HILLSIDE CEMETERY, ELGIN STATE HOSP., ELGIN, ILL.	03-114-08
CAUSES OF DEATH	MYOCARDIAL INFARCTION	03-114-09
SOURCE OF CASE	ELGIN 05	03-114-10
LITERATURE CITATION		03-114-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE N.		03-114-11A
NCRRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE N.		03-114-11B
LCONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE N.		03-114-11C
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA, VIENNA (1962). CASE 03-114.		03-114-11D
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 279, IAEA, VIENNA (1962). CASE N.		03-114-11E
MILLER, ANL-6839 (1964) PP. 18-39. CASE 03-114.		03-114-11F
MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE 03-114.		03-114-11H
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-114.		03-114-11I
		03-114-11J
EXPOSURE	THERAPEUTIC--INJECTION 05	03-114-12
SOURCE AND HOSPITAL RECORD		03-114-14
ADMITTED ELGIN STATE HOSPITAL 05-08-31, PAROLED AND READMITTED SEVERAL TIMES THEREAFTER. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL 360 UCI, BETWEEN MARCH AND JULY 1931. AGE 30 AT INJECTION.		03-114-14A
HOSPITAL RECORD--		03-114-14B
06-20-31 A NEEDLE WAS REMOVED FROM VEIN AFTER CONSIDERABLE SEARCHING.		03-114-14C
09-28-31 IS RECEIVING RADIUM CHLORIDE 10 MICROGRAMS INTRAVENOUSLY WEEKLY.		03-114-14D
10-10-31 SHE WAS PATIENT THAT GOT THE NEEDLE IN HER ARM WHILE RECEIVING RADIUM TREATMENT.		03-114-14E
(NOTE THAT ABOVE DATE CONTRADICTS PUBLISHED MARCH TO JULY INJECTION DATES.)		03-114-14F
		03-114-14G
		03-114-14H
		03-114-14I
		03-114-14J
		03-114-14K
		03-114-14L
FAMILY HISTORY		03-114-15
NEVER MARRIED		03-114-15A
MEDICAL HISTORY		03-114-20
DIAGNOSED DEMENTIA PRAECOX, CATATONIC TYPE, ELGIN STATE HOSPITAL.		03-114-20A
GAMMA-RAY MEASUREMENTS		03-114-25
07-30-59 RAB,RAC C.370 UCI HGS 1 TILTING CHAIR CEM		03-114-25E
03-10-60 RAB,RAC C.384 UCI HGS 1 TILTING CHAIR CEM		03-114-25F
12-19-63 RAB,RAC C.323 UCI HGS 1 TILTING CHAIR CEM		03-114-25G
12-19-63 RAB,RAC C.359 UCI HGS 1 7-CRYST-PCS CEM		03-114-25H
08-05-64 RAB,RAC C.304 UCI HGS 1 TILTING CHAIR CEM		03-114-25I
BREATH MEASUREMENTS		03-114-26
03-10-60 EM-222 C.950 UCI BREATH RADON HELMET FFL		03-114-26F
08-05-64 EM-222 C.645 UCI BREATH RADON HELMET FFL		03-114-26I

COMPUTED TOTAL-BODY RADIUM								03-114-27
12-31	1.10	UCI	1.80	UCI	2.90	UCI	TOTAL	SCHLUNDT A 03-114-27A
06-32	0.90	UCI	5.70	UCI	6.60	UCI	TOTAL	SCHLUNDT A 03-114-27B
05-51	0.57	UCI	1.15	UCI	1.71	UCI	TOTAL	NORRIS B 03-114-27C
07-53	0.50	UCI	1.19	UCI	1.70	UCI	TOTAL	NORRIS B 03-114-27D
07-30-59	0.370	UCI			1.193	UCI	TOTAL	0.31 03-114-27E
03-10-60	0.384	UCI			1.239	UCI	TOTAL	0.31 03-114-27F
12-19-63	0.323	UCI			1.041	UCI	TOTAL	0.31 03-114-27G
12-19-63	0.359	UCI			1.157	UCI	TOTAL	0.31 03-114-27H
08-05-64	0.304	UCI			0.983	UCI	TOTAL	0.31 03-114-27I

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON								03-114-28
03-10-60			0.950	UCI	1.377	UCI	TOTAL	0.69 03-114-28F
08-05-64			0.645	UCI	0.934	UCI	TOTAL	0.69 03-114-28I

X-RAY EXAMINATION								03-114-30
PARTIAL SKELETAL SURVEY								03-114-30A
05-18-51	ELGIN STATE HOSP.				LOC. ACRH			03-114-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2								03-114-30C
PPF AREA OF BONE SCLEROSIS IN NECK OF RIGHT HUMERUS. A FEW								03-114-30D
AREAS OF BONE RESORPTION IN MID PORTION OF SHAFT OF RIGHT RADIUS.								03-114-30E

PARTIAL SKELETAL SURVEY								03-114-31A
07-17-53	ELGIN STATE HOSP.				LOC. ACRH			03-114-31B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5								03-114-31C
PPF SEVERAL AREAS UP TO 1.5 CM SIZE OF BONE RESORPTION IN SHAFT								03-114-31D
OF RIGHT RADIUS. COARSENING OF TRABECULAR PATTERN IN NECK OF								03-114-31E
RIGHT AND LEFT FEMUR. PATCHY BONE SCLEROSIS IN HEAD AND NECK OF								03-114-31F
LEFT FEMUR.								03-114-31G

COMPLETE SKELETAL SURVEY								03-114-32A
12-15-55	ELGIN STATE HOSP.				LOC. ACRH			03-114-32B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5								03-114-32C
PPF NO CHANGE OR PROGRESSION OF LESIONS SINCE LAST EXAMINATION.								03-114-32D

COMPLETE SKELETAL SURVEY								03-114-33A
08-21-58	ELGIN STATE HOSP.				LOC. ACRH			03-114-33B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2								03-114-33C
PPF NO CHANGE OR PROGRESSION OF LESIONS SINCE LAST EXAMINATION.								03-114-33D

COMPLETE SKELETAL SURVEY								03-114-34A
12-20-63	ANL	X-RAY NO. R-231		LOC. ANL				03-114-34B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10								03-114-34C
PPF WEDGING OF FIFTH CERVICAL VERTEBRA. MULTIPLE 1 CM SIZE AREAS								03-114-34D
OF BONE RESORPTION IN RIGHT RADIUS AND ULNA AND LEFT RADIUS.								03-114-34E
MULTIPLE 13 MM SIZE AREAS OF BONE RESORPTION IN SHAFT OF LEFT								03-114-34F
ULNA. 15 MM SIZE AREA OF BONE RESORPTION IN MID PORTION OF SHAFT								03-114-34G
OF RIGHT FEMUR. COARSENING OF TRABECULAR PATTERN OF HEAD AND NECK								03-114-34H
OF BOTH FEMORA. MULTIPLE 1 CM SIZE AREAS OF BONE RESORPTION IN								03-114-34I
RIGHT TIBIA, LEFT TIBIA AND LEFT FIBULA.								03-114-34J

CLINICAL LABORATORY FINDINGS								03-114-40
12-20-63	HG 14.8		HTC 43		RBC 4.43			03-114-40A
WBC 8600	DIFF. P 52	ST	L 46	M 1	E 1	B		03-114-40B

000	-X23	SCHIZOPHRENIC REACTION, CATAIONIC TYPE	03-114-67
430	-516.7	MYOCARDIAL INFARCTION	03-114-67A

DATA REVISED 11-04-68	03-114-99
-----------------------	-----------

PATIENT C3-115	BCRN	06	03-115-01 03-115-02 03-115-05
FEMALE			
OTHER PERTINENT NCS.	CASE 0		03-115-05A
SOURCE OF CASE	ELGIN 05		03-115-10
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE C. MCCRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE C. LONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE C. MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA, VIENNA (1962). CASE C3-115. MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 279, IAEA, VIENNA (1962). CASE C. MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P.67 (IAEA, VIENNA (1964). CASE C3-115. MILLER, ANL-6839 (1964) PP. 18-39. CASE 03-115. MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE 03-115. MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-115.			03-115-11A 03-115-11B 03-115-11C 03-115-11D 03-115-11E 03-115-11F 03-115-11G 03-115-11H 03-115-11I 03-115-11J 03-115-11K 03-115-11L
EXPOSURE	THERAPEUTIC--INJECTION C5		03-115-12
SOURCE AND HOSPITAL RECORD			03-115-14
ADMITTED ELGIN STATE HOSPITAL 03-27-31. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL 260 UCI, BETWEEN MARCH AND DECEMBER 1931. AGE 25 AT INJECTION. HOSPITAL RECORD-- 06-16-31 TRANSFERRED TO WING COTTAGE FOR TREATMENT FROM LONEY COTTAGE. 09-08-31 WING COTTAGE NO. 2. HAS RECEIVED 6 RADIUM CHLORIDE TREATMENTS TO DATE. 10-12-31 WING COTTAGE. PATIENT IS AT PRESENT RECEIVING BLANKET THERAPY AND RADIUM CHLORIDE. 10-28-31, 11-04-31 WING COTTAGE. 11-09-31 WING COTTAGE. SHE IS RECEIVING RADIUM CHLORIDE WEEKLY. 11-18-31, 11-25-31, 12-29-31 WING COTTAGE. 12-31-31 WING COTTAGE. IS VERY UNWELL AND HAS SHOWN NO IMPROVE- MENT AFTER BEING IN THE WARD FOR SEVERAL MONTHS AND TREATED WITH RADIUM. IS TO BE RETURNED TO ANNEX 4. 01-06-32 WING COTTAGE. 03-28-32 ANNEX 4. (NOTE THAT ABOVE DATES CONTRADICT PUBLISHED MARCH TO DECEMBER INJECTION DATES.)			03-115-14A 03-115-14B 03-115-14C 03-115-14D 03-115-14E 03-115-14F 03-115-14G 03-115-14H 03-115-14I 03-115-14J 03-115-14K 03-115-14L 03-115-14M 03-115-14N 03-115-14O 03-115-14P 03-115-14Q 03-115-14R 03-115-14S
FAMILY HISTORY			03-115-15
MARRIED, SEPARATED			03-115-15A
MEDICAL HISTORY			03-115-20
ADMITTED ELGIN STATE HOSPITAL 03-27-31 WITH DIAGNOSIS OF DEMENTIA PRAECOX, CATATONIC TYPE. PATIENT COMPLAINED OF PAIN ON MOTION OF LEFT HIP ABOUT 1940, X-RAY EXAMINATION OF PELVIS, LOWER SPINE, AND ANKLE WERE NEGATIVE. PHYSICAL EXAMINATION 1951 ESSENTIALLY NEGATIVE EXCEPT FOR HYPERTROPHIC OSTEOARTHRITIC CHANGES IN HANDS.			03-115-20A 03-115-20B 03-115-20C 03-115-20D 03-115-20E

GAMMA-RAY MEASUREMENTS

07-28-59	RAB,RAC	0.240 UCI	HGS 1 TILTING CHAIR	CEM	03-115-25
03-08-60	RAB,RAC	0.240 UCI	HGS 1 TILTING CHAIR	CEM	03-115-25E
12-16-63	RAB,RAC	0.221 UCI	HGS 1 TILTING CHAIR	CEM	03-115-25F
12-16-63	RAB,RAC	0.268 UCI	HGS 1 7-CRYST-POS	CEM	03-115-25G
01-16-64	RAB,RAC	0.211 UCI	HGS 1 TILTING CHAIR	CEM	03-115-25H
01-16-64	RAB,RAC	0.255 UCI	HGS 1 7-CRYST-POS	CEM	03-115-25I
08-06-64	RAB,RAC	0.215 UCI	HGS 1 TILTING CHAIR	CEM	03-115-25J
					03-115-25K

BREATH MEASUREMENTS

03-08-60	EM-222	0.790 UCI	BREATH RADON HELMET	HFL	03-115-26
08-06-64	EM-222	0.668 UCI	BREATH RADON HELMET	HFL	03-115-26F
					03-115-26K

COMPUTED TOTAL-BODY RADIUM

12-31	1.20 UCI	6.40 UCI	7.60 UCI TOTAL	SCHLUNDT A	03-115-27
06-32	0.70 UCI	2.40 UCI	3.10 UCI TOTAL	SCHLUNDT A	03-115-27A
05-51	0.39 UCI	0.54 UCI	0.93 UCI TOTAL	NORRIS B	03-115-27B
07-53	0.34 UCI	0.67 UCI	1.01 UCI TOTAL	NORRIS B	03-115-27C
07-28-59	0.240 UCI		0.774 UCI TOTAL		03-115-27D
03-08-60	0.240 UCI		0.774 UCI TOTAL	0.31	03-115-27E
12-16-63	0.221 UCI		0.713 UCI TOTAL	0.31	03-115-27F
12-16-63	0.268 UCI		0.865 UCI TOTAL	0.31	03-115-27G
01-16-64	0.211 UCI		0.681 UCI TOTAL	0.31	03-115-27H
01-16-64	0.255 UCI		0.824 UCI TOTAL	0.31	03-115-27I
08-06-64	0.215 UCI		0.694 UCI TOTAL	0.31	03-115-27J
					03-115-27K

TOTAL-BODY COMPUTED FROM BREATH RADON

03-08-60	0.790 UCI	1.144 UCI TOTAL	0.69	03-115-28
08-06-64	0.668 UCI	0.968 UCI TOTAL	0.69	03-115-28F
				03-115-28K

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY				03-115-30
05-C9-51	ELGIN STATE HOSP.	LOC. ACRH		03-115-30A
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3				03-115-30B
PPF SCLEROSIS OF THE PETROUS PORTION OF THE RIGHT TEMPORAL BONE.				03-115-30C
SEVERAL UP TO 5 MM SIZE AREAS OF BONE RESORPTION PRESENT IN THE				03-115-30D
SHAFT OF THE RIGHT AND LEFT RADIUS AND ULNA. COARSENING OF THE				03-115-30E
TRAPEZOIDAL PATTERN OF THE LEFT FIBULA.				03-115-30F
				03-115-30G

PARTIAL SKELETAL SURVEY				03-115-31A
01-09-53	ELGIN STATE HOSP.	LOC. ACRH		03-115-31B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 7				03-115-31C
PPF INCREASED NUMBER OF UP TO 5 MM SIZE AREAS OF BONE RESORPTION				03-115-31D
IN THE DISTAL END OF THE RIGHT AND LEFT RADIUS AND ULNA. SEVERAL				03-115-31E
UP TO 5 MM SIZE AREAS OF BONE SCLEROSIS IN THE HEADS OF THE RIGHT				03-115-31F
AND LEFT FEMUR. COARSENING OF THE TRAPEZOIDAL PATTERN OF THE RIGHT				03-115-31G
AND LEFT FIBULA AND THE LEFT TIBIA WITH MANY UP TO 5 MM SIZE				03-115-31H
AREAS OF BONE RESORPTION THROUGHOUT THE SHAFT OF THE LEFT FIBULA.				03-115-31I

COMPLETE SKELETAL SURVEY			03-115-32A
01-27-56	ELGIN STATE HOSP.	LOC. ACRH	03-115-32B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 5	03-115-32C
PPF NO CHANGE SINCE THE LAST EXAMINATION DONE 3 YEARS PREVIOUSLY.			03-115-32D
COMPLETE SKELETAL SURVEY			03-115-33A
11-18-58	ELGIN STATE HOSP.	LOC. ACRH	03-115-33B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 4	03-115-33C
PPF NO CHANGE SINCE LAST EXAMINATION DONE 3 YEARS PREVIOUSLY.			03-115-33D
COMPLETE SKELETAL SURVEY			03-115-34A
12-17-63	ANL	X-RAY NO. R-227 LOC. ANL	03-115-34B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 13	03-115-34C
PPF FIVE UP TO 8 MM SIZE AREAS OF BONE RESORPTION IN THE NECK			03-115-34D
OF THE RIGHT HUMERUS WITH SEVERAL UP TO 5 MM SIZE AREAS OF BONE			03-115-34E
RESORPTION IN THE APPROXIMATELY HALF OF THE SHAFT OF THE RIGHT			03-115-34F
HUMERUS. COARSENING OF THE TRABECULAR PATTERN OF THE RIGHT AND			03-115-34G
LEFT RADIUS AND ULNA WITH MULTIPLE UP TO 1 CM SIZE AREAS OF BONE			03-115-34H
RESORPTION IN THE SHAFT OF THE RIGHT RADIUS, LEFT RADIUS AND LEFT			03-115-34I
ULNA. AREAS OF BONE SCLEROSIS PRESENT IN THE HEAD OF THE RIGHT			03-115-34J
AND LEFT FEMUR UNCHANGED SINCE PREVIOUS EXAMINATIONS. MULTIPLE			03-115-34K
UP TO 5 MM SIZE AREAS OF BONE RESORPTION IN THE LEFT FEMUR GREAT-			03-115-34L
ER TROCHANTERIC REGION. COARSENING OF THE TRABECULAR PATTERN OF			03-115-34M
THE RIGHT AND LEFT TIBIA AND FIBULA WITH MULTIPLE UP TO 18 MM			03-115-34N
SIZE AREAS OF BONE RESORPTION IN THE MID PORTION OF THE SHAFT OF			03-115-34O
THE LEFT TIBIA AND SMALLER AREAS IN THE SHAFT OF THE RIGHT TIBIA.			03-115-34P
THERE HAS BEEN A SLIGHT PROGRESSION IN THE NUMBER OF AND SEVER-			03-115-34Q
ITY OF THE LESIONS SINCE THE LAST EXAMINATION DONE 8 YEARS			03-115-34R
PREVIOUSLY.			03-115-34S
CLINICAL LABORATORY FINDINGS			03-115-40
05-09-51	HG 12.5	HTC	03-115-40A
WBC	DIFF. NORMAL	RBC 4.35	03-115-40B
12-17-63	HG 15.6	HTC 51	03-115-41A
WBC 16,500	DIFF. P 76	ST 2 L 17 M 4 E 1 B	03-115-41B
000 -X23	SCHIZOPHRENIC REACTION, CATATONIC TYPE		03-115-67
2456 -910	OSTEOARTHRITIS OF THE INTERPHALANGEAL JOINTS OF HANDS		03-115-67A
DATA REVISED 11-04-68			03-115-99

PATIENT 03-116	BORN	08	03-116-01
			03-116-02
			03-116-02A
FEMALE			03-116-05
OTHER PERTINENT NOS.	CASE P		03-116-05A
SOURCE OF CASE	ELGIN 05		03-116-10
LITERATURE CITATION			03-116-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE P.			03-116-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE P.			03-116-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE P.			03-116-11C
MILLER, ANL-6839 (1964) PP. 18-39. CASE 03-116.			03-116-11D
MILLER AND FINKEL, ANL-7217 (1965) PP. 7-90. CASE 03-116.			03-116-11E
MILLER AND FINKEL, AM.J.ROENT. 103,271 (AUG. 1968). CASE 03-116.			03-116-11F
EXPOSURE	THERAPEUTIC--INJECTION 05		03-116-12
SOURCE AND HOSPITAL RECORD			03-116-14
ADMITTED ELGIN STATE HOSPITAL 02-28-31. RECEIVED RADIUM CHLORIDE			03-116-14A
INTRAVENOUSLY, TOTAL 250 UCI, BETWEEN JULY AND SEPTEMBER, 1931.			03-116-14B
AGE 23 AT INJECTION. HOSPITAL RECORD--			03-116-14C
06-16-31 TRANSFERRED TO WING COTTAGE FOR TREATMENT.			03-116-14D
06-17-31 RADIUM CHLORIDE ONCE WEEKLY.			03-116-14E
10-12-31 AT WING COTTAGE.			03-116-14F
11-09-31 RECEIVING RADIUM CHLORIDE.			03-116-14G
11-17-31 RECEIVING RADIUM CHLORIDE WEEKLY.			03-116-14H
03-01-32 TRANSFERRED TO BROOKS COTTAGE.			03-116-14I
07-23-55 TRANSFERRED TO MANTENO STATE HOSP.			03-116-14J
06-29-59 X-RAY REPORT ON SKULL, FILM L706. X-RAY REPORT ON FACE,			03-116-14K
FILM 725. THE ANTRA SEEM TO BE OF SLIGHTLY INCREASED OPACITY,			03-116-14L
BUT ALL OTHER NASAL ACCESSORY SINUSES AND MASTOID CELLS ARE			03-116-14M
NORMALLY VENTILATED.			03-116-14N
(NOTE THAT ABOVE DATES CONTRADICT PUBLISHED JULY TO SEPTEMBER			03-116-14O
INJECTION DATES.)			03-116-14P
FAMILY HISTORY			03-116-15
MEDICAL HISTORY			03-116-20
DIAGNOSED AS DEMENTIA PRAECOX, CATATONIC, AT ELGIN STATE HOSP.			03-116-20A
GAMMA-RAY MEASUREMENTS			03-116-25
11-17-60 RAB,RAC 0.507 UCI HGS 1 TILTING CHAIR CEM			03-116-25D
02-18-64 RAB,RAC 0.442 UCI HGS 1 TILTING CHAIR CEM			03-116-25E
02-18-64 RAB,RAC 0.495 UCI HGS 1 7-CRYST-POS CEM			03-116-25F
COMPUTED TOTAL-BODY RADIUM			03-116-27
12-31 1.10 UCI 5.80 UCI 6.90 UCI TOTAL SCHLUNDT A			03-116-27A
06-32 0.90 UCI 4.20 UCI 5.10 UCI TOTAL SCHLUNDT A			03-116-27B
05-51 0.95 UCI 1.60 UCI 2.56 UCI TOTAL NORRIS B			03-116-27C
11-17-60 0.507 UCI 1.634 UCI TOTAL 0.31			03-116-27D
02-18-64 0.442 UCI 1.426 UCI TOTAL 0.31			03-116-27E
02-18-64 0.495 UCI 1.597 UCI TOTAL 0.31			03-116-27F

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

05-09-51 ELGIN STATE HOSP. LOC. ACRH
 ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 11
 PPF FIVE AREAS OF BONE RESORPTION 10 MM SIZE IN THE RIGHT RAMUS
 OF THE MANDIBLE. ASEPTIC NECROSIS OF THE HEAD OF THE RIGHT
 HUMERUS WITH MULTIPLE 3 MM SIZE AREAS OF BONE RESORPTION AND
 SCLEROSIS WITHIN THE HEAD OF THE RIGHT HUMERUS. LARGE AREA
 MEASURING 2 X 1 CM OF ASEPTIC NECROSIS OF THE HEAD OF THE LEFT
 HUMERUS WITH AREAS OF BONE RESORPTION IN THE REGION OF THE NECK
 OF THE HUMERUS. PATCHY SCLEROSIS IN THE HEAD AND NECK OF THE
 RIGHT AND LEFT FEMUR WITH COARSENING OF THE TRABECULAR PATTERN
 OF BOTH FEMORA.

03-116-30
 03-116-30A
 03-116-30B
 03-116-30C
 03-116-30D
 03-116-30E
 03-116-30F
 03-116-30G
 03-116-30H
 03-116-30I
 03-116-30J
 03-116-30K
 03-116-30L

COMPLETE SKELETAL SURVEY

11-17-60 ANL X-RAY NO. R-215 LOC. ANL
 ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 31
 PPF SEVERAL UP TO 9 MM AREAS OF BONE RESORPTION SCATTERED
 THROUGHOUT THE CALVARIUM. A FEW SMALL AREAS OF BONE RESORPTION
 AND SCLEROSIS IN THE LEFT ISCHIAL TUBEROSITY. FLATTENING OF THE
 SUPERIOR BORDER OF THE LEFT ACETABULUM. COARSENING OF THE
 TRABECULAR PATTERN OF THE RIGHT SCAPULA. RESORPTION OF THE AR-
 TICULAR SURFACE OF THE HEAD OF THE RIGHT HUMERUS. FLATTENING AND
 RESORPTION OF THE HEAD OF THE LEFT HUMERUS WITH MARKED SECONDARY
 HYPERTROPHIC CHANGES ABOUT THE RIGHT AND LEFT GLENOID FOSSE OF
 BOTH SCAPULAE. A FEW AREAS OF BONE RESORPTION IN THE CORTEX OF
 THE RIGHT AND LEFT RADIUS. MULTIPLE AREAS OF BONE RESORPTION
 THROUGHOUT THE RIGHT AND LEFT FEMUR WITH MARKED COARSENING OF THE
 TRABECULAR PATTERN. MARKED ROUGHENING AND FLATTENING OF THE AR-
 TICULAR SURFACE OF THE HEAD OF THE LEFT FEMUR. COARSENING OF THE
 TRABECULAR PATTERN OF RIGHT AND LEFT TIBIA WITH MULTIPLE AREAS OF
 BONE RESORPTION THROUGHOUT THE SHAFT OF THE RIGHT AND LEFT FIBU-
 LA. ASEPTIC NECROSIS OF RIGHT AND LEFT TARSAL SCAPHOIDS.

03-116-31A
 03-116-31B
 03-116-31C
 03-116-31D
 03-116-31E
 03-116-31F
 03-116-31G
 03-116-31H
 03-116-31I
 03-116-31J
 03-116-31K
 03-116-31L
 03-116-31M
 03-116-31N
 03-116-31O
 03-116-31P
 03-116-31Q
 03-116-31R
 03-116-31S

COMPLETE SKELETAL SURVEY

02-18-64 ANL X-RAY NO. R-215B LOC. ANL
 ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 25
 PPF PATCHY SCLEROSIS IN BOTH ISCHIAL TUBEROSITIES. SOLITARY
 SMALL AREAS OF BONE RESORPTION IN THE SHAFT OF THE PROXIMAL
 PHALANX OF THE RIGHT RING FINGER AND IN THE SHAFT OF THE FIFTH
 RIGHT METACARPAL. OLD FRACTURE OF THE MULTANGULAR MAJOR. IN-
 CREASED FLATTENING AND RESORPTION OF HEADS OF RIGHT AND LEFT
 HUMERUS AND RIGHT AND LEFT FEMUR. PROGRESSION OF RESORPTION OF
 RIGHT AND LEFT TARSAL SCAPHOIDS. REMAINDER OF CHANGES ARE AS DES-
 CRIED FOR THE PREVIOUS EXAMINATION. MARKED PROGRESSION IN NUMBER
 AND SEVERITY OF LESIONS DURING A 13-YEAR PERIOD.

03-116-32A
 03-116-32B
 03-116-32C
 03-116-32D
 03-116-32E
 03-116-32F
 03-116-32G
 03-116-32H
 03-116-32I
 03-116-32J
 03-116-32K
 03-116-32L

CLINICAL LABORATORY FINDINGS

10-19-50 HG 12.9 HTC RBC 4.40

03-116-40
 03-116-40A

05-10-51 SERUM CALCIUM 10.2 MG PERCENT

03-116-41C

11-17-60 PG 13.1 HTC RBC 4.28
 WBC 5700 DIFF. P 67 ST 1 L 24 M 6 E 2 B

03-116-42A
 03-116-42B

2301 -4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE HUMERUS (LEFT,RIGHT)	03-116-66
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT,RIGHT)	03-116-66A
2394 -4722.1	ASEPTIC NECROSIS OF THE TARSAL SCAPHOID (LEFT,RIGHT)	03-116-66B
000 -X23	SCHIZOPHRENIC REACTION, CATATONIC TYPE	03-116-67
DATA REVISED	11-04-68	03-116-99

PATIENT 03-117	BORN 10-29-98	03-117-01
DECEASED		03-117-02
		03-117-02A
MALE		03-117-05
OTHER PERTINENT NOS.	CASE Q	03-117-05A
	U OF CHICAGO AUTOPSY	03-117-05B
DECEASED 04-20-57		03-117-06
DEATH CERT. NO.	AUTOPSY YES	03-117-07
INTERMENT MT. ISAIAH CEMETERY, CHICAGO, ILL.		03-117-08
CAUSES OF DEATH	STRANGULATION (HOMICIDE)	03-117-09
	PULMONARY EDEMA OF LUNGS	03-117-09A
SOURCE OF CASE	ELGIN 05	03-117-10
LITERATURE CITATION		03-117-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE Q.		03-117-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE Q.		03-117-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE C.		03-117-11C
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959).		03-117-11D
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959).		03-117-11E
ROWLAND, RADIOSOTOPES IN THE BIOSPHERE, CALDECOTT AND SNYDER,		03-117-11F
EDS., U OF MINNESOTA, MINNEAPOLIS (1960).		03-117-11G
LLOYD, BRIT.J.RADIOL. 34,521 (AUG. 1961).		03-117-11H
EXPOSURE	THERAPEUTIC--INJECTION 05	03-117-12
SOURCE AND HOSPITAL RECORD		03-117-14
ADMITTED ELGIN STATE HOSPITAL 04-17-18. RECEIVED RADIUM CHLORIDE		03-117-14A
INTRAVENOUSLY, TOTAL 450 UCI, BETWEEN MARCH AND DECEMBER 1931.		03-117-14B
AGE 33 AT INJECTION. HOSPITAL RECORD--		03-117-14C
01-27-31 PATIENT RECEIVING RADIUM INJECTIONS.		03-117-14D
02-02-31 PATIENT RUNS A SLIGHT TEMPERATURE ON THE DAY FOLLOWING		03-117-14E
HIS RADIUM INJECTIONS.		03-117-14F
02-10-31 PATIENT SEEMS TO BE DROWSY ON THE DAY FOLLOWING HIS		03-117-14G
INJECTION.		03-117-14H
03-02-31 PATIENT IS STILL RECEIVING RADIUM TREATMENT.		03-117-14I
(NOTE THAT ABOVE DATES CONTRADICT PUBLISHED MARCH TO DECEMBER		03-117-14J
INJECTION DATES.)		03-117-14K
FAMILY HISTORY		03-117-15
NEVER MARRIED		03-117-15A
MEDICAL HISTORY		03-117-20
PATIENT HAD BEEN SCHIZOPHRENIC SINCE EARLY CHILDHOOD. DIAGNOSED		03-117-20A
DEMENTIA PRAECOX. TRAUMATIC FRACTURE NASAL BONE 07-48, AND TRAU-		03-117-20B
MATIC FRACTURE OF MEDIAL MALLEOLUS OF LEFT ANKLE 10-48. PHYSICAL		03-117-20C
EXAM 08-29-50 WAS NEGATIVE. PATIENT STRANGLED TO DEATH 04-20-57		03-117-20D
APPARENTLY BY ANOTHER PATIENT. AUTOPSY REVEALED POSSIBLE EARLY		03-117-20E
RADIUM NECROSIS OF BONE (DR. B.H. SPARGO).		03-117-20F

COMPUTED TOTAL-BODY RADIUM					03-117-27
12-31	1.60 UCI	16.10 UCI	17.70 UCI TOTAL	SCHLUNDT A	03-117-27A
06-32	1.30 UCI			SCHLUNDT A	03-117-27B
05-51	0.22 UCI	0.59 UCI	0.81 UCI TOTAL	NORRIS B	03-117-27C
07-53	0.23 UCI	1.31 UCI	1.54 UCI TOTAL	NORRIS B	03-117-27D

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

05-10-51 ELGIN STATE HOSP. NO. LOC. ACRH

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0

PPF NONE.

03-117-30

03-117-30A

03-117-30B

03-117-30C

03-117-30D

PARTIAL SKELETAL SURVEY

08-06-53 ELGIN STATE HOSP. NO. LOC. ACRH

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3

PPF MODERATE COARSENING OF TRABECULAR PATTERN OF LEFT RADIUS

WITH SEVERAL UP TO 5 MM SIZE AREAS OF BONE RESORPTION. A FEW UP

TO 5 MM SIZE AREAS OF BONE RESORPTION IN MID PORTION OF SHAFT OF

LEFT FEMUR.

03-117-31A

03-117-31B

03-117-31C

03-117-31D

03-117-31E

03-117-31F

03-117-31G

COMPLETE SKELETAL SURVEY

01-27-56 ELGIN STATE HOSP. NO. LOC. ACRH

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3

PPF INCREASE IN SIZE OF AREAS OF BONE RESORPTION IN SHAFT OF

RIGHT RADIUS WHICH NOW MEASURE 1 CM IN GREATEST EXTENT. LESIONS

IN LEFT FEMUR AS BEFORE. MINIMAL PROGRESSION OF AREAS OF BONE

RESORPTION SINCE LAST EXAMINATION DONE 3 YEARS PREVIOUSLY.

03-117-32A

03-117-32B

03-117-32C

03-117-32D

03-117-32E

03-117-32F

03-117-32G

CLINICAL LABORATORY FINDINGS

01-27-31 HG 106 HTC RBC 5.66

WBC 9,000 DIFF. P 75 ST 0 L 22 M 2 E 1 B 0

03-117-40

03-117-40A

03-117-40B

07-02-48 HG 15.5 HTC RBC 4.68

WBC 10,200 DIFF. P 74 ST 0 L 25 M 0 E 1 B 0

03-117-41A

03-117-41B

03-14-49 HG 16.8 HTC RBC 4.89

WBC 10,200 DIFF. P ST L M E B

03-117-42A

03-117-42B

SPECIMENS AVAILABLE

FROM AUTOPSY

THORACIC AND LUMBAR VERTEBRAL BODIES

HEAD AND NECK AND PROXIMAL 5 CM OF LEFT FEMUR

FRAGMENT OF SKULL

2 PORTIONS OF METATARSALS

LOC. ACRH

380 GMS

245 GMS

12 GMS

6 GMS

03-117-50

03-117-50A

03-117-50B

03-117-50C

03-117-50D

03-117-50E

AUTORADIOGRAPHIC ANALYSES

10-61

FEMUR

RER

MAXIMUM HOT SPOT

12.

PCI RA226/MG BONE

AVERAGE DIFFUSE

C.080

PCI RA226/MG BONE

CALCULATED UNIFORM LABEL

C.170

PCI RA226/MG BONE

HOT SPOT TO DIFFUSE RATIO

15C.

DIFFUSE TO UNIFORM LABEL

C.47

AUTORADIOGRAPHS SHOW THAT RADIUM IS DEPOSITED IN WIDE BANDS IN THE OSTEONS.

03-117-53
03-117-53A
03-117-53B
03-117-53C
03-117-53D
03-117-53E
03-117-53F
03-117-53G
03-117-53H

000 -X22 SCHIZOPHRENIC REACTION, HEBEPHRENIC TYPE

03-117-67

AUTOPSY REPORT AT ANL

03-117-70

DATA REVISED 11-04-68

03-117-99

PATIENT C3-118	BORN 05-22-98	03-118-01
DECEASED		03-118-02
		03-118-02A
FEMALE		03-118-05
OTHER PERTINENT NGS.	AMBH	03-118-05A
	ELGIN AUTOPSY	03-118-05B
	CASE R	03-118-05C
DECEASED 09-29-55		03-118-06
DEATH CERT. NO.	AUTOPSY YES	03-118-07
INTERMENT HILLSIDE CEMETERY, ELGIN STATE HOSP., ELGIN, ILL.		03-118-08
CAUSES OF DEATH MALIGNANT NEOPLASM OF LUNGS (DEATH CERT.)		03-118-09
OSTEOGENIC SARCOMA OF RIGHT TIBIA METASTATIC TO LUNGS (ACTUAL)		03-118-09A
SOURCE OF CASE	ELGIN 05	03-118-10
LITERATURE CITATION		03-118-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE R.		03-118-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE R.		03-118-11B
LCONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE R.		03-118-11C
HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY 11,149, GENEVA (1956).		03-118-11D
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959).		03-118-11E
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959).		03-118-11F
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN., MINNEAPOLIS (1960).		03-118-11G
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 279, IAEA, VIENNA (1962). CASE R.		03-118-11H
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-118-11I
EXPOSURE	THERAPEUTIC--INJECTION 05	03-118-12
SOURCE AND HOSPITAL RECORD		03-118-14
ADMITTED ELGIN STATE HOSPITAL 10-22-30. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL 410 UCI, BETWEEN MARCH AND DECEMBER 1931.		03-118-14A
AGE 32 AT INJECTION. HOSPITAL RECORD--		03-118-14B
02-10-31 AT PRESENT IS RECEIVING VARIOUS INJECTIONS OF RADIUM CHLORIDE.		03-118-14C
05-29-31 SHE RECEIVED 8 INJECTIONS OF RADIUM CHLORIDE, 10 MICROGRAMS.		03-118-14D
11-19-31 IS TAKING RADIUM CHLORIDE TREATMENTS AT WING COTTAGE, TWICE WEEKLY.		03-118-14E
(NOTE THAT ABOVE DATES CONTRADICT PUBLISHED MARCH TO DECEMBER INJECTION DATES.)		03-118-14F
		03-118-14G
		03-118-14H
		03-118-14I
		03-118-14J
		03-118-14K
FAMILY HISTORY		03-118-15
MARRIED		03-118-15A
DIVORCED 03-27-35		03-118-15B
CHILDREN FEMALE		03-118-16

MEDICAL HISTORY

PATIENT ADMITTED ELGIN STATE HOSPITAL WITH DIAGNOSIS OF SCHIZOPHRENIA. IN 1933 CLINICAL RECORDS NOTE THAT CONDITION OF HER TEETH WAS GOOD. IN 1937 PYORRHEA WAS DISCOVERED AND BY 1950 PATIENT WAS COMPLETELY EDENTULOUS. PHYSICAL EXAM IN 1950 REVEALED NEGATIVE OR NORMAL FINDINGS. ON 03-14-55 PATIENT COMPLAINED OF PAIN IN RIGHT LEG AND DIFFICULTY IN WALKING. RADIOGRAPHY DISCLOSED TUMOR OF RIGHT TIBIA ARISING NEAR SITE OF THE TIBIAL TUBERCLE. ON 04-26-55 RIGHT MID-THIGH AMPUTATION PERFORMED AT U OF CHICAGO CLINICS. METASTATIC TUMOR DEPOSITS NOTED IN CHEST ROENTGENOGRAM 05-31-55. PATIENT RETURNED TO ELGIN STATE HOSPITAL 06-08-55, WHERE THERE WAS CLINICAL PROGRESSION OF METASTATIC DISEASE, AND DEATH ON 09-29-55. GROSS AND HISTOLOGIC EXAMINATION OF HEAD OF LEFT FEMUR ON AUTOPSY REVEALED A SECOND PRIMARY OSTEOGENIC SARCOMA ARISING IN THE HEAD OF THE LEFT FEMUR (SEE AUTOPSY REPORT).

COMPUTED TOTAL-BODY RADIUM

12-31	1.10 UCI			SCHLUNDT A	03-118-27
05-51	1.27 UCI	2.30 UCI	3.57 UCI TOTAL	NORRIS B	03-118-27A
07-53	1.23 UCI	1.85 UCI	3.09 UCI TOTAL	NORRIS B	03-118-27B

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY
05-15-51 ELGIN STATE HOSP. NO.
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 11
PPF NUMEROUS UP TO 6 MM SIZE AREAS OF BONE RESORPTION THROUGHOUT CALVARIUM. COARSENING OF THE TRABECULAR PATTERN OF THE RIGHT SCAPULA. A FEW UP TO 1 CM SIZE AREAS OF BONE SCLEROSIS IN THE HEAD OF THE RIGHT HUMERUS. MARKED SCALLOPING OF THE ENDOSTEAL BORDER OF THE SHAFT OF THE RIGHT HUMERUS. SEVERAL LARGE AREAS OF BONE RESORPTION IN RIGHT RADIUS. MARKED COARSENING OF TRABECULAR PATTERN OF RIGHT AND LEFT FEMUR AND RIGHT TIBIA AND FIBULA. NUMEROUS AREAS OF BONE SCLEROSIS IN HEAD OF RIGHT AND LEFT FEMUR AND RIGHT FIBULA.

PARTIAL SKELETAL SURVEY
07-31-53 ELGIN STATE HOSP. NO.
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 16
PPF MARKED COLLAPSE OF THIRD, FIFTH AND SIXTH CERVICAL VERTEBRAL BODIES PROBABLY RELATED TO PRESENCE OF RADIUM IN THE SKELETON. LESIONS AS BEFORE WITH ADDITION OF LARGE AREAS OF BONE RESORPTION IN SHAFT OF RIGHT RADIUS AND LEFT HUMERUS. LARGE COALESCENT AREAS OF BONE SCLEROSIS IN HEAD AND NECK OF LEFT FEMUR WITH SEVERAL UP TO 2 CM SIZE AREAS OF BONE RESORPTION IN SHAFT OF LEFT FEMUR.

LEFT AND RIGHT KNEE, PATELLA, TIBIA AND FIBULA, AP
03-17-55 ELGIN STATE HOSP. NO.
ADVANCED (MALIGNANT) CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5
PPF VIEWS OF PROXIMAL HALF OF TIBIA AND FIBULA DEMONSTRATE A LARGE OSTEOGENIC TUMOR ARISING IN PROXIMAL 9 CM OF TIBIA. IT HAS PENETRATED THROUGH THE PERIOSTEUM ANTERIORLY AND Laterally AND IS FORMING NEW BONE.

COMPLETE SKELETAL SURVEY	03-118-33A
04-14-55 U OF CHICAGO CLINICS UNIT NO.	03-118-33B
ADVANCED(MALIGNANT) CHANGES TYPICAL OF RADIUM DEPOSITION.SCORE 26	03-118-33C
PPF ADVANCED (MALIGNANT) CHANGES ON THE BASIS OF OSTEOSARCCMA CF	03-118-33D
THE RIGHT TIBIA AND ASEPTIC NECROSIS OF THE RIGHT TARSAL SCAPHOID.	03-118-33E
MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, MANDIBLE,	03-118-33F
RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND	03-118-33G
LEFT FEMUR, LEFT TIBIA AND FIBULA. PATCHY SCLEROSIS IN THE RIGHT	03-118-33H
AND LEFT HUMERUS, RIGHT AND LEFT FEMUR, AND LEFT TIBIA. ASEPTIC	03-118-33I
NECROSIS OF THE RIGHT TARSAL SCAPHOID. OSTECCGENIC SARCOMA OF THE	03-118-33J
PROXIMAL THIRD OF THE RIGHT TIBIA.	03-118-33K
CLINICAL LABORATORY FINDINGS	03-118-40
04-13-55 HG 11.2 HTC 35 RBC 3.50	03-118-40A
WBC 6300 DIFF. P 56 ST L 44 M 0 E 0 B 0	03-118-40B
SPECIMENS AVAILABLE	03-118-50
BONE AND TUMOR LOC. ACRH	03-118-50A
RADIOCHEMICAL ANALYSIS	03-118-51
TIBIA HFL	03-118-51A
05-56 1.67 G ASH 288 UUG/G ASH RA226 0.006 UUCI/G ASH TH228	03-118-51B
05-56 2.10 G ASH 190 UUG/G ASH RA226 0.005 UUCI/G ASH TH228	03-118-51C
06-56 4.70 G ASH 430 UUG/G ASH RA226 0.005 UUCI/G ASH TH228	03-118-51D
FEMUR HFL	03-118-51E
10-57 5.95 G ASH 1216 UUG/G ASH RA226 0.013 UUCI/G ASH TH228	03-118-51F
10-57 4.94 G ASH 332 UUG/G ASH RA226 0.004 UUCI/G ASH TH228	03-118-51G
AUTORADIOGRAPHIC ANALYSES	03-118-53
11-61 DISTAL END FEMUR, PROXIMAL END TIBIA, DISTAL END TIBIA	03-118-53A
MAXIMUM HOT SPOT 16. PCI RA226/MG BCNE	03-118-53B
AVERAGE DIFFUSE LEVEL 0.15 PCI RA226/MG BCNE	03-118-53C
CALCULATED UNIFORM LABEL 0.66 PCI RA226/MG BCNE	03-118-53D
HOT SPOT TO DIFFUSE RATIO 107.	03-118-53E
DIFFUSE TO UNIFORM LABEL 0.23	03-118-53F
MALIGNANT TUMOR OSTEOGENIC SARCOMA, RIGHT TIBIA	03-118-60
(SECOND PRIMARY) OSTEOGENIC SARCOMA OF HEAD OF LEFT FEMUR	03-118-60A
23513-876F CSTEEOGENIC SARCOMA, HEAD OF FEMUR (LEFT)	03-118-66
23721-876.OF OSTEOGENIC SARCOMA, PROX. 1/3 TIBIA SHAFT, METASTATIC(RT)	03-118-66A
2394 -4722.1 ASEPTIC NECROSIS OF THE TARSAL SCAPHCID (RIGHT)	03-118-66B
000 -X20 SCHIZOPHRENIC REACTION, NOT OTHERWISE SPECIFIED	03-118-67
AUTOPSY REPORT AT ANL	03-118-70
DATA REVISED 05-14-68	03-118-99

PATIENT	03-119	BORN	03-07-80	03-119-01
	DECEASED			03-119-02
				03-119-02A
	FEMALE			03-119-05
OTHER PERTINENT NOS.	U OF CHICAGO AUTOPSY			03-119-05A
	CASE S			03-119-05B
DECEASED	04-14-60			03-119-06
DEATH CERT.NO.		AUTOPSY YES		03-119-07
INTERMENT	MT. OLIVET CEMETERY, AURORA, ILLINOIS			03-119-08
CAUSES OF DEATH	BRONCHOPNEUMONIA			03-119-09
SOURCE OF CASE	ELGIN 05			03-119-10
LITERATURE CITATION				03-119-11
	SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE S.			03-119-11A
	NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE S.			03-119-11B
	LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE S.			03-119-11C
EXPOSURE	THERAPEUTIC--INJECTION	05		03-119-12
SOURCE AND HOSPITAL RECORD				03-119-14
	ADMITTED ELGIN STATE HOSPITAL 01-20-31. RELEASED AND READMITTED			03-119-14A
	SEVERAL TIMES THEREAFTER. RECEIVED RADIUM CHLORIDE INTRAVENCUSLY,			03-119-14B
	TOTAL 70 UCI, BETWEEN OCTOBER AND NOVEMBER 1931. AGE 51 AT INJEC-			03-119-14C
	TIONS. RADIUM CHLORIDE NEVER MENTIONED IN HOSPITAL RECORD.			03-119-14D
FAMILY HISTORY				03-119-15
	MARRIED			03-119-15A
	HUSBAND DECEASED			03-119-15B
CHILDREN	MALE (2)			03-119-16
	FEMALE (2)			03-119-16A
MEDICAL HISTORY				03-119-20
	DIAGNOSED PSYCHOSIS WITH CEREBRAL ARTERIOSCLEROSIS AT ELGIN STATE			03-119-20A
	HOSP. CAUSES OF DEATH INCLUDED ACUTE TRACHEOBRONCHITIS AND			03-119-20B
	PNEUMONITIS, CORONARY SCLEROSIS AND CARDIAC FAILURE, CARCINOMA			03-119-20C
	OF BLADDER.			03-119-20D
GAMMA-RAY MEASUREMENTS				03-119-25
	08-05-59	RAB,RAC	0.322 UCI	HGS 1 TILTING CHAIR
				CEM
COMPUTED TOTAL-BODY RADIUM				03-119-27
	12-31	0.50 UCI		SCHLUNDT A
	05-51	0.19 UCI	0.35 UCI	0.54 UCI TOTAL
	07-53	0.20 UCI	0.43 UCI	0.64 UCI TOTAL
	08-05-59	0.322 UCI	1.038 UCI TOTAL	0.31
				NORRIS B
				NORRIS B
				03-119-27A
				03-119-27B
				03-119-27C
				03-119-27D

X-RAY EXAMINATION		03-119-30
PARTIAL SKELETAL SURVEY		03-119-30A
10-22-51	ELGIN STATE HOSP. NO.	03-119-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 0 03-119-30C
PPF NONE.		03-119-30D
PARTIAL SKELETAL SURVEY		03-119-31A
08-04-53	ELGIN STATE HOSP. NO.	03-119-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 0 03-119-31C
PPF NONE.		03-119-31D
COMPLETE SKELETAL SURVEY		03-119-32A
10-27-58	ELGIN STATE HOSP. NO.	03-119-32B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 0 03-119-32C
PPF MARKED GENERALIZED OSTEOPOROSIS.		03-119-32D
COMPLETE SKELETAL SURVEY		03-119-33A
01-24-56	ELGIN STATE HOSP. NO.	03-119-33B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 0 03-119-33C
PPF NONE.		03-119-33D
CLINICAL LABORATORY FINDINGS		03-119-40
12-18-43	HG 85	03-119-40A
11-19-45	HG 75	03-119-41A
SPECIMENS AVAILABLE		03-119-50
FROM AUTOPSY		ACRH 03-119-50A
APPROX. 13 CM OF LEFT FEMUR, INCL. HEAD AND NECK		215 GMS 03-119-50B
PORTION OF VERTEBRAL BODIES		113 03-119-50C
PORTION OF WING OF ILIUM, TRIANGULAR, 9X10X6 CM		38 03-119-50D
CORONAL SECTION OF SKULL		10 03-119-50E
2 RIBS		30 GMS 03-119-50F
MALIGNANT TUMOR CARCINOMA OF BLADDER		03-119-60
730; -8191	CARCINOMA, NOT OTHERWISE SPECIFIED, CF URINARY BLADDER	03-119-66
009; -516	CHRONIC BRAIN SYNDROME WITH CEREBRAL ARTERIOSCLEROSIS	03-119-67
361; -Y10	BRONCHOPNEUMONIA, UNDETERMINED CAUSE	03-119-67A
410; -516	ARTERIOSCLEROTIC HEART DISEASE	03-119-67B
460; -942	GENERALIZED ARTERIOSCLEROSIS	03-119-67C
AUTOPSY REPORT AT ANL		03-119-70
DATA REVISED 11-04-68		03-119-99

PATIENT 03-120	BORN	79	03-120-01
DECEASED			03-120-02
			03-120-02A
FEMALE			03-120-05
OTHER PERTINENT NOS.	CASE T		03-120-05A
DECEASED 06-25-37			03-120-06
DEATH CERT. NO.	AUTOPSY YES		03-120-07
INTERMENT BIG FOOT CEMETERY, MCHENRY COUNTY, CHEMUNG, ILL.			03-120-08
CAUSES OF DEATH	GENERALIZED ARTERIOSCLEROSIS,		03-120-09
	BRONCHOPNEUMONIA,		03-120-09A
	HYPERTENSIVE HEART DISEASE		03-120-09B
SOURCE OF CASE	ELGIN 05		03-120-10
LITERATURE CITATION			03-120-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE T.			03-120-11A
(PATIENT 03-125 ALSO LISTED AS PATIENT T IN LATER PUBLICATIONS.)			03-120-11B
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING,			03-120-11C
F. 279, IAEA, VIENNA (1962). CASE T.			03-120-11D
EXPOSURE	THERAPEUTIC--INJECTION 05		03-120-12
SOURCE AND MEDICAL RECORD			03-120-14
ADMITTED ELGIN STATE HOSPITAL 1917, RELEASED AND READMITTED			03-120-14A
SEVERAL TIMES THEREAFTER. RECEIVED RADIUM CHLORIDE INTRAVENOUSLY,			03-120-14B
TOTAL 110 UCI, BETWEEN SEPTEMBER AND DECEMBER 1931. AGE 52 AT			03-120-14C
INJECTION. HOSPITAL RECORD--			03-120-14D
10-12-31 PATIENT IS TO RECEIVE RA CHLORIDE, ONE AMPoule WEEKLY.			03-120-14E
03-30-32 WING COTTAGE. GIVEN 10 MICROGRAMS OF RADIUM, CASE OF			03-120-14F
HYPERTENSION.			03-120-14G
(NOTE THAT ABOVE DATES CONTRADICT PUBLISHED SEPTEMBER TO DECEMBER			03-120-14H
INJECTION DATES.)			03-120-14I
FAMILY HISTORY			03-120-15
MARRIED	PARA	GRAVIDA 7	03-120-15A
HUSBAND DECEASED			03-120-15B
MEDICAL HISTORY			03-120-20
DIAGNOSED DEMENTIA PRAECOX, PARANOID TYPE. RADIUM CHLORIDE			03-120-20A
ADMINISTERED WITH HOPE THAT VERY HIGH BLOOD PRESSURE WOULD BE			03-120-20B
SLIGHTLY LOWERED.			03-120-20C
COMPUTED TOTAL-BODY RADIUM			03-120-27
12-31 0.75 UCI 8.30 UCI 9.00 UCI TOTAL SCHLUNDT A			03-120-27A
06-32 0.50 UCI 4.80 UCI 5.30 UCI TOTAL SCHLUNDT A			03-120-27B
000 -X24 SCHIZOPHRENIC REACTION, PARANOID TYPE			03-120-67
361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE			03-120-67A
400 -533 HYPERTENSIVE CARDIOVASCULAR DISEASE			03-120-67B
460 -942 GENERALIZED ARTERIOSCLEROSIS			03-120-67C
DATA REVISED 11-04-68			03-120-99

PATIENT 03-121	BGRN	09	03-121-01
FEMALE			03-121-02
			03-121-05
OTHER PERTINENT NOS.	CASE U		03-121-05A
SOURCE OF CASE	ELGIN 05		03-121-10
LITERATURE CITATION			03-121-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE U			03-121-11A
MORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE U.			03-121-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE U.			03-121-11C
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA, VIENNA (1962). CASE 03-121.			03-121-11D
			03-121-11E
MILLER AND MARINELLI, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 279, IAEA, VIENNA (1962). CASE U.			03-121-11F
			03-121-11G
MILLER, ANL-6839 (1964) PP. 18-39.			03-121-11H
MILLER AND FINKEL, ANL-7217, PP. 7-90. (1965). CASE 03-121.			03-121-11I
MILLER AND FINKEL, AM.J.ROENT. 103,871 (AUG. 1968). CASE 03-121.			03-121-11J
EXPOSURE	THERAPEUTIC--INJECTION 05		03-121-12
SOURCE AND HOSPITAL RECORD			03-121-14
ADMITTED ELGIN STATE HOSPITAL 09-16-31, PAROLED 06-15-33,			03-121-14A
READMITTED 05-04-34, PAROLED 11-23-36, READMITTED 10-28-38.			03-121-14B
RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, TOTAL 90 MICROCURIES,			03-121-14C
BETWEEN OCTOBER AND DECEMBER 1931. AGE 22 AT INJECTION.			03-121-14D
HOSPITAL RECORD--			03-121-14E
11-18-31 ANNEX 4. GIVEN MALARIA TREATMENT ON WING COTTAGE AND			03-121-14F
WAS THEN RETURNED TO ANNEX 4C.			03-121-14G
MEDICAL HISTORY			03-121-20
DIAGNOSED DEMENTIA PRAECOX, CATATONIC TYPE AT ELGIN STATE HCSP.			03-121-20A
IN 1932 PATIENT COMPLAINED OF VAGUE JOINT PAINS, BUT HAS HAD NO			03-121-20B
SYMPTOMS REFERRABLE TO THE SKELETAL SYSTEM SINCE.			03-121-20C
GAMMA-RAY MEASUREMENTS			03-121-25
07-29-59 RAB,RAC C.170 UCI HGS 1 TILTING CHAIR CEM			03-121-25E
03-09-60 RAB,RAC C.175 UCI HGS 1 TILTING CHAIR CEM			03-121-25F
12-19-63 RAB,RAC C.139 UCI HGS 1 TILTING CHAIR CEM			03-121-25G
12-19-63 RAB,RAC C.129 UCI HGS 1 7-CRYS-PCS CEM			03-121-25H
01-16-64 RAB,RAC C.122 UCI HGS 1 7-CRYS-PCS CEM			03-121-25I
01-16-64 RAB,RAC C.137 UCI HGS 1 TILTING CHAIR 0.31			03-121-25J
08-05-64 RAB,RAC C.134 UCI HGS 1 TILTING CHAIR 0.31			03-121-25K
BREATH MEASUREMENTS			03-121-26
03-09-60 EM-222 C.360 UCI BREATH RADON HELMET FFL			03-121-26F
08-05-64 EM-222 C.237 UCI BREATH RADON HELMET FFL			03-121-26K
COMPUTED TOTAL-BODY RADIUM			03-121-27
12-31 0.50 UCI SCHLUNDT A			03-121-27A
06-32 0.60 UCI SCHLUNDT A			03-121-27B
05-51 0.19 UCI 0.39 UCI 0.58 UCI TOTAL MORRIS B			03-121-27C
07-53 0.22 UCI 0.36 UCI 0.58 UCI TOTAL MORRIS B			03-121-27D

07-29-59	0.170 UCI	0.548 UCI TOTAL	0.31	03-121-27E
03-09-60	0.175 UCI	0.564 UCI TOTAL	0.31	03-121-27F
12-19-63	0.139 UCI	0.447 UCI TOTAL	0.31	03-121-27G
12-19-63	0.129 UCI	0.416 UCI TOTAL	0.31	03-121-27H
01-16-64	0.122 UCI	0.393 UCI TOTAL	0.31	03-121-27I
01-16-64	0.137 UCI	0.441 UCI TOTAL	0.31	03-121-27J
08-05-64	0.134 UCI	0.432 UCI TOTAL	0.31	03-121-27K
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON				03-121-28
03-09-60	0.360 UCI	0.522 UCI TOTAL	0.69	03-121-28F
08-05-64	0.237 UCI	0.343 UCI TOTAL	0.69	03-121-28K
X-RAY EXAMINATION				03-121-30
PARTIAL SKELETAL SURVEY				03-121-30A
06-05-51	ELGIN STATE HOSP.	LOC. ACRH		03-121-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 0	03-121-30C
PPF NONE.				03-121-30D
COMPLETE SKELETAL SURVEY				03-121-31A
08-13-53	ELGIN STATE HOSP.	LOC. ACRH		03-121-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 3	03-121-31C
PPF NONE.				03-121-31D
COMPLETE SKELETAL SURVEY				03-121-32A
01-10-55	ELGIN STATE HOSP.	LOC. ACRH		03-121-32B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 7	03-121-32C
PPF AREA OF BONE SCLEROSIS IN WING OF LEFT ILIUM 8 MM IN				03-121-32D
DIAMETER. MULTIPLE LINEAR AREAS OF BONE RESORPTION IN FIRST RIGHT				03-121-32E
METACARPAL AND RIGHT AND LEFT METATARSALS. 5 MM SIZE AREA BONE				03-121-32F
SCLEROSIS OF DISTAL END OF LEFT FEMUR AT SITE OF OLD EPIPHYSEAL				03-121-32G
LINE.				03-121-32H
COMPLETE SKELETAL SURVEY				03-121-33A
10-10-58	ELGIN STATE HOSP.	LOC. ACRH		03-121-33B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 0	03-121-33C
PPF NO LESIONS NOTED ON THIS EXAMINATION.				03-121-33D
PARTIAL SKELETAL SURVEY				03-121-34A
12-20-63	ANL	X-RAY NO. R-232	LOC. ANL	03-121-34B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 9.5	03-121-34C
PPF INCREASE IN SIZE OF AREA OF BONE SCLEROSIS IN WING OF LEFT				03-121-34D
ILIUM TO 1 CM. MULTIPLE UP TO 6 CM SIZE AREAS OF BONE RESORPTION				03-121-34E
IN MID PORTION OF SHAFT OF RIGHT AND LEFT HUMERUS. SMALL LINEAR				03-121-34F
AREAS OF BONE RESORPTION IN SHAFT OF FIRST RIGHT METACARPAL.				03-121-34G
COARSENING OF TRABECULAR PATTERN OF LEFT RADIUS AND ULNA, RIGHT				03-121-34H
TIBIA AND FIBULA AND LEFT TIBIA AND FIBULA. MULTIPLE UP TO 1 CM				03-121-34I
SIZE AREAS OF BONE RESORPTION IN LEFT TIBIA AND FIBULA AND BONY				03-121-34J
SCLEROSIS AT DISTAL END OF RIGHT TIBIA. SLIGHT PROGRESSION OF				03-121-34K
BONY LESIONS OVER 12-YEAR PERIOD.				03-121-34L
CLINICAL LABORATORY FINDINGS				03-121-40
12-20-63	PG 12.5	HTC 40	RBC 4.18	03-121-40A
WBC 8100	DIFF. P 64	ST	L 30 M 6 E B	03-121-40B
000 -X23	SCHIZOPHRENIC REACTION, CATATONIC TYPE			03-121-67
DATA REVISED 11-04-68				03-121-99

PATIENT	03-122			03-122-01
	DECEASED			03-122-02
	MALE			03-122-02A
				03-122-05
OTHER PERTINENT NOS.	CASE V			03-122-05A
SOURCE OF CASE	ELGIN .05			03-122-10
LITERATURE CITATION				03-122-11
	SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE V.			03-122-11A
	NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE V.			03-122-11B
EXPOSURE	THERAPEUTIC--INJECTION	05		03-122-12
SOURCE AND HOSPITAL RECORD				03-122-14
	ADMITTED ELGIN STATE HOSPITAL 08-28-31. RECEIVED RADIUM CHLORIDE			03-122-14A
	INTRAVENOUSLY, TOTAL 100 UCI, BETWEEN OCTOBER AND DECEMBER 1931.			03-122-14B
	AGE 23 AT INJECTION. HOSPITAL RECORD--			03-122-14C
	11-09-31 RECEIVED TO DATE 6 INJECTIONS OF RACL2.			03-122-14D
	01-02-32 RECEIVING RACL2.			03-122-14E
	04-20-32 HAS BEEN GIVEN RACL2.			03-122-14F
	(NOTE THAT ABOVE DATES CONTRADICT PUBLISHED OCTOBER TO DECEMBER			03-122-14G
	INJECTION DATES.)			03-122-14H
MEDICAL HISTORY				03-122-20
	ONSET OF ILLNESS WHEN HE WAS STRUCK OVER HEAD AND FOUND UNCON-			03-122-20A
	SCIOUS. WAS ILL FOR 7 MONTHS--NERVOUS, TALKED IRRATIONALLY.			03-122-20B
	DIAGNOSED DEMENTIA PRAECOX CATATONIC TYPE AT ELGIN STATE HOSPITAL.			03-122-20C
COMPUTED TOTAL-BODY RADIUM				03-122-27
12-31	0.30 UCI	6.20 UCI	6.50 UCI TOTAL	SCHLUNDT A 03-122-27A
000 -X23	SCHIZOPHRENIC REACTION, CATATONIC TYPE			03-122-67
DATA REVISED	04-29-68			03-122-99

PATIENT	03-123	BORN	14	03-123-01
	DECEASED			03-123-02
				03-123-02A
				03-123-02B
	MALE			03-123-05
OTHER PERTINENT NOS.	CASE W			03-123-05A
DECEASED	02-05-37			03-123-06
DEATH CERT.NO.		AUTOPSY YES		03-123-07
INTERMENT	ROCK ISLAND, ILLINOIS.			03-123-08
CAUSES OF DEATH	MILIARY TUBERCULOSIS			03-123-09
SOURCE OF CASE	ELGIN 05			03-123-10
LITERATURE CITATION				03-123-11
	SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE W.			03-123-11A
	NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE W.			03-123-11B
EXPOSURE	THERAPEUTIC--INJECTION 05			03-123-12
SOURCE AND HOSPITAL RECORD				03-123-14
	ADMITTED PEORIA STATE HOSPITAL 1931 FOR 3 MONTHS, TRANSFERRED			03-123-14A
	ELGIN STATE HOSPITAL 09-10-31. RECEIVED RADIUM CHLORIDE			03-123-14B
	INTRAVENOUSLY, TOTAL 90 UCI, BETWEEN OCTOBER AND DECEMBER 1931.			03-123-14C
	HOSPITAL RECORD--			03-123-14D
	RECOMMENDED TREATMENT RACL2.			03-123-14E
FAMILY HISTORY				03-123-15
	NEVER MARRIED			03-123-15A
MEDICAL HISTORY				03-123-20
	DIAGNOSED DEMENTIA PRAECOX AT ELGIN STATE HOSPITAL.			03-123-20A
COMPUTED TOTAL-BODY RADIUM				03-123-27
12-31	1.10 UCI	8.60 UCI	9.70 UCI TOTAL	SCHLUNDT A 03-123-27A
000 -X20	SCHIZOPHRENIC REACTION, NOT OTHERWISE SPECIFIED			03-123-67
012 -123	TUBERCULOSIS MILIARY, ACUTE			03-123-67A
DATA REVISED	04-29-68			03-123-99

PATIENT 03-124	BORN 12-03-10	03-124-01
DECEASED		03-124-02
MALE		03-124-02A
		03-124-05
OTHER PERTINENT NOS.	CASE X	03-124-05A
SOURCE OF CASE	ELGIN 05	03-124-10
LITERATURE CITATION		03-124-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE X.		03-124-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE X.		03-124-11B
EXPOSURE	THERAPEUTIC--INJECTION 05	03-124-12
SOURCE AND HOSPITAL RECORD		03-124-14
ADMITTED ELGIN STATE HOSPITAL 08-04-31. RECEIVED RADIUM CHLORIDE		03-124-14A
INTRAVENOUSLY, TOTAL 90 UCI, BETWEEN OCTOBER AND DECEMBER 1931.		03-124-14B
AGE 20 AT INJECTION. HOSPITAL RECORD--		03-124-14C
10-19-31 PATIENT RECEIVING RACL2.		03-124-14D
11-03-31 PATIENT RECEIVING RACL2.		03-124-14E
06-04-32 PATIENT DISCHARGED.		03-124-14F
COMPUTED TOTAL-BODY RADIUM		03-124-27
12-31 0.30 UCI 3.90 UCI 4.20 UCI TOTAL	SCHLUNDT A	03-124-27A
DATA REVISED 11-04-68		03-124-99

PATIENT 03-125	BGRN	13	03-125-01
FEMALE			03-125-02
			03-125-05
OTHER PERTINENT NCS.	CASE T		03-125-05A
SOURCE OF CASE	ELGIN 05		03-125-10
LITERATURE CITATION			03-125-11
NCRRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE T.			03-125-11A
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE T.			03-125-11B
(PATIENT 03-120 ALSO LISTED AS PATIENT T.)			03-125-11C
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA,			03-125-11D
VIENNA (1962). CASE 03-125.			03-125-11E
MILLER, ANL-6839 (1964) PP. 18-39.			03-125-11F
EXPOSURE	THERAPEUTIC--INJECTION C5		03-125-12
SOURCE AND HOSPITAL RECORD			03-125-14
ADMITTED ELGIN STATE HOSPITAL 07-22-30. PAROLED AND READMITTED			03-125-14A
MANY TIMES THEREAFTER. RECEIVED RADIUM CHLORIDE, PROBABLE TOTAL			03-125-14B
110 UCI, STARTING OCTOBER 1931. HOSPITAL RECORD--			03-125-14C
10-12-31 WING COTTAGE, RECEIVING RADIUM CHLORIDE.			03-125-14D
10-28-31 RECEIVING RADIUM CHLORIDE.			03-125-14E
03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.			03-125-14F
FAMILY HISTORY			03-125-15
NEVER MARRIED			03-125-15A
MEDICAL HISTORY			03-125-20
PATIENT HOSPITALIZED AT ELGIN STATE HOSPITAL 07-22-30 WITH			03-125-20A
DIAGNOSIS OF SCHIZOPHRENIA. CLINICAL HISTORY DOES NOT REVEAL ANY			03-125-20B
ORTHOPEDIC COMPLAINTS. PHYSICAL EXAM 08-50 NEGATIVE EXCEPT FOR			03-125-20C
ABSENCE OF MOST TEETH AND SEVERE CARIES OF REMAINING TEETH AND			03-125-20D
SEVERE PYORRHEA.			03-125-20E
GAMMA-RAY MEASUREMENTS			03-125-25
07-28-59 RAB,RAC C.280 UCI HGS 1 1-METER ARC CEM			03-125-25C
07-28-59 RAB,RAC C.302 UCI HGS 1 TILTING CHAIR CEM			03-125-25D
03-09-60 RAB,RAC C.285 UCI HGS 1 TILTING CHAIR CEM			03-125-25E
12-16-63 RAB,RAC C.254 UCI HGS 1 7-CRYST-PCS CEM			03-125-25F
12-17-63 RAB,RAC C.226 UCI HGS 1 TILTING CHAIR CEM			03-125-25G
BREATH MEASUREMENTS			03-125-26
03-09-60 EM222 C.840 UCI RADON BREATH HELMET HFL			03-125-26E
COMPUTED TOTAL-BODY RADIUM			03-125-27
05-51 0.280 UCI C.710 UCI 0.990 UCI TOTAL NCRRIS A			03-125-27A
07-55 0.320 UCI C.770 UCI 1.090 UCI TOTAL NCRRIS A			03-125-27B
07-28-59 0.280 UCI 0.903 UCI TOTAL 0.31			03-125-27C
07-28-59 0.302 UCI 0.974 UCI TOTAL 0.31			03-125-27D
03-09-60 0.285 UCI 0.919 UCI TOTAL 0.31			03-125-27E
12-16-63 0.254 UCI 0.819 UCI TOTAL 0.31			03-125-27F
12-17-63 0.226 UCI 0.728 UCI TOTAL 0.31			03-125-27G

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON				03-125-28
03-09-60	0.840 UCI	1.217 UCI TOTAL	0.69	03-125-28E
X-RAY EXAMINATION				03-125-30
PARTIAL SKELETAL SURVEY				03-125-30A
05-23-51	ELGIN STATE HOSP. NO.	LOC. ACRH		03-125-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 0	03-125-30C
PPF NONE.				03-125-30D
PARTIAL SKELETAL SURVEY				03-125-31A
08-07-53	ELGIN STATE HOSP. NO.	LOC. ACRH		03-125-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 1	03-125-31C
PPF SLIGHT COARSENING OF THE TRABECULAR PATTERN OF DISTAL ENDS OF RIGHT AND LEFT FIBULAE.				03-125-31D
				03-125-31E
COMPLETE SKELETAL SURVEY				03-125-32A
01-06-56	ELGIN STATE HOSP. NO.	LOC. ACRH		03-125-32B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 3	03-125-32C
PPF 8 MM SIZE AREA BONE RESORPTION PROXIMAL THIRD OF RIGHT HUMERUS. COARSENING OF TRABECULAR PATTERN OF DISTAL END OF RIGHT AND LEFT FIBULAE.				03-125-32D
				03-125-32E
				03-125-32F
COMPLETE SKELETAL SURVEY				03-125-33A
11-17-58	ELGIN STATE HOSP. NO.	LOC. ACRH		03-125-33B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 9	03-125-33C
PPF MULTIPLE UP TO 9 CM SIZE AREAS OF BONE RESORPTION IN THE SHAFT OF RIGHT AND LEFT HUMERUS, AND DISTAL END OF RIGHT RADIUS. COARSENING OF TRABECULAR PATTERN OF PROXIMAL END OF RIGHT AND LEFT RADIUS, RIGHT FIBULA, AND LEFT FIBULA. MULTIPLE UP TO 1 CM AREAS OF BONE RESORPTION IN RIGHT AND LEFT TIBIA, SEVERAL SMALL AREAS OF BONE RESORPTION IN SHAFT OF RIGHT FIRST METATARSAL. PROGRESSION FROM NEGATIVE TO MINIMAL CHANGES DURING THE PREVIOUS 7-YEAR PERIOD.				03-125-33D
				03-125-33E
				03-125-33F
				03-125-33G
				03-125-33H
				03-125-33I
				03-125-33J
				03-125-33K
COMPLETE SKELETAL SURVEY				03-125-34A
12-17-63	ANL	X-RAY NO. R-226	LOC. ANL	03-125-34B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 19	03-125-34C
PPF AS ON PREVIOUS EXAMINATION WITH ADDITION OF SEVERAL UP TO 18 MM SIZE AREAS OF BONE RESORPTION IN SHAFT OF RIGHT AND LEFT FEMUR.				03-125-34D
				03-125-34E
				03-125-34F
CLINICAL LABORATORY FINDINGS				03-125-40
08-22-50	HG 14.5	HTC	RBC 4.72	03-125-40A
WBC	DIFF.	NORMAL		03-125-40B
05-07-51	HG 13	HTC	RBC 4.2	03-125-41A
WBC	DIFF.	NORMAL		03-125-41B
12-17-63	HG 13.5	HTC	RBC 4.42	03-125-42A
WBC 9000	DIFF. P 73	ST	L 17 M 4 E 6 B	03-125-42B
000 -X20	SCHIZOPHRENIC REACTION, NOT OTHERWISE SPECIFIED			03-125-67
DATA REVISED 04-29-68				03-125-99

PATIENT C3-126	BORN 06-16-10	03-126-01
DECEASED		03-126-02
		03-126-02A
FEMALE		03-126-05
OTHER PERTINENT NOS.	AMBH	03-126-05A
	AMBH AUTOPSY	03-126-05B
	ILL. R.E.	03-126-05C
	CASE ROSE D	03-126-05D
DECEASED 07-13-65		03-126-06
DEATH CERT.NO.	AUTOPSY YES	03-126-07
INTERMENT	ALL SAINTS CEMETERY, DES PLAINES, ILLINOIS	03-126-08
CAUSES OF DEATH	CARCINOMA OF SPHENOID SECONDARY TO	03-126-09
	RADIUM POISONING (DEATH CERTIFICATE)	03-126-09A
	SQUAMOUS CELL CARCINOMA OF SPHENOID SINUS (ACTUAL)	03-126-09B
SOURCE OF CASE	ELGIN 05	03-126-10
LITERATURE CITATION		03-126-11
SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE ROSE D.		03-126-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE ROSE D.		03-126-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE ROSE D.		03-126-11C
MILLER AND FINKEL, ANL-7217, PP. 7-50. (1965). CASE 03-126.		03-126-11D
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-126-11E
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-126-11F
EXPOSURE	THERAPEUTIC--INJECTION 05	03-126-12A
SOURCE ADMITTED ELGIN STATE HOSP. 12-12-30. RECEIVED RADIUM		03-126-14A
CHLORIDE INTRAVENOUSLY, TOTAL 200 UCI (NORRIS).		03-126-14B
HOSPITAL RECORD--		03-126-14C
03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.		03-126-14D
1956--HER LEG WAS AMPUTATED AT ELGIN STATE HOSP. AFTER COMPLICATIONS RESULTING FROM ATTACK BY ANOTHER PATIENT.		03-126-14E
		03-126-14F
FAMILY HISTORY		03-126-15
NEVER MARRIED		03-126-15A
MEDICAL HISTORY		03-126-20
PATIENT WAS GIVEN RA-226 INTRAVENOUSLY AS A FORM OF THERAPY FOR		03-126-20A
HER MANIC-DEPRESSIVE PSYCHOSIS AT ELGIN STATE HOSP. SHE WAS PHYSICALLY RELATIVELY WELL UNTIL 1957 WHEN SHE SUSTAINED A FRACTURE		03-126-20B
OF THE DISTAL 1/3 OF THE RIGHT FEMUR FOLLOWING A MINOR FALL.		03-126-20C
THIS WAS COMPLICATED BY OSTEOMYELITIS AND PATIENT UNDERWENT A		03-126-20D
RIGHT MID-THIGH AMPUTATION IN 1957. IN NOVEMBER 1964 STRABISMUS		03-126-20E
BECAME APPARENT AND PATIENT COMPLAINED OF DOUBLE VISION. IN FEB.		03-126-20F
1965 THE PATIENT COMPLAINED OF PERSISTENT FRONTAL HEADACHE AND A		03-126-20G
PERSISTENT PROFUSE WATERY DISCHARGE FROM NOSE. DURING NEXT 2		03-126-20H
MONTHS BEFORE ADMISSION TO U OF CHICAGO CLINICS, PATIENT HAD		03-126-20I
DAILY FEVER TO 101 DEG. F, FREQUENT NAUSEA, VOMITING AND ANOREXIA.		03-126-20J
RADIOGRAPHY ON ADMISSION TO HOSPITAL 04-06-65 REVEALED SPONTANEOUS PNEUMOENCEPHALOGRAPH. LAMINAGRAPHY OF MASTOIDS REVEALED		03-126-20K
CHANGES HIGHLY SUGGESTIVE OF CARCINOMA OF RIGHT MASTOID. MUCOSAL		03-126-20L
THICKENING OF ALL PARANASAL SINUSES WAS NOTED. BECAUSE SYMPTOMATOLOGY WAS SUGGESTIVE OF CARCINOMA OF THE SPHENOID WITH INVASION		03-126-20M
		03-126-20N
		03-126-20O
		03-126-20P

OF BASE OF THE BRAIN, SPHENOID BIOPSIES WERE DONE AND SECTIONS 03-126-200
 DEMONSTRATED SQUAMOUS CELL CARCINOMA ARISING IN SPHENOID SINUS. 03-126-20R
 RADIATION THERAPY WAS BEGUN, BUT PATIENT FAILED AND DIED 07-13-65. 03-126-20S

GAMMA-RAY MEASUREMENTS

07-08-60	RAB,RAC	C.449 UCI	HGS 1 TILTING CHAIR	CEM	03-126-25
04-09-65	RAB,RAC	C.403 UCI	ACRH	RJH	03-126-25B 03-126-25C

COMPUTED TOTAL-BODY RADIUM

05-51	0.56 UCI	1.26 UCI	1.82 UCI TOTAL	NORRIS A	03-126-27
07-08-60	0.449 UCI		1.444 UCI TOTAL	0.31	03-126-27A 03-126-27B
04-09-65	0.403 UCI		1.300 UCI TOTAL	0.31	03-126-27C

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY 03-126-30
 06-01-51 ELGIN STATE HOSP. LOC. ACRH 03-126-30A
 ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 13 03-126-30B
 PPF ADVANCED ASEPTIC NECROSIS OF THE HEAD OF THE RIGHT FEMUR. 03-126-30C
 MULTIPLE AREAS OF BONE RESORPTION IN RIGHT RADIUS AND ULNA, LEFT 03-126-30D
 RADIUS AND LEFT FIBULA. ASEPTIC NECROSIS OF THE LEFT TARSAL SCA- 03-126-30E
 PHOID. MULTIPLE AREAS OF BONE SCLEROSIS IN HEAD AND NECK OF RIGHT 03-126-30F
 FEMUR, AND HEAD OF LEFT FEMUR. MARKED COARSENING OF TRABECULATION 03-126-30G
 PATTERN OF RIGHT AND LEFT TIBIA AND FIBULA. 03-126-30H
 03-126-30I

PARTIAL SKELETAL SURVEY

07-08-60 ANL X-RAY NO. R-203 LOC. ANL 03-126-31A
 MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10 CR 14 03-126-31B
 PPF MULTIPLE AREAS OF BONE RESORPTION IN THE VERTEX OF SKULL, 03-126-31C
 RIGHT HUMERUS, RIGHT RADIUS AND ULNA, LEFT RADIUS AND ULNA AND 03-126-31D
 LEFT PATELLA AND FIBULA. VERY LARGE AREAS OF BONE RESORPTION IN 03-126-31E
 SHAFT OF LEFT TIBIA. FRACTURE OF NECK OF RIGHT FEMUR (POSSIBLY 03-126-31F
 PATHOLOGICAL). 03-126-31G
 03-126-31H

SPECIAL VIEWS--LAMINAGRAPHY OF BOTH MASTOIDS

04-08-65 U OF CHICAGO CLINICS NO. LOC. U OF C 03-126-32A
 A LARGE AREA OF DESTRUCTION IS NOTED IN THE RIGHT MASTOID, ONLY 03-126-32B
 A FEW PERIPHERAL CELLS ARE LEFT. THE CAVITY IS SPECIFIED BY A 03-126-32C
 SLIGHT, TISSUE-LIKE DENSITY. THE LEFT MASTOID DEMONSTRATES SOME 03-126-32D
 REABSORPTION OF THE TRABECULAR PATTERN. 03-126-32E
 03-126-32F

SPECIAL VIEWS--LAMINAGRAPHY OF SPHENOID SINUS AND SELLA TURCICA

04-08-65 U OF CHICAGO CLINICS NO. LOC. U OF C 03-126-33A
 A SPONTANEOUS PNEUMOENCEPHALAGRAM WITH A LARGE AMOUNT OF AIR IN 03-126-33B
 THE CISTERNS AND VENTRICULAR SYSTEM IS PRESENT. MARKED DESTRUC- 03-126-33C
 TION PRESENT IN THE SUPERIOR, LATERAL, AND INFERIOR WALL OF THE 03-126-33D
 SPHENOID SINUS IS PRESENT. THE OUTLINE OF THE SELLA TURCICA IS 03-126-33E
 COMPLETELY DISRUPTED EXCEPT FOR THE ANTERIOR CLINGIDS, WHICH ARE 03-126-33F
 NORMAL. 03-126-33G
 03-126-33H

CLINICAL LABORATORY FINDINGS

07-08-60	HG 13.7	HTC	RBC 4.55		03-126-40
WBC 8600	DIFF. P 59	ST	L 34	M 6 E 1 B	03-126-40A 03-126-40B
04-07-65	HG 13.0	HTC 41	RBC		03-126-41A
WBC 9600	DIFF. P 81	ST	L 16	M 2 E 1 B 0	03-126-41B
CALCIUM 9.8 MG PERCENT, PHOSPHORUS 4.2 MG PERCENT,					03-126-41C
ALKALINE PHOSPHATASE 2.9 UNITS PERCENT					03-126-41D

MALIGNANT TUMOR	SQUAMOUS CELL CARCINOMA OF SPHENOID SINUS	03-126-60
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (RIGHT)	03-126-66
23514-416	FRACTURE OF THE NECK OF THE FEMUR (RIGHT)	03-126-66A
23522-100.0	CHRONIC OSTEOMYELITIS OF MIDDLE THIRD OF FEMUR SHAFT (RT)	03-126-66B
2394 -4722.1	ASEPTIC NECROSIS OF THE TARSAL SCAPHOID (LEFT)	03-126-66C
324 -814.3F	EPIDERMOID CARCINOMA, SPHENOID SINUS WITH FISTULA,DIFF.	03-126-66D
000 X12	MANIC DEPRESSIVE REACTION, DEPRESSIVE TYPE	03-126-67
235 -20	MID-THIGH AMPUTATION OF FEMUR (RIGHT)	03-126-67A
AUTOPSY REPORT AT ANL		03-126-70
PRIMARY TUMOR SLIDE AT ANL		03-126-71
AUTOPSY SLIDE AT ACRH		03-126-72
DATA REVISED C5-08-68		03-126-99

PATIENT	03-127								03-127-01
									03-127-02
									03-127-03
	FEMALE								03-127-05
OTHER PERTINENT NOS.		CASE	EDITH C.						03-127-05A
SOURCE OF CASE		ELGIN	05						03-127-10
LITERATURE CITATION									03-127-11
	SCHLUNDT, ET AL, AM.J.ROENT.	30,515	(OCT. 1933).	CASE	EDITH C.				03-127-11A
	NORRIS, ET AL, AM.J.ROENT.	73,785	(MAY 1955).	CASE	EDITH C.				03-127-11B
	LOONEY, ET AL, AM.J.ROENT.	73,1006	(JUNE 1955).	CASE	EDITH C.				03-127-11C
EXPOSURE		THERAPEUTIC--INJECTION	05						03-127-12
SOURCE AND MEDICAL RECORD									03-127-14
	ADMITTED ELGIN STATE HOSPITAL	06-05-31.	RECEIVED RADIUM CHLORIDE						03-127-14A
	INTRAVENOUSLY, TOTAL 260 UCI.	AGE 23 AT INJECTION.	HOSPITAL						03-127-14B
	RECORD--								03-127-14C
	09-25-31 RECEIVED 15 AMPOULES OF RADIUM.	BETWEEN 06-12-31 AND							03-127-14D
	09-25-31 RECEIVED 15 AMPOULES OF RACL2.								03-127-14E
	03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.								03-127-14F
GAMMA-RAY MEASUREMENTS									03-127-25
	04-09-62	RAB,RAC	0.175 UCI	HGS 1	TILTING CHAIR	CEM			03-127-25B
COMPUTED TOTAL-BODY RADIUM									03-127-27
	05-51	0.31 UCI	0.50 UCI	0.81 UCI	TOTAL	NORRIS A			03-127-27A
	04-09-62	0.175 UCI		0.565 UCI	TOTAL	0.31			03-127-27B
X-RAY EXAMINATION									03-127-30
	COMPLETE SKELETAL SURVEY								03-127-30A
	04-09-62	ANL	X-RAY NO. R-223	LOC.	ANL				03-127-30B
	MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.					SCORE 3			03-127-30C
	PPF QUESTIONABLY SLIGHT SCLEROSIS OF THE PETROUS PORTIONS OF								03-127-30D
	BOTH TEMPORAL BONES. TWO 3 MM SIZE AREAS OF BONE RESORPTION IN								03-127-30E
	THE SHAFT OF THE RIGHT RADIUS. MULTIPLE UP TO 1 CM SIZE AREAS								03-127-30F
	OF BONE RESORPTION IN THE SHAFTS OF THE RIGHT AND LEFT FIBULA.								03-127-30G
	A FEW UP TO 2 MM SIZE CYSTIC AREAS OF BONE RESORPTION ON THE								03-127-30H
	INFERIOR, ANTERIOR ASPECT OF THE LEFT TARSAL SCAPHOID.								03-127-30I
CLINICAL LABORATORY FINDINGS									03-127-40
	04-09-62	HG 14.3	HTC	RBC 4.54					03-127-40A
	WBC 5000	DIFF. P 60	ST	L 30	M 6	E 4	B		03-127-40B
DATA REVISED	11-04-68								03-127-99

PATIENT	03-128	03-128-01
	DECEASED	03-128-02
		03-128-02A
	FEMALE	03-128-05
OTHER PERTINENT NOS.	CASE SADIE S	03-128-05A
SOURCE OF CASE	ELGIN 05	03-128-10
LITERATURE CITATION		03-128-11
	SCHLUNDT, ET AL, AM.J.ROENT. 30,515 (OCT. 1933). CASE SADIE S.	03-128-11A
EXPOSURE	THERAPEUTIC--INJECTION 05	03-128-12
SOURCE AND HOSPITAL RECORD		03-128-14
	ADMITTED ELGIN STATE HOSPITAL 10-26-30. RECEIVED RADIUM CHLORIDE	03-128-14A
	INTRAVENOUSLY, AMOUNT UNKNOWN. HOSPITAL RECCRD--	03-128-14B
	04-02-31 SHE IS ONE OF THE CASES THAT HAS HAD 11 OR 12 TREAT-	03-128-14C
	MENTS OF RADIUM CHLORIDE. SHE OUGHT TO GO ON WITH 4 OR 5 DOSES	03-128-14D
	OF RADIUM.	03-128-14E
	09-20-31 DISCHARGED.	03-128-14F
	10-09-51 LETTER TO PATIENT FROM A.A. LIEBERMAN, ASKING HER TO	03-128-14G
	COME TO ELGIN FOR MEASUREMENTS AND X-RAYS BY ANL. NO REPLY	03-128-14H
	IN FILE.	03-128-14I
	03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.	03-128-14J
DATA REVISED 11-04-68		03-128-99

PATIENT 03-129	BORN	02	03-129-01
DECEASED			03-129-02
			03-129-02A
MALE			03-129-05
DECEASED 05-05-33			03-129-06
DEATH CERT.NO.	AUTOPSY YES		03-129-07
INTERMENT GRACELAND CEMETERY, CHICAGO, ILL.			03-129-08
CAUSES OF DEATH	BRONCHIAL PNEUMONIA,		03-129-09
	CHRONIC MYOCARDITIS		03-129-09A
SOURCE OF CASE	ELGIN 05		03-129-10
EXPOSURE	THERAPEUTIC--INJECTION 05		03-129-12
SOURCE AND HOSPITAL RECORD			03-129-14
PATIENT ADMITTED ELGIN STATE HOSPITAL 09-18-31. RECEIVED RADIUM			03-129-14A
INTRAVENOUSLY. AGE 29 AT INJECTION. HOSPITAL RECORD--			03-129-14B
11-03-31 PATIENT IS RECEIVING RACL2.			03-129-14C
11-09-31 PATIENT IS NOW RECEIVING RACL2.			03-129-14D
1932 PATIENT IS 30 YEARS OLD, RECEIVED RACL2.			03-129-14E
FAMILY HISTORY			03-129-15
NEVER MARRIED			03-129-15A
361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE			03-129-67
DATA REVISED 04-30-68			03-129-99

PATIENT	03-130	BORN	69	03-130-01
	DECEASED			03-130-02
				03-130-02A
	FEMALE			03-130-05
DECEASED	03-26-36			03-130-06
	DEATH CERT. NO.	AUTOPSY	NONE	03-130-07
CAUSES OF DEATH	CARCINOMA OF STOMACH			03-130-09
	METASTASIS OF CERVICAL LYMPH GLANDS			03-130-09A
SOURCE OF CASE	ELGIN	05		03-130-10
EXPOSURE	THERAPEUTIC--INJECTION	05		03-130-12
SOURCE AND HOSPITAL RECORD				03-130-14
	ADMITTED ELGIN STATE HOSPITAL 03-08-24. RECEIVED RADIUM CHLORIDE			03-130-14A
	INTRAVENOUSLY. HOSPITAL RECORD--			03-130-14B
	12-23-31 RADIUM CHLORIDE TREATMENT STARTED.			03-130-14C
FAMILY HISTORY				03-130-15
	NEVER MARRIED.			03-130-15A
MEDICAL HISTORY				03-130-20
	DIAGNOSED DEMENTIA PRAECOX PARANOID ON ADMISSION TO ELGIN STATE			03-130-20A
	HOSPITAL AT AGE 55. PHYSICAL EXAMINATIONS AT 6 MONTH INTERVALS			03-130-20B
	UNTIL DEATH WERE ESSENTIALLY NEGATIVE EXCEPT FOR MODERATELY			03-130-20C
	MARKED HYPERTENSION. DIED OF CARCINOMA OF STOMACH IN 1936.			03-130-20D
CLINICAL LABORATORY FINDINGS				03-130-40
01-24-36	HG 86	HTC	RBC	03-130-40A
WBC 8900	DIFF. P 68	ST	L 30 M E B	03-130-40B
000 -X24	SCHIZOPHRENIC REACTION, PARANOID TYPE			03-130-67
47X -X30	ESSENTIAL HYPERTENSION			03-130-67A
640 -8191	CARCINOMA OF THE STOMACH			03-130-67B
MALIGNANT TUMOR	CARCINOMA OF STOMACH			03-130-60
DATA REVISED	05-14-68			03-130-99

PATIENT 03-131	BORN 03-11-07	03-131-01
DECEASED		03-131-02
		03-131-02A
FEMALE		03-131-05
DECEASED 04-22-49		03-131-06
DEATH CERT. NO.	AUTOPSY NONE	03-131-07
INTERMENT ARLINGTON CEMETERY, ROCKFORD, ILL.		03-131-08
CAUSES OF DEATH	INTESTINAL OBSTRUCTION	03-131-09
SOURCE OF CASE	ELGIN 05	03-131-10
EXPOSURE	THERAPEUTIC--INJECTION 05	03-131-12
SOURCE AND HOSPITAL RECORD		03-131-14
PATIENT ADMITTED ELGIN STATE HOSPITAL 02-07-31. RECEIVED RADIUM		03-131-14A
CHLORIDE INTRAVENOUSLY 1931, DOSAGE NOT KNOWN. HOSPITAL RECORD--		03-131-14B
09-18-31 RECEIVED 6 DOSES OF RACL2.		03-131-14C
10-12-31 RECEIVING RACL2.		03-131-14D
FAMILY HISTORY		03-131-15
NEVER MARRIED		03-131-15A
MEDICAL HISTORY		03-131-20
DIAGNOSED SCHIZOPHRENIA AT ELGIN STATE HOSPITAL.		03-131-20A
604 YX4	INTESTINAL OBSTRUCTION DUE TO UNDETERMINED CAUSE	03-131-67
DATA REVISED 04-30-68		03-131-99

PATIENT	03-132	BORN	12-24-91	03-132-01
	DECEASED			03-132-02
				03-132-02A
	MALE			03-132-05
DECEASED	10-04-31			03-132-06
	DEATH CERT. NO.			03-132-07
	INTERMENT	FOREST HOME CEMETERY, FOREST PARK, ILL.		03-132-08
CAUSES OF DEATH	ASPHYXIA DUE TO INHALING ILLUMINATING GAS, SUICIDE			03-132-09
SOURCE OF CASE	ELGIN	05		03-132-10
EXPOSURE	THERAPEUTIC--INJECTION 05			03-132-12
SOURCE AND HOSPITAL RECORD				03-132-14
	ADMITTED ELGIN STATE HOSPITAL 01-03-31. RECEIVED RADIUM INTRA-			03-132-14A
	VOUSLY. AGE 39 AT INJECTION. HOSPITAL RECORD--			03-132-14B
	07-24-31 HAS BEEN IN C-3 SOUTH FOR SEVERAL WEEKS.			03-132-14C
	08-26-31 IS WANTED BACK FOR TREATMENT WITH RADIUM CHLORIDE IN			03-132-14D
	C-3 SOUTH.			03-132-14E
FAMILY HISTORY				03-132-15
MARRIED				03-132-15A
CHILDREN	(2)			03-132-16
DATA REVISED	04-30-68			03-132-99

PATIENT	03-133	BORN	08-24-11	03-133-01
	DECEASED			03-133-02
	MALE			03-133-02A
				03-133-05
DECEASED	07-31-54			03-133-06
	DEATH CERT. NO.	AUTOPSY	NONE	03-133-07
	INTERMENT	JEWISH WALDHEIM CEMETERY, FOREST PARK, ILLINOIS		03-133-08
CAUSES OF DEATH	LARGE BOWEL OBSTRUCTION			03-133-09
SOURCE OF CASE	ELGIN	05		03-133-10
EXPOSURE	THERAPEUTIC--INJECTION	05		03-133-12
SOURCE AND HOSPITAL RECORD				03-133-14
	RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, AMOUNT UNKNOWN.			03-133-14A
	HOSPITAL RECORD--			03-133-14B
	03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.			03-133-14C
.660 YX4	COLON OBSTRUCTION DUE TO UNDETERMINED CAUSE			03-133-67
DATA REVISED	04-30-68			03-133-99

PATIENT 03-134
DECEASED

MALE

03-134-01
03-134-02
03-134-02A
03-134-05

SOURCE OF CASE

ELGIN 05

03-134-10

EXPOSURE

THERAPEUTIC--INJECTION

03-134-12

SOURCE AND HOSPITAL RECORD

ADMITTED ELGIN STATE HOSPITAL 07-17-31. HOSPITAL RECORD--

03-23-32 DISCHARGED.

03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.

10-09-51 LETTER TO PATIENT AT

MEASUREMENTS AT ELGIN. NO REPLY IN FILE.

REGARDING

03-134-14
03-134-14A
03-134-14B
03-134-14C
03-134-14D
03-134-14E

DATA REVISED 04-30-68

03-134-99

PATIENT C3-135					03-135-C1
MALE					03-135-02
					03-135-05
SOURCE OF CASE	ELGIN 05				03-135-10
LITERATURE CITATION					03-135-11
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA,					03-135-11A
VIENNA (1962). CASE C3-135.					03-135-11B
EXPOSURE	THERAPEUTIC--INJECTION 05				03-135-12
SOURCE AND HOSPITAL RECORD					03-135-14
ADMITTED ELGIN STATE HOSPITAL 08-29-30. RECEIVED RADIUM CHLORIDE					03-135-14A
INTRAVENOUSLY, AMOUNT UNKNOWN. HOSPITAL RECORD--					03-135-14B
03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.					03-135-14C
FAMILY HISTORY					03-135-15
NEVER MARRIED					03-135-15A
GAMMA-RAY MEASUREMENTS					03-135-25
06-21-60 RAB,RAC 0.391 UCI	HGS 1 TILTING CHAIR	CEM			03-135-25A
08-05-64 RAB,RAC 0.329 UCI	HGS 1 TILTING CHAIR	CEM			03-135-25B
BREATH MEASUREMENTS					03-135-26
08-05-64 EM-222 0.410	BREATH RADON HELMET	HFL			03-135-26B
COMPUTED TOTAL-BODY RADIUM					03-135-27
06-21-60 0.391 UCI	1.261 UCI TOTAL	0.31			03-135-27A
08-05-64 0.329 UCI	1.060 UCI TOTAL	0.31			03-135-27B
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON					03-135-28
08-05-64 0.410 UCI	0.594 UCI TOTAL	0.69			03-135-28A
X-RAY EXAMINATION					03-135-30
COMPLETE SKELETAL SURVEY					03-135-30A
08-05-64 ANL X-RAY NO. R-236 LOC. ANL					03-135-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.				SCORE 4.5	03-135-30C
PPF THICKENING OF THE VAULT OF THE SKULL TO 1 CM WITH MARKED					03-135-30D
COARSENING OF THE TRABECULAR PATTERN OF THE MANDIBLE. COARSENING					03-135-30E
OF THE TRABECULAR PATTERN OF THE RIGHT AND LEFT RADIUS AND ULNA,					03-135-30F
RIGHT AND LEFT TIBIA AND FIBULA. 8 X 13 MM SIZE AREAS OF BONE					03-135-30G
SCLEROSIS PRESENT IN THE NECK OF THE LEFT FEMUR. SKULL FINDINGS					03-135-30H
RESEMBLE THOSE OF PAGET'S DISEASE MORE THAN FROM THE EFFECTS OF					03-135-30I
RADIUM.					03-135-30J
DATA REVISED 04-30-68					03-135-99

PATIENT 03-136
DECEASED
MALE

03-136-01
03-136-02
03-136-05

SOURCE OF CASE

ELGIN 05

03-136-10

EXPOSURE

THERAPEUTIC--INJECTION 05

03-136-12

SOURCE AND HOSPITAL RECORD

03-28-32 SUMMARY--PATIENT TREATED WITH RADIUM CHLORIDE.

03-136-14
03-136-14A

DATA REVISED 05-01-68

03-136-99

PATIENT 03-137	BORN	82	03-137-01
DECEASED			03-137-02
MALE			03-137-02A
			03-137-05
DECEASED 09-10-34			03-137-06
DEATH CERT. NO.			03-137-07
INTERMENT BETHANIA CEMETERY, SUMMIT, ILLINOIS			03-137-08
CAUSES OF DEATH HYPERTENSIVE ARTERIAL DISEASE			03-137-09
CARDIAC DECOMPENSATION			03-137-09A
SOURCE OF CASE ELGIN 05			03-137-10
EXPOSURE THERAPEUTIC--INJECTION 05			03-137-12
SOURCE AND HOSPITAL RECORD			03-137-14
ADMITTED ELGIN STATE HOSPITAL. RECEIVED RADIUM CHLORIDE			03-137-14A
INTRAVENOUSLY, AMOUNT UNKNOWN. HOSPITAL RECORD--			03-137-14B
03-30-32 GIVEN 10 UCI RACL2.			03-137-14C
400 -533 HYPERTENSIVE CARDIOVASCULAR DISEASE			03-137-67
DATA REVISED 04-30-68			03-137-99

PATIENT	03-138	BORN	82	03-138-01
	DECEASED			03-138-02
				03-138-02A
				03-138-02B
	MALE			03-138-05
DECEASED	03-31-46			03-138-06
DEATH CERT.NO.		AUTOPSY NONE		03-138-07
INTERMENT	OAK HILL CEMETERY, CHICAGO, ILL.	(CREMATION)		03-138-08
CAUSES OF DEATH	ARTERIOSCLEROSIS			03-138-09
SOURCE OF CASE	ELGIN	05		03-138-10
EXPOSURE	THERAPEUTIC--INJECTION	05		03-138-12
SOURCE AND HOSPITAL RECORD				03-138-14
	ADMITTED ELGIN STATE HOSPITAL 03-04-32. RECEIVED RADIUM INTRA-			03-138-14A
	VOUSLY. HOSPITAL RECORD--			03-138-14B
	03-30-32 AT WING COTTAGE. PATIENT WAS GIVEN 10 UG RADIUM.			03-138-14C
	04-05-32 PATIENT IS CASE OF HYPERTENSION, BEING TREATED WITH			03-138-14D
	RADIUM CHLORIDE.			03-138-14E
	06-27-35 TRANSFERRED TO MANTENO STATE HOSPITAL.			03-138-14F
47X -X30	ESSENTIAL HYPERTENSION			03-138-67
DATA REVISED	08-21-68			03-138-99

PATIENT 03-139	BORN	08	03-139-01
MALE			03-139-02
			03-139-05
OTHER PERTINENT NOS.	CASE PAUL N		03-139-05A
SOURCE OF CASE	ELGIN 05		03-139-10
LITERATURE CITATION			03-139-11
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE PAUL N.			03-139-11A
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE PAUL N.			03-139-11B
MILLER, (IN) SYMPOSIUM ON WHOLE BODY COUNTING, P. 81, IAEA,			03-139-11C
VIENNA (1962). CASE 03-139.			03-139-11D
MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P.67 (IAEA,			03-139-11E
VIENNA (1964).			03-139-11F
MILLER, ANL-6839 (1964) PP. 18-39.			03-139-11G
EXPOSURE	THERAPEUTIC--INJECTION 05		03-139-12
SOURCE AND HOSPITAL RECORD			03-139-14
ADMITTED ELGIN STATE HOSPITAL 10-23-31. RECEIVED RADIUM CHLORIDE			03-139-14A
INTRAVENOUSLY, 11 INJECTIONS (PROBABLY 10 UCI EACH), TOTAL 110			03-139-14B
UCI, MARCH AND APRIL 1933. AGE 25 AT INJECTION. HOSPITAL RECORD--			03-139-14C
03-31-33 WING 1. PATIENT IS RECEIVING RADIUM CHLORIDE INTRA-			03-139-14D
VENOUSLY.			03-139-14E
04-10-33 WING 1. PATIENT HAS BEEN ON THIS WARD ABOUT SIX WEEKS			03-139-14F
AND HAS RECEIVED 11 INJECTIONS OF RADIUM CHLORIDE INTRAVENOUSLY.			03-139-14G
FAMILY HISTORY			03-139-15
MARRIED, SEPARATED			03-139-15A
CHILDREN (1)			03-139-16
MEDICAL HISTORY			03-139-20
DIAGNOSED DEMENTIA PRAECOX, HEREPHRENIC AT ELGIN STATE HOSP.			03-139-20A
PHYSICAL EXAMS DONE EVERY 6 MONTHS FROM 1931 TO 1950 HAVE BEEN			03-139-20B
ESSENTIALLY NEGATIVE.			03-139-20C
GAMMA-RAY MEASUREMENTS			03-139-25
08-05-59	RAB,RAC	0.157 UCI	HGS 1 TILTING CHAIR CEM 03-139-25C
03-11-60	RAB,RAC	0.155 UCI	HGS 1 TILTING CHAIR CEM 03-139-25D
12-17-63	RAB,RAC	0.141 UCI	HGS 1 7-CRYST-POS CEM 03-139-25E
12-17-63	RAB,RAC	0.135 UCI	HGS 1 TILTING CHAIR CEM 03-139-25F
COMPUTED TOTAL-BODY RADIUM			03-139-27
05-51	0.08 UCI	0.38 UCI	0.46 UCI TOTAL NORRIS A 03-139-27A
07-53	0.10 UCI	0.42 UCI	0.52 UCI TOTAL NORRIS A 03-139-27B
08-05-59	0.157 UCI		0.506 UCI TOTAL 0.31 03-139-27C
03-11-60	0.155 UCI		0.500 UCI TOTAL 0.31 03-139-27D
12-17-63	0.141 UCI		0.456 UCI TOTAL 0.31 03-139-27E
12-17-63	0.135 UCI		0.434 UCI TOTAL 0.31 03-139-27F

X-RAY EXAMINATION		03-139-30
PARTIAL SKELETAL SURVEY		03-139-30A
06-06-51	ELGIN STATE HOSP. NO.	03-139-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		03-139-30C
PPF NONE.		03-139-30D
PARTIAL SKELETAL SURVEY		03-139-31A
08-24-53	ELGIN STATE HOSP. NO.	03-139-31B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		03-139-31C
PPF SLIGHT PROGRESSION IN COARSENING OF TRABECULAR PATTERN IN		03-139-31D
TIBIA AND FIBULA BILATERALLY.		03-139-31E
COMPLETE SKELETAL SURVEY		03-139-32A
01-09-56	ELGIN STATE HOSP. NO.	03-139-32B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		03-139-32C
PPF PATIENT HAS HAD SIMPLE MASTOIDECTOMY ON LEFT.		03-139-32D
COMPLETE SKELETAL SURVEY		03-139-33A
12-01-58	ELGIN STATE HOSP. NO.	03-139-33B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		03-139-33C
PPF SLIGHT PROGRESSION IN COARSENING OF TRABECULAR PATTERN.		03-139-33D
COMPLETE SKELETAL SURVEY		03-139-34A
12-18-63	ANL X-RAY NO. R-228 LOC. ANL	03-139-34B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION.		03-139-34C
PPF SLIGHT PROGRESSION OF TRABECULAR PATTERN.		03-139-34D
CLINICAL LABORATORY FINDINGS		03-139-40
05-28-33	HG 100 HTC RBC 5.58	03-139-40A
WBC 9,800	DIFF. P 68 ST 5 L 32 M E B	03-139-40B
12-18-63	HG 13.7 HTC 45 RBC 4.48	03-139-41A
WBC 10,700	P 62 ST L 30 M 7 E 1 B 0	03-139-41B
000 -X22	SCHIZOPHRENIC REACTION, HEBEPHRENIC TYPE	03-139-67
DATA REVISED 05-01-68		03-139-99

PATIENT 03-140	BORN 02-09-05	03-140-01
DECEASED		03-140-02
MALE		03-140-02A
		03-140-05
DECEASED 04-26-37		03-140-06
DEATH CERT.NO.	AUTOPSY NONE	03-140-07
INTERMENT OAKWOOD CEMETERY, CHICAGO, ILL.		03-140-08
CAUSES OF DEATH PULMONARY TUBERCULOSIS		03-140-09
SOURCE OF CASE ELGIN 05		03-140-10
LITERATURE CITATION		03-140-11
ROWLAND, ANL-6297 (1960) PP. 8-15. CASE 03-140.		03-140-11A
EXPOSURE THERAPEUTIC--INJECTION 05		03-140-12
SOURCE AND HOSPITAL RECORD		03-140-14
ADMITTED ELGIN STATE HOSPITAL 03-07-30. RECEIVED RADIUM CHLORIDE		03-140-14A
INTRAVENOUSLY, PROBABLY 11 WEEKLY INJECTIONS 10 UCI, TOTAL		03-140-14B
110 UCI. HOSPITAL RECORD--		03-140-14C
04-10-33 WING 1. THIS PATIENT HAS BEEN ON THIS WARD ABOUT SIX		03-140-14D
WEEKS. HAS RECEIVED 11 INJECTIONS OF RADIUM CHLORIDE.		03-140-14E
FAMILY HISTORY		03-140-15
NEVER MARRIED		03-140-15A
MEDICAL HISTORY		03-140-20
BILATERAL PULMONARY TUBERCULOSIS DEVELOPED IN 05-35 AND		03-140-20A
PATIENT DIED OF THIS DISEASE 04-26-37. PATIENT WAS EXHUMED ON		03-140-20B
10-13-59 AND BONE WAS REMOVED FOR ANALYSIS.		03-140-20C
SPECIMENS AVAILABLE		03-140-50
FROM EXHUMATION		03-140-50A
DISTAL 11 CM OF LEFT FEMUR	200 GMS	03-140-50B
AUTORADIOGRAPHIC ANALYSES		03-140-53
APPROXIMATELY 2-3 OF THE DISTAL END OF THE RIGHT FEMUR WAS		03-140-53A
OBTAINED ON EXHUMATION OF THIS PATIENT 10-13-59.		03-140-53B
10-61 DISTAL END RIGHT FEMUR	RER	03-140-53C
MAXIMUM HOT SPOT	10.8 PCI RA226/MG BCNE	03-140-53D
AVERAGE DIFFUSE LEVEL	0.044 PCI RA226/MG BCNE	03-140-53E
HOT SPOT TO DIFFUSE RATIO	246	03-140-53F
360 -123 PULMONARY TUBERCULOSIS		03-140-67
DATA REVISED 04-30-68		03-140-99

PATIENT 03-141	BORN 01-16-06	03-141-01
DECEASED		03-141-02
		03-141-02A
MALE		03-141-05
OTHER PERTINENT NOS.	AMBH	03-141-05A
DECEASED 10-07-63		03-141-06
DEATH CERT.NO.	AUTOPSY NONE	03-141-07
INTERMENT	BRUSILOVER VEREIN CEMETERY, PROVISIO, ILLINOIS	03-141-08
CAUSES OF DEATH	MALIGNANT NEOPLASM OF NECK WITH METASTASES (DEATH CERT.)	03-141-09
	EPIDERMOID CARCINOMA, LEFT MASTOID (ACTUAL)	03-141-09A
		03-141-09B
SOURCE OF CASE	ELGIN 05	03-141-10
LITERATURE CITATION		03-141-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-141-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RADIOISOTOPES, U OF UTAH, SALT LAKE CITY (1969).		03-141-11B
		03-141-11C
EXPOSURE	THERAPEUTIC--INJECTION 05	03-141-12
SOURCE AND HOSPITAL RECORD		03-141-14
PATIENT ADMITTED CHICAGO STATE HOSPITAL 05-23-30, PAROLED AND RE-ADMITTED SEVERAL TIMES THEREAFTER. AT ELGIN STATE HOSPITAL PATIENT RECEIVED RADIUM CHLORIDE INTRAVENOUSLY, PROBABLE TOTAL 110 UCI, 1933. AGE 27 AT INJECTION. HOSPITAL RECORD-- 04-10-33 WING 1. PATIENT HAS RECEIVED 11 INJECTIONS OF RADIUM CHLORIDE INTRAVENOUSLY. HAS BEEN ON THIS WARD ABOUT SIX WEEKS.		03-141-14A
		03-141-14B
		03-141-14C
		03-141-14D
		03-141-14E
		03-141-14F
MEDICAL HISTORY		03-141-20
ABOUT MARCH 1962 PATIENT HAD DETAILED SINUS AND MASTOID RADIO- GRAPHIC EXAMINATIONS, INCLUDING POLYTOMOGRAPHY OF MASTOIDS, AT U OF CHICAGO CLINICS. THEIR IMPRESSION--SCLEROSIS OF LEFT MASTOID REPRESENTED CHRONIC MASTOIDITIS, NO EVIDENCE OF BONY DESTRUCTION.		03-141-20A
		03-141-20B
		03-141-20C
		03-141-20D
IN MAY OR JUNE 1963 PATIENT DEVELOPED LARGE FLUCTUANT MASS OVER LEFT MASTOID. INCISION AND DRAINAGE REVEALED LARGE NECROTIC ABSCESS (ILLINOIS EYE AND EAR INFIRMARY, DR. ROBIN BROWN). NECROTIC TUMOR EXTENDED POSTERIORLY TO MIDLINE, INFERIORLY TO INSERTION OF STENO-CLEIDO-MASTOID MUSCLE, AND ANTERIORLY TO ZYGOMA. THE TUMOR WAS AN EPIDERMOID CARCINOMA.		03-141-20E
		03-141-20F
		03-141-20G
		03-141-20H
		03-141-20I
		03-141-20J
GAMMA-RAY MEASUREMENTS		03-141-25
02-06-62 RAB,RAC 0.271 UCI HGS 1 TILTING CHAIR CEM		03-141-25A
02-06-62 RAB,RAC 0.298 UCI HGS 1 7-CRYST-POS CEM		03-141-25B
COMPUTED TOTAL-BODY RADIUM		03-141-27
02-06-62 0.271 UCI 0.874 UCI TOTAL 0.31		03-141-27A
02-06-62 0.298 UCI 0.961 UCI TOTAL 0.31		03-141-27B

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

02-06-62 ANL X-RAY NO. R-222 LOC. ANL
 ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 20
 PPF AREAS OF BONE RESORPTION IN THE SKULL, MANDIBLE, RIGHT
 HUMERUS, LEFT RADIUS, RIGHT AND LEFT FEMUR, RIGHT AND LEFT
 PATELLA, RIGHT TIBIA, RIGHT AND LEFT FIBULA. AREAS OF INCREASED
 BONE DENSITY SEEN IN RIGHT HUMERUS, AND RIGHT AND LEFT FEMUR.
 POSSIBILITY OF CHOLESTEATOMA OR POSSIBLY OF MALIGNANT TUMOR IN
 LEFT MASTOID.

03-141-30
 03-141-30A
 03-141-30B
 03-141-30C
 03-141-30D
 03-141-30E
 03-141-30F
 03-141-30G
 03-141-30H
 03-141-30I

LAMINAGRAPHY OF MASTOID

03-07-62 U OF C CLINICS UNIT NO. LOC. U OF C
 PPF SCLEROSIS OF LEFT MASTOID, PROBABLE CHRONIC MASTOIDITIS.
 NO EVIDENCE OF BONY DESTRUCTION.

03-141-31A
 03-141-31B
 03-141-31C
 03-141-31D

CLINICAL LABORATORY FINDINGS

02-06-62 HG 15.6 HTC RBC 4.93
 WBC 9600 DIFF. P 67 ST 2 L 25 M 6 E B

03-141-40
 03-141-40A
 03-141-40B

SPECIMENS AVAILABLE

FEW BONE AND TUMOR CHIPS

RJH

03-141-50
 03-141-50A

MALIGNANT TUMOR EPIDERMOID CARCINOMA, LEFT MASTOID

03-141-60

2134 -814 EPIDERMOID CARCINOMA OF THE MASTOID

03-141-66

X84 -13 SIMPLE MASTOIDECTOMY

03-141-67

DATA REVISED 05-08-68

03-141-99

PATIENT 03-201	BORN 06-14-09	03-201-01
DECEASED		03-201-02
		03-201-02A
		03-201-03
		03-201-05
FEMALE		
DECEASED 04-27-63		03-201-06
DEATH CERT.NO.	AUTOPSY YES	03-201-07
INTERMENT	GRACELAND CEMETERY, CHICAGO, ILL.	03-201-08
CAUSES OF DEATH	OSTEOGENIC SARCOMA OF RIGHT HUMERUS WITH METASTASES.	03-201-09
SOURCE OF CASE	REFERRED BY DR. WILLIAM T. KERNAHAN	03-201-10
	AND DR. EDWARD L. COMPERE, CHICAGO, ILL.	03-201-10A
LITERATURE CITATION		03-201-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-201-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-201-11B
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-201-11C
EXPOSURE	UNKNOWN 07	03-201-12
SOURCE NOT KNOWN. PROBABLY ACQUIRED MEDICALLY SOMETIME BETWEEN 1919		03-201-13
AND 1925.		03-201-13A
FAMILY HISTORY		03-201-15
MARRIED 1936	PARA 3 GRAVIDA 3	03-201-15A
CHILDREN	MALE L W	03-201-16
	FEMALE L W	03-201-16A
	FEMALE L W	03-201-16B
MEDICAL HISTORY		03-201-20
ANEMIA IN CHILDHOOD, POSSIBLY TREATED BY TONIC. HISTORY OF PAIN-		03-201-20A
FUL RIGHT FOOT AT AGE 29, X-RAY SHOWED ASEPTIC NECROSIS OF HEAD		03-201-20B
OF ASTRAGALUS WITH ASSOCIATED DEGENERATIVE ARTHRITIC CHANGES.		03-201-20C
PATHOLOGICAL FRACTURE OF LEFT FEMUR 1955. EXTENSIVE REVIEW OF		03-201-20D
CASE AT MASS. GENL. HOSP. 1958. REMOVAL OF PIN AND NECROTIC		03-201-20E
TISSUE FROM LEFT FEMUR 1959. (07-23-59)		03-201-20F
FILMS TAKEN OF THE RIGHT HUMERUS IN MARCH, 1962 DEMONSTRATED A		03-201-21A
TUMOR OF THE PROXIMAL THIRD OF THE RIGHT HUMERUS. BIOPSY DONE BY		03-201-21B
DR. E.L. COMPERE AT CHICAGO WESLEY MEMORIAL HOSPITAL DEMONSTRATED		03-201-21C
A VERY ACTIVE OSTEOGENIC SARCOMA. PROXIMAL THIRD OF THE HUMERUS		03-201-21D
RESECTED 03-17-62 BUT THE PATIENT DIED OF WIDESPREAD METASTATIC		03-201-21E
DISEASE ON 04-27-63.		03-201-21F
GAMMA-RAY MEASUREMENTS		03-201-25
07-23-59 RAB,RAC 0.990 UCI HGS 1 TILTING CHAIR CEM		03-201-25A
12-03-59 RAB,RAC 0.955 UCI HGS 1 TILTING CHAIR CEM		03-201-25B
02-08-62 RAB,RAC 0.928 UCI HGS 1 TILTING CHAIR CEM		03-201-25C
02-08-62 RAB,RAC 0.920 UCI HGS 1 7-CRYST-POS CEM		03-201-25D
BREATH MEASUREMENTS		03-201-26
12-03-59 EM-222 1.890 UCI RADON BREATH HFL		03-201-26B

COMPUTED TOTAL-BODY RADIUM				03-201-27
07-23-59	0.990 UCI	3.200 UCI TOTAL	0.31	03-201-27A
12-03-59	0.955 UCI	3.081 UCI TOTAL	0.31	03-201-27B
02-08-62	0.928 UCI	2.990 UCI TOTAL	0.31	03-201-27C
02-08-62	0.920 UCI	2.968 UCI TOTAL	0.31	03-201-27D
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON				03-201-28
12-03-59	1.890 UCI	2.739 UCI TOTAL	0.69	03-201-28B
X-RAY EXAMINATION				03-201-30
DENTAL FILMS				03-201-30A
10-01-54	DR. ROBERT M. POTTER			03-201-30B
MODERATE CHANGES TYPICAL OF DEPOSITION OF RADIUM IN TEETH,				03-201-30C
MANDIBLE, AND MAXILLA.				03-201-30D
DENTAL FILMS				03-201-31A
06-04-58	DR. ROBERT M. POTTER			03-201-31B
MANY SMALL AREAS OF BONE RESORPTION NOTED IN REGION OF MANDIBLE.				03-201-31C
IMPACTED THIRD MOLAR IS PRESENT.				03-201-31D
DENTAL FILMS				03-201-32A
08-01-61	DR. ROBERT M. POTTER			03-201-32B
MARKED EROSION OF CROWN OF PARTIALLY IMPACTED THIRD MOLAR, WHICH				03-201-32C
MAY BE SECONDARY TO DEPOSITION OF RADIUM IN DENTIN OR REPRESENTS				03-201-32D
CARIOUS EROSION.				03-201-32E
SPECIMENS AVAILABLE				03-201-50
TOOTH	LOWER LEFT THIRD MOLAR, EXTRACTED 08-61			03-201-50A
1.51 NCI RA-226,	WT. 1.445 GM,	1045 PCI RA-226/GM,	RER	03-201-50B
44.1 PERCENT RETENTION OF RADON				03-201-50C
MALIGNANT TUMOR OSTEOGENIC SARCOMA, RIGHT HUMERUS 1962				03-201-60
2301 -876F	OSTEOGENIC SARCOMA OF THE UPPER EXTREMITY OF HUMERUS(RT)			03-201-66
23021-20	AMPUTATION OF PROXIMAL THIRD OF HUMERUS (RIGHT)			03-201-66A
235 -416	FRACTURE OF THE FEMUR (LEFT)			03-201-66B
2392 -4722.1	ASEPTIC NECROSIS OF THE ASTRAGULUS			03-201-66C
TOOTH MEASUREMENT				03-201-73
SAMPLE 13.00	TOOTH MOLAR FRAGMENTS			03-201-73A
TOTAL WT. 0.765	CALC.GMS.CA. 0.214			03-201-73B
UNSEALED EQUILIBRIUM PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY		03-201-73C
- 198.5	- 926.7	0.301		03-201-73D
DATA REVISED C3-06-68				03-201-99

PATIENT	03-202				03-202-01
	MALE				03-202-05
SOURCE OF CASE		SCHLUNDT NOTES, PATIENT OF DR. F J			03-202-10
EXPOSURE		THERAPEUTIC--INJECTION	05		03-202-12
BREATH MEASUREMENTS					03-202-26
07-01-60	EM-222	1.800 UCI	BREATH RADON BOTTLE	HFL	03-202-26A
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON					03-202-28
07-01-60		1.800 UCI	2.609 UCI TOTAL	0.69	03-202-28A
ADDITIONAL INFORMATION		PATIENT REFUSED TO BE STUDIED.			03-202-91
DATA REVISED	07-12-67				03-202-99

PATIENT 03-203	BORN 08-25-03	03-203-01
		03-203-02
		03-203-03
		03-203-04
		03-203-05
FEMALE		
SOURCE OF CASE	RESPONSE TO NEWSPAPER ARTICLE	03-203-10
EXPOSURE	THERAPEUTIC--INJECTION 05	03-203-12
SOURCE	SERIES OF 12 INTRAVENOUS INJECTIONS OF RADIUM CHLORIDE IN 1933 FOR TREATMENT OF SEVERE RHEUMATIC FEVER, SEVERE PURPURA AND CHOREA.	03-203-13
		03-203-13A
		03-203-13B
FAMILY HISTORY		03-203-15
MARRIED 1925, DIVORCED	PARA 1 GRAVIDA 2 (1 MISC.)	03-203-15A
MARRIED 1957		03-203-15B
HUSBAND	L W	03-203-15C
CHILDREN	FEMALE 1926 L W	03-203-16
MEDICAL HISTORY		03-203-20
IN ADDITION TO ILLNESS NOTED ABOVE, PATIENT WAS GIVEN MEDICATION		03-203-20A
FOR GLANDULAR DIFFICULTIES FOLLOWING RADIUM TREATMENT. FRACTURE		03-203-20B
OF LEFT ELBOW SUSTAINED IN FALL IN 1939. TREATMENT FOR ANEMIA FOR		03-203-20C
A NUMBER OF YEARS UP TO 1949. HYSTERECTOMY 1950. PATIENT HAS FELT		03-203-20D
WELL SINCE LAST SURGERY 1950.		03-203-20E
GAMMA-RAY MEASUREMENTS		03-203-25
06-10-59 RAB,RAC C.026 UCI HCS 1 TILTING CHAIR CEM		03-203-25A
COMPUTED TOTAL-BODY RADIUM		03-203-27
06-10-59 0.026 UCI 0.084 UCI TOTAL 0.31		03-203-27A
X-RAY EXAMINATION		03-203-30
PARTIAL SKELETAL SURVEY		03-203-30A
06-10-59 ANL X-RAY NO. R-135 LOC. ANL		03-203-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-203-30C
PPF HEALED FRACTURE OF LEFT OLECRANON.		03-203-30D
CLINICAL LABORATORY FINDINGS		03-203-40
06-10-59 HG 14.3 HTC RBC 4.71		03-203-40A
WBC 7100 DIFF. P 74 ST 2 L 16 M 6 E 1 B 1		03-203-40B
2321 -416 FRACTURE OF THE ULNA (LEFT)		03-203-67
782 -10 HYSTERECTOMY		03-203-67A

PATIENT 03-204	BORN 08-01-98	03-204-01
		03-204-02
		03-204-03
		03-204-04
		03-204-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-204-10
EXPOSURE	THERAPEUTIC--ORAL	03-204-12
SOURCE PATIENT TOOK RADIUMMILK CAPSULES OCCASIONALLY 1922-1930.		03-204-13
DRUG PREPARED BY BROTHER, DR. B C		03-204-13A
FAMILY HISTORY		03-204-15
MARRIED 1917	PARA 2 GRAVIDA 2	03-204-15A
HUSBAND DECEASED		03-204-15B
MARRIED 1956		03-204-15C
CHILDREN	MALE 1918 L W	03-204-16
	FEMALE 1921 L W	03-204-16A
MEDICAL HISTORY		03-204-20
SURGERY--APPENDECTOMY 1920, HYSTERECTOMY 1939, CHOLECYSTECTOMY		03-204-20A
OCT 1959. ONE SEVERE HEART ATTACK FOLLOWED BY SEVERAL LIGHTER		03-204-20B
ATTACKS DEC 1958 THROUGH ABOUT JUNE 1959. NO FRACTURES. INQUIRY		03-204-20C
BY SYSTEMS OTHERWISE NEGATIVE. TEETH--FULL UPPER DENTURE, PARTIAL		03-204-20D
DENTURE BELOW. (09-27-60)		03-204-20E
GAMMA-RAY MEASUREMENTS		03-204-25
09-27-60 RAB,RAC 0.007 UCI HGS 1 TILTING CHAIR CEM		03-204-25A
COMPUTED TOTAL-BODY RADIUM		03-204-27
09-27-60 0.007 UCI 0.021 UCI TOTAL 0.31		03-204-27A
X-RAY EXAMINATION		03-204-30
PARTIAL SKELETAL SURVEY		03-204-30A
09-27-60 ANL X-RAY NO. R-208 LOC. ANL		03-204-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1		03-204-30C
PROBABLE PAGET'S DISEASE.		03-204-30D
CLINICAL LABORATORY FINDINGS		03-204-40
09-27-60 HG 14.3 HTC RBC 442		03-204-40A
WBC 8300 CIFF. P 54 ST 1 L 38 M 1 E 6 B		03-204-40B
430 -516.7 MYOCARDIAL INFARCTION		03-204-67
661 -12 APPENDECTOMY		03-204-67A
687 -12 CHOLECYSTECTOMY		03-204-67B
782 -10 HYSTERECTOMY		03-204-67C
200 -9401 OSTEITIS DEFORMANS (PAGET'S DISEASE)		03-204-67D

PATIENT. 03-205	BORN 09-25-00	03-205-01
		03-205-02
		03-205-03
FEMALE		03-205-05
SOURCE OF CASE	REFERRED BY M.I.T.	03-205-10
EXPOSURE	THERAPEUTIC--INJECTION 05	03-205-12
SOURCE TWO SERIES OF 12 INJECTIONS EACH OF RADIUM CHLORIDE GIVEN		03-205-13
INTRAVENOUSLY IN 1928 BY DR. M S		03-205-13A
FAMILY HISTORY		03-205-15
MARRIED		03-205-15A
HUSBAND	L W	03-205-15B
MEDICAL HISTORY		03-205-20
APPENDECTOMY IN 1915. PATIENT FELL DOWN STAIRS AND INJURED BACK		03-205-20A
IN 1925, NO FRACTURES WERE FOUND. BACK PAINS AND ARTHRITIS IN		03-205-20B
1928 TREATED BY RADIUM INJECTIONS AS NOTED ABOVE. UTERINE SUS-		03-205-20C
PENSION IN 1930 FOLLOWED BY BILATERAL PHLEBITIS, PATIENT IN BED		03-205-20D
FOR 10 MONTHS. PATIENT STARTED FALLING IN 1937 AND A DIAGNOSIS OF		03-205-20E
PROGRESSIVE MUSCULAR DYSTROPHY WAS MADE IN 1953 AT THE MONTREAL		03-205-20F
NEUROLOGICAL INSTITUTE. INQUIRY BY SYSTEMS IS ESSENTIALLY NEGA-		03-205-20G
TIVE EXCEPT FOR HISTORY OF THREE SINUS OPERATIONS IN 1925. DENTAL		03-205-20H
HISTORY--ONLY THE WISDOM TEETH HAVE BEEN EXTRACTED.		03-205-20I
PATIENT HAS BEEN ON LONG TERM CORTISONE THERAPY SINCE 1953.		03-205-20J
(07-01-59)		03-205-20K
INTERVAL HISTORY--NO SERIOUS DISEASE EXCEPT FOR PROGRESSIVE WEAK-		03-205-21A
NESS OF LIMBS, ESPECIALLY RIGHT ARM AND LEFT LEG. (05-17-65)		03-205-21B
FURTHER DENTAL EXTRACTATIONS, 1967, AND PROGRESSIVE WEAKNESS OF		03-205-22A
LIMBS AND TRUNK. (06-06-68)		03-205-22B
GAMMA-RAY MEASUREMENTS		03-205-25
07-01-59 RAB,RAC 0.150 UCI HGS 1 TILTING CHAIR CEM		03-205-25A
05-17-65 RAB,RAC 0.103 UCI HGS 1 TILTING CHAIR CEM		03-205-25B
05-17-65 RAB,RAC 0.124 UCI HGS 1 7-CRYST-POS CEM		03-205-25C
06-05-68 RAB,RAC 0.090 UCI HGS 1 TILTING CHAIR CEM		03-205-25D
BREATH MEASUREMENTS		03-205-26
03-06-59 EM-222 0.400 RADON BREATH M.I.T.		03-205-26A
COMPUTED TOTAL-BODY RADIUM		03-205-27
07-01-59 0.150 UCI 0.485 UCI TOTAL 0.31		03-205-27A
05-17-65 0.103 UCI 0.333 UCI TOTAL 0.31		03-205-27B
05-17-65 0.133 UCI 0.401 UCI TOTAL 0.31		03-205-27C
06-05-68 0.090 UCI 0.291 UCI TOTAL 0.31		03-205-27D
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-205-28
03-06-59 0.400 UCI 0.580 UCI TOTAL 0.69		03-205-28A

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

07-01-59 ANL X-RAY NO. R-140 LOC. ANL
 MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 16
 PPF AREAS OF BONE RESORPTION IN RIGHT AND LEFT HUMERUS, RIGHT
 AND LEFT RADIUS AND ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT
 TIBIA AND FIBULA, LEFT PATELLA. AREA OF BONE SCLEROSIS SEEN IN
 HEAD OF THE RIGHT HUMERUS. COARSENING OF TRABECULATION NOTED IN
 BONES OF RIGHT AND LEFT HAND, AND THE RIGHT AND LEFT FOOT.

03-205-30
 03-205-30A
 03-205-30B
 03-205-30C
 03-205-30D
 03-205-30E
 03-205-30F
 03-205-30G
 03-205-30H

COMPLETE SKELETAL SURVEY

05-17-65 ANL X-RAY NO. R-140B LOC. ANL
 MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 23
 PPF AS BEFORE WITH SLIGHT PROGRESSION IN THE NUMBER OF AND
 SEVERITY OF BONE LESIONS.

03-205-31A
 03-205-31B
 03-205-31C
 03-205-31D
 03-205-31E

06-06-68 ANL X-RAY NO. R-140C LOC. ANL
 MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 23.5
 PPF SKELETAL RADIOGRAPHY ESSENTIALLY UNCHANGED SINCE PREVIOUS
 EXAMINATION IN 1965. PATIENT ALSO HAS SECONDARY DISUSE ATROPHY
 ASSOCIATED WITH KNOWN PROGRESSIVE DYSTROPHY.

03-205-32A
 03-205-32B
 03-205-32C
 03-205-32D
 03-205-32E

CLINICAL LABORATORY FINDINGS

07-01-59 HG 13.4 HTC RBC 3.98
 WBC 7200 DIFF. P 59 ST L 37 M 3 E 1 B

03-205-40
 03-205-40A
 03-205-40B

05-17-65 HG 13.5 HTC 44 RBC 4.37
 WBC 10,000 DIFF. P 58 ST L 34 M 6 E 1 B 1

03-205-41A
 03-205-41B

270 -9X9 PROGRESSIVE MUSCULAR DYSTROPHY
 489 -415.0 PHLEBITIS OF FEMORAL VEINS FOLLOWING SURGERY
 661 -12 APPENDECTOMY
 782 -56 UTERINE SUSPENSION

03-205-67
 03-205-67A
 03-205-67B
 03-205-67C

TOOTH MEASUREMENT

SAMPLE 20.01 TOOTH MOLAR FRAGMENT
 TOTAL WT. 1.2440 CALC.GMS.CA. 0.3483
 UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY
 89.0 113.2 79 325.0 0.756

03-205-73
 03-205-73A
 03-205-73B
 03-205-73C
 03-205-73D

SAMPLE 20.02 TOOTH INCISOR
 TOTAL WT. 0.8061 CALC.GMS.CA. 0.2257
 UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY
 42.8 78.0 55 345.5 0.804

03-205-74A
 03-205-74B
 03-205-74C
 03-205-74D

DATA REVISED 12-03-68

03-205-99

PATIENT	03-206	BORN	01-18-14	03-206-01
	MALE			03-206-02
				03-206-05
OTHER PERTINENT NOS.	AMBH			03-206-05A
SOURCE OF CASE	REFERRED BY DRS. WM.T. KERNAHAN AND J.A.D. COOPER			03-206-10
LITERATURE CITATION				03-206-11
	MILLER, ANL-6839 (1964) PP. 18-39.			03-206-11A
	MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P.67, IAEA, VIENNA (1964).			03-206-11B
				03-206-11C
EXPOSURE	PROB. THERAPEUTIC 05			03-206-12
SOURCE RADIUM INJECTIONS, PROBABLY JAN., 1936 FOR GC ARTHRITIS.				03-206-13
SEE BELOW.				03-206-13A
FAMILY HISTORY				03-206-15
MARRIED 1941				03-206-15A
CHILDREN	FEMALE	1945	L W	03-206-16
	MALE	1945	L W	03-206-16A
MEDICAL HISTORY				03-206-20
PATIENT TREATED BY DR. F W , BLDG., ,				03-206-20A
INFANCY TO 1938. INJECTIONS IN JAN. 1936, SEVERAL INJECTIONS PER				03-206-20B
DAY FOR SEVERAL DAYS, ONCE DAILY THEREAFTER FOR APPROX. ONE MONTH.				03-206-20C
RADIUM INJECTIONS GIVEN FOR GC ARTHRITIS.				03-206-20D
1918--WATER ON KNEE, BOTH SIDES. FULL LENGTH LEG CASTS FOR ABOUT				03-206-20E
18 MONTHS WITH 12 TO 15 MONTHLY ASPIRATIONS.				03-206-20F
1919--TONSILLECTOMY AND ADENOID SURGERY. CONGENITAL DISLOCATED				03-206-20G
LEFT WRIST AND SHORTENED LEFT FOREARM (1 INCH) AND SMALLER LEFT				03-206-20H
HAND. CHILDHOOD DISEASES, GERMAN MEASLES, CHICKEN POX, ETC.				03-206-20I
1924--FRACTURE LEFT WRIST AND LEFT ARM, FELL OFF HORSE.				03-206-20J
FRACTURE LEFT UPPER LEG.				03-206-20K
1934--MARINE HOSP., MOBILE, ALA. FOR VD.				03-206-20L
1942--SULFA POISONING, SULFA RECEIVED FOR LEFT MASTOID INFECTION,				03-206-20M
HINES HOSPITAL. LEFT MASTOIDECTOMY, PRES.-ST.LUKE'S HCSP., DR. F.				03-206-20N
LYONS. APPENDECTOMY, JACKSON PARK HOSP., DR. GEORGE J.C. GERTZ.				03-206-20O
1943--TEETH COMPLETELY EXTRACTED AS RESULT OF PYORRHEA SUBSEQUENT				03-206-20P
TO JAW SURGERY (AFTER FRACTURE LEFT JAW IN FIGHT 1941),				03-206-20Q
DR. MAYLAND.				03-206-20R
1944 OR 45--FRACTURE LEFT LOWER LEG, AUTOMOBILE ACCIDENT.				03-206-20S
1956--FRACTURE DISTAL LEFT FEMUR, FELL TO GROUND WHILE STANDING.				03-206-20T
VA RESEARCH HOSP., CHICAGO.				03-206-20U
1957--FRACTURE DISTAL RIGHT FEMUR, FELL ON STREET WHILE WALKING,				03-206-20V
VA RESEARCH HOSP., CHICAGO.				03-206-20W
1958--FRACTURE DISTAL RIGHT HUMERUS, AFTER BUMPING DOOR JAMB.				03-206-20X
VA RESEARCH HOSP., CHICAGO.				03-206-20Y
ABOUT 1959--ATTACK BRONCHIAL ASTHMA, AWAKENED THANKSGIVING A.M.				03-206-20Z
WITH SEVERAL BROKEN RIBS FROM COUGHING.				03-206-21A

1961--FRACTURE RIGHT INDEX FINGER, AFTER SWIPING AT HIS SON. 03-206-21B
 VA RESEARCH HOSP., CHICAGO. 03-206-21C
 1961--TRAUMATIC AMPUTATION RIGHT TOES BY LAWN MOWER. 03-206-21D
 01-20-63 TO 04-63--O'MALLEY PROCEDURE ON LEFT FEMUR, STAPH INFECTION, AND HEART ATTACK. VA RESEARCH HOSP., CHICAGO. 03-206-21E
 PAIN IN DISTAL LEFT HUMERUS FOR PAST 3 YEARS BUT NO FRACTURE. 03-206-21F
 SEVERE PAIN IN BOTH HIPS SINCE 1957. TAKES DARVON FOR PAIN. 03-206-21G
 05-03-66 EXAMINATION AT VA RESEARCH HOSP., CHICAGO, REVEALED 03-206-21H
 RIGHT HIP FLEXION OF 110 DEGREES, NO EXTENSION ABDUCTION OF 20 03-206-21I
 DEGREES, ADDUCTION OF 30 DEGREES, INTERNAL ROTATION OF 10 DEGREES 03-206-21J
 AND EXTERNAL ROTATION OF 75 DEGREES. MARKED GRATING 03-206-21K
 AND A CRACKING SENSATION OVER THE LEFT HIP. SURGERY PERFORMED 03-206-21L
 BY DR. G. STEINER--SNYDER ROD WAS REMOVED FROM LEFT FEMUR, AND 03-206-21M
 A SPECIAL LONG-STEM HIP PROSTHESIS WAS INSERTED THROUGH MODIFIED 03-206-21O
 POSTERIOR APPROACH. 03-206-21P

GAMMA-RAY MEASUREMENTS					03-206-25
06-17-58	RAB,RAC	1.050 UCI	HGS 1 TILTING CHAIR	CEM	03-206-25A
			AND 1 METER ARC		03-206-25B
09-16-63	RAB,RAC	0.980 UCI	HGS 1 TILTING CHAIR	CEM	03-206-25C
			AND 13-CRYST-POS		03-206-25D
11-13-64	RAB,RAC	0.926 UCI	HGS 1 7-CRYST-POS	CEM	03-206-25E

BREATH MEASUREMENTS					03-206-26
06-17-58	EM-222	3.120 UCI	RADON BREATH	HFL	03-206-26A

COMPUTED TOTAL-BODY RADIUM					03-206-27
06-17-58	1.050 UCI	3.120 UCI	4.170 UCI TOTAL	--	03-206-27A
09-16-63	0.980 UCI		3.160 UCI TOTAL	0.31	03-206-27C
11-13-64	0.926 UCI		2.988 UCI TOTAL	0.31	03-206-27E

X-RAY EXAMINATION 03-206-30
 COMPLETE SKELETAL SURVEY 03-206-30A
 1955-1959 VA RES. HOSP., AND ANL X-RAY NO. , R-120 03-206-30B
 ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION SCORE 18.5 03-206-30C
 PPF FRACTURES OF RIGHT AND LEFT FEMURS, PATHOLOGICAL BY HISTORY. 03-206-30D
 FRACTURE OF RIGHT HUMERUS. AREAS OF BONE RESORPTION IN RIGHT 03-206-30E
 TIBIA AND FIBULA, RIGHT FEMUR, RIGHT RADIUS AND ULNA, AND RIGHT 03-206-30F
 METATARSALS. AREAS OF BONE SCLEROSIS IN LEFT HUMERUS, RIGHT TIBIA 03-206-30G
 AND FIBULA, AND LEFT FEMUR. THICKENING OF CORTEX OF RIGHT FEMUR, 03-206-30H
 RIGHT TIBIA AND LEFT RADIUS. COARSENING OF TRABECULAR PATTERN OF 03-206-30I
 RIGHT AND LEFT HUMERUS, RADIUS AND ULNA, AND RIGHT AND LEFT FOOT. 03-206-30J

COMPLETE SKELETAL SURVEY					03-206-31A
09-16-63	ANL	X-RAY NO. R-120B	LOC. ANL		03-206-31B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 22					03-206-31C
PPF PATHOLOGICAL FRACTURES OF RIGHT AND LEFT FEMUR AND RIGHT					03-206-31D
HUMERUS. ASEPTIC NECROSIS OF HEAD OF LEFT FEMUR, AND POSSIBLY					03-206-31E
OF LEFT ASTRAGALUS. TRAUMATIC AMPUTATION OF DISTAL RIGHT FIRST					03-206-31F
THREE TOES. HEALED FRACTURE OF DISTAL LEFT RADIUS AND LEFT FIBULA.					03-206-31G
SCLEROSIS OF RIGHT RADIUS AND ULNA, LEFT HUMERUS, RIGHT AND LEFT					03-206-31H
FEMUR, TIBIA AND FIBULA, RIGHT ASTRAGALUS, LEFT FEMUR.					03-206-31I
AREAS OF BONE RESORPTION IN RIGHT AND LEFT TIBIA AND FIBULA,					03-206-31J
LEFT FEMUR. COARSENING OF TRABECULATION OF RIGHT AND LEFT FOOT.					03-206-31K

SPECIAL VIEWS--SINUSES AND MASTOIDS, LAMINAGRAMS	03-206-32A
07-30-64 U OF C CLINICS UNIT NO. LOC. U OF C	03-206-32B
CHANGES IN LEFT FRONTAL SINUS AND LEFT FRONTAL BONE CONSISTENT	03-206-32C
WITH RADIATION OSTEITIS. POST-SURGICAL DEFECT IN LEFT MASTOID.	03-206-32D
OPACIFICATION OF MIDDLE EAR CAVITY IS PRESUMABLY RESULT OF	03-206-32E
SURGERY ALSO.	03-206-32F

CLINICAL LABORATORY FINDINGS	03-206-40
09-16-63 HG 13.5 HTC RBC 4.96	03-206-40A
WBC 10,000 DIFF. P 60 ST 1 L 32 M 5 E 2 B	03-206-40B

SPECIMENS AVAILABLE	03-206-50
05-03-66 FEMUR HEAD LOC. ANL	03-206-50A

229 -416 FRACTURE OF RIBS	03-206-66
23023-416 FRACTURE OF LOWER THIRD OF SHAFT OF HUMERUS (RIGHT)	03-206-66A
235 -543 OPEN REDUCTION OF THE FEMUR WITH INTRAMEDULLARY METAL ROD	03-206-66B
235 -544 OPEN REDUCTION OF THE FEMUR WITH INSERTION OF PROSTHESIS	03-206-66C
23513-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT)	03-206-66D
23523-416 FRACTURE OF THE LOWER THIRC OF THE FEMUR (LEFT,RIGHT)	03-206-66E

X84 -13 SIMPLE MASTOIDECTOMY (LEFT)	03-206-67
X84 -100 MASTOIDITIS, ACUTE	03-206-67A
219 -416 FRACTURE OF THE MANDIBLE	03-206-67B
2313 -416 FRACTURE OF DISTAL END OF RADIUS (LEFT)	03-206-67C
2323 -416 FRACTURE OF DISTAL END OF ULNA (LEFT)	03-206-67D
2347 -416 FRACTURE OF THE PHALANGES CF THE INDEX FINGER	03-206-67E
23723-416 FRACTURE OF LOWER THIRD OF SHAFT OF TIBIA (LEFT)	03-206-67F
634 -12 TONSILLECTOMY	03-206-67G
661 -12 APPENDECTOMY	03-206-67H

DATA REVISED 03-04-68	03-206-99
-----------------------	-----------

PATIENT	03-207	BORN	10-12-79	03-207-01
				03-207-02
				03-207-03
				03-207-04
				03-207-05
FEMALE				
SOURCE OF CASE	SEARCH BY RJH, CEM			03-207-10
EXPOSURE	THERAPEUTIC--ORAL (04)			03-207-12
SOURCE	PATIENT TOOK RADIUM MILK, WHICH WAS RA-BA IN COMPRESSED LACTOSE, FROM 1922 TO ABOUT 1930. RA-BA WAS PURCHASED FROM AMERICAN RADIUM CO., NEW YORK CITY, (PROB. U.S. RADIUM CORP.), MEASURED BY BUREAU OF STANDARDS, WASHINGTON DC, THEN ENCAPSULED. SHE TOOK 2 OR 3 CAPSULES ALMOST EVERY DAY AS A STIMULANT OR TO WARD OFF COLDS.			03-207-13 03-207-13A 03-207-13B 03-207-13C 03-207-13D 03-207-13E
FAMILY HISTORY				03-207-15
MARRIED 1905,	HUSBAND DECEASED 1916			03-207-15A
MARRIED 1922	PARA 0 GRAVIDA 1 (MISC.)			03-207-15B
HUSBAND	DECEASED 1947			03-207-15C
MEDICAL HISTORY				03-207-20
PATIENT WAS INVOLVED IN AUTOMOBILE ACCIDENT ABOUT 1931, LEFT KNEE WAS INJURED, NO SURGERY. KNEE SLIPPED SEVERAL TIMES LATER. PATIENT SUSTAINED FRACTURE OF RIGHT HIP 1954 WHILE GETTING OUT OF CAR, SLIPPED ON POOR LEFT KNEE AND STRUCK RIGHT HIP AGAINST DOOR, CONTINUED TO WALK FOR SEVERAL DAYS BUT PAIN BECAME WORSE AND X-RAYS REVEALED FRACTURE, METAL CAP INSERTED SURGICALLY. ABOUT 18 MONTHS LATER WHILE WALKING DOWN STEPS, SHE SLIPPED AGAIN ON LEFT KNEE AND PAIN DEVELOPED IN RIGHT THIGH, X-RAYS REVEALED FRACTURE OF FEMUR, METAL PIN INSERTED, AND STILL PRESENT. NOW BOTH HIP AND THIGH DO NOT CAUSE DISCOMFORT. HAS HAD CONSIDERABLE PAIN IN LEFT KNEE FOR PAST YEAR. PNEUMONIA ABOUT 1910 BUT WAS NOT HOSPITALIZED. NO SERIOUS ILLNESSES EXCEPT FOR ENLARGED HEART AND HYPERTENSION SINCE 1956, CONTROLLED BY MEDICATION. INQUIRY BY SYSTEMS--DEAF RIGHT EAR SINCE 1917 AS RESULT OF ABSCESS, SWOLLEN ANKLES SINCE 1954, OCCASIONAL INCONTINENCE OF BLADDER, RECENT HAND TREMOR ON ARISING, DISAPPEARS AFTER BREAKFAST. TEETH--ALL EXTRACTED, WEARS DENTURES. (09-27-60)				03-207-20A 03-207-20B 03-207-20C 03-207-20D 03-207-20E 03-207-20F 03-207-20G 03-207-20H 03-207-20I 03-207-20J 03-207-20K 03-207-20L 03-207-20M 03-207-20N 03-207-20O 03-207-20P 03-207-20Q
GAMMA-RAY MEASUREMENTS				03-207-25
07-28-60	RAB,RAC	0.268 UCI	VA HOSP., LA, CALIF.	CEM 03-207-25A
09-27-60	RAB,RAC	0.234 UCI	HGS-1 TILTING CHAIR	CEM 03-207-25B
COMPUTED TOTAL-BODY RADIUM				03-207-27
07-28-60	0.268 UCI	0.864 UCI TOTAL	0.31	03-207-27A
09-27-60	0.234 UCI	0.755 UCI TOTAL	0.31	03-207-27B

X-RAY EXAMINATION		03-207-30
COMPLETE SKELETAL SURVEY		03-207-30A
09-27-60	ANL X-RAY NO. R-207 LOC. ANL	03-207-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 23.5		03-207-30C
PPF AREAS OF BONE RESORPTION SEEN IN SKULL, RIGHT HUMERUS, RIGHT		03-207-30D
RADIUS AND ULNA, LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA,		03-207-30E
RIGHT AND LEFT METATARSALS. RESORPTION OF AIR CELLS IN RIGHT		03-207-30F
MASTOID. OLD FRACTURE IN RIGHT FEMUR, PATHOLOGICAL ACCORDING TO		03-207-30G
HISTORY.		03-207-30H
CLINICAL LABORATORY FINDINGS		03-207-40
09-27-60	HG 12.7 HTC RBC 3.85	03-207-40A
WBC 9400	DIFF. P 67 ST L 27 M 5 E 1 B	03-207-40B
47X -X30	ESSENTIAL HYPERTENSION	03-207-67
235 -543	OPEN REDUCTION OF THE FEMUR WITH INTRAMEDULLARY METAL ROD	03-207-67A
235 -544	OPEN REDUCTION OF THE FEMUR WITH PROSTHESIS (RIGHT)	03-207-67B
23514-416	FRACTURE OF THE NECK OF THE FEMUR (RIGHT)	03-207-67C
DATA REVISED 02-28-68		03-207-99

PATIENT 03-208	BORN 05-28-69	03-208-01
DECEASED		03-208-02
		03-208-03
FEMALE		03-208-05
OTHER PERTINENT NOS.	MIT 01-004	03-208-05A
	U OF C DEPT. PATH. AUTOPSY	03-208-05B
	U OF C LAB BONE AND JOINT PATH.	03-208-05C
	CASE 118	03-208-05D
	CASE 4	03-208-05E
DECEASED 02-06-53		03-208-06
DEATH CERT.NO.	AUTOPSY YES	03-208-07
INTERMENT	GRACELAND CEMETERY, CHICAGO, ILL.	03-208-08
CAUSES OF DEATH	APLASTIC ANEMIA,	03-208-09
	CHRONIC RADIUM POISONING,	03-208-09A
	ARTERIOSCLEROTIC HEART DISEASE,	03-208-09B
	GENERALIZED ARTERIOSCLEROSIS (DEATH CERT.)	03-208-09C
	PANMYELOSIS,	03-208-09D
	ARTERIOSCLEROSIS (ACTUAL)	03-208-09E
SOURCE OF CASE	REFERRED BY DR. GEORGE COLEMAN	03-208-10
LITERATURE CITATION		03-208-11
	AUB, ET AL, MEDICINE 31,221 (SEPT. 1952).	03-208-11A
	NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 118.	03-208-11B
	HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY	03-208-11C
	11,149, GENEVA (1956).	03-208-11D
	ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959) CASE 118.	03-208-11E
	ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959). CASE 118.	03-208-11F
	ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN.,	03-208-11G
	MINNEAPOLIS (1960).	03-208-11H
	LLOYD, BRIT.J.RADIOL. 34,521 (AUG. 1961).	03-208-11I
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING	03-208-11J
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).	03-208-11K
EXPOSURE	THERAPEUTIC--METHOD UNKNOWN	03-208-12
SOURCE RECEIVED RADIUM AS MEDICATION IN 1919 FROM DR. E C ,		03-208-13
CHICAGO, ILL., NOT KNOWN IF INTRAVENOUS OR ORAL. (ORAL ACCORDING		03-208-13A
TO AUB PAPER.)		03-208-13B
FAMILY HISTORY		03-208-15
MARRIED		03-208-15A
CHILDREN 1 FEMALE L W		03-208-16
MEDICAL HISTORY		03-208-20
PATIENT DEVELOPED ORTHOPEDIC DIFFICULTIES ABOUT 1927. SEEN		03-208-20A
FREQUENTLY IN ENSUING YEARS AT MASSACHUSETTS GENERAL HOSPITAL,		03-208-20B
BY DR. JOSEPH AUB. STUDIED BY R.D. EVANS. PROGRESSIVE ORTHOPEDIC		03-208-20C
DIFFICULTIES. UNDER CARE IN CHICAGO OF DR. GEORGE COLEMAN (DE-		03-208-20D
CEASED). (DR. R C HAS HIS OLD RECORDS.) BETWEEN		03-208-20E
1950 AND 1952 DEVELOPED A SEVERE ANEMIA. SUPPORTED BY BLOOD		03-208-20F
TRANSFUSIONS UNTIL DEATH. COMPLETE AUTOPSY REPORT AVAILABLE ACRH.		03-208-20G
CLINICAL DIAGNOSIS WAS APLASTIC ANEMIA, HOWEVER, REVIEW OF		03-208-20H
AUTOPSY SECTIONS BY DR. H. RAPPAPORT AT U OF C WOULD INDICATE		03-208-20I
THAT THE PATIENT ACTUALLY HAD PANMYELOSIS.		03-208-20J

COMPUTED TOTAL-BODY RADIUM
1941

10.5 UCI TOTAL EVANS F

03-208-27
03-208-27A

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

05-33 TO 04-49 MASSACHUSETTS GENERAL HOSP.

ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.

PPF MARKED RESORPTION OF EDENTULOUS MANDIBLE 06-38. MANY

LARGE AREAS OF BONE RESORPTION THROUGHOUT THE CALVARIUM 04-40.

MARKED ASEPTIC NECROSIS OF HEAD OF RIGHT HUMERUS, FRACTURE OF

NECK OF HUMERUS, AND MULTIPLE AREAS OF BONE SCLEROSIS IN HEAD AND

NECK OF HUMERUS 04-39 WITH PROGRESSIVE RESORPTION OF INFARCTED

AREA 1941 TO 1947. HEALING OF FRACTURE NOTED IN 11-42.

MULTIPLE AREAS OF BONE RESORPTION IN SHAFT OF HUMERUS 11-42.

COARSENING OF TRABECULATION OF RIGHT CLAVICLE WITH SEVERAL AREAS

OF BONE RESORPTION 04-41. SECONDARY HYPERTROPHIC OSTEOARTHRITIS

OF SHOULDER JOINT 04-41.

03-208-30
03-208-30A
03-208-30B
03-208-30C
03-208-30D
03-208-30E
03-208-30F
03-208-30G
03-208-30H
03-208-30I
03-208-30J
03-208-30K
03-208-30L
03-208-30M

AREA OF BONE RESORPTION OF BONES OF RIGHT FIRST METACARPAL, AND
BILATERAL HYPERTROPHIC OSTEOARTHRITIS OF BOTH HANDS 04-41.

03-208-31A
03-208-31B

SLIGHT COARSENING OF TRABECULATION OF PELVIS 12-36 WITH GRADUAL
DEVELOPMENT OF HYPERTROPHIC OSTEOARTHRITIS OF THE RIGHT ACETA-
BULUM. SCLEROSIS OF RIGHT AND LEFT FEMURS IN REGION OF GREATER
TROCHANTER 12-40. BONE RESORPTION OF JUNCTION OF INFERIOR HEAD
AND NECK OF LEFT FEMUR, 04-41. MARKED ASEPTIC NECROSIS OF HEAD
OF RIGHT FEMUR AND AREAS OF BONE RESORPTION IN REGION OF GREATER
TROCHANTER IN REGION OF RIGHT FEMUR 04-42. PROGRESSIVE NECROSIS
AND RESORPTION OF HEAD OF RIGHT FEMUR 03-43. COARSENING OF
TRABECULATION AND AREAS OF BONE RESORPTION IN PROXIMAL TIBIA
AND PATELLA 04-35. FRACTURE OF RIGHT PATELLA AND INCREASE IN
AREAS OF BONE RESORPTION IN REGION OF RIGHT TIBIAL TUBERCLE
04-40. INCREASE IN NUMBER AND SIZE OF AREAS OF BONE RESORPTION
IN PROXIMAL RIGHT TIBIA AND FIBULA 01-42 WITH PROGRESSION NOTED
IN 06-47. HEALING OF FRACTURE OF RIGHT PATELLA 06-47 WITH IN-
CREASE IN SIZE OF AREAS OF BONE RESORPTION IN PATELLA. BONE
RESORPTION AREAS ALSO IN DISTAL RIGHT FEMUR AND SMALL PATCHY
AREAS OF BONE SCLEROSIS IN PROXIMAL RIGHT TIBIA 06-47.

03-208-32A
03-208-32B
03-208-32C
03-208-32D
03-208-32E
03-208-32F
03-208-32G
03-208-32H
03-208-32I
03-208-32J
03-208-32K
03-208-32L
03-208-32M
03-208-32N
03-208-32O
03-208-32P
03-208-32Q

FRACTURE OF LEFT PATELLA 03-43 WITH MULTIPLE AREAS OF BONE RE-
SORPTION IN PROXIMAL LEFT TIBIA. PATCHY SCLEROSIS OF DISTAL LEFT
FEMUR AND PROXIMAL LEFT TIBIA. MARKED RESORPTION OF MID LEFT
PATELLA AND PROXIMAL LEFT TIBIA 06-47.

03-208-33A
03-208-33B
03-208-33C
03-208-33D

NORMAL RIGHT ANKLE AND FOOT 05-33. SMALL AREA OF BONE RESORPTION
RIGHT TARSAL SCAPHOID, AND RIGHT DISTAL TIBIA 10-35. MARKED ASEPTIC
NECROSIS OF RIGHT TARSAL SCAPHOID 04-36 WITH MARKED RESORP-
TION AND ANTERIOR PROTRUSION BY 12-40. PATCHY SCLEROSIS IN ALL
TARSAL BONES 12-40. MULTIPLE LARGE AREAS OF BONE RESORPTION IN
METATARSALS AND PHALANGES OF RIGHT FOOT 06-47. ASEPTIC NECROSIS OF
INFERIOR RIGHT ASTRAGALUS 07-48 ALONG WITH DENSE BONE SCLEROSIS
OF DISTAL TIBIA.

03-208-34A
03-208-34B
03-208-34C
03-208-34D
03-208-34E
03-208-34F
03-208-34G
03-208-34H

UNREMARKABLE LEFT ANKLE AND FOOT 05-33. SLIGHT COARSENING OF TRA-
BECULATION OF METATARSALS AND PHALANGES OF LEFT FOOT 05-34 ALONG
WITH INFARCTION OF LEFT TARSAL SCAPHOID. NO CHANGE IN FILMS OF
1935 AND 1936. PROTRUSION OF ANTERIOR INFARCTED TARSAL SCAPHOID
IN 06-47 WITH MULTIPLE AREAS OF BONE RESORPTION IN METATARSALS.

03-208-35A
03-208-35B
03-208-35C
03-208-35D
03-208-35E

CLINICAL LABORATORY FINDINGS

12-04-41 HG 12.5 HTC RBC 4.1
WBC 9600 DIFF. P 71 ST L 23 M 4 E 2 B

03-208-40
03-208-40A
03-208-40B

01-28-42 HG 13 HTC RBC 4.4
WBC 10,600 DIFF. P 76 ST L 20 M 3 E 1 B

03-208-41A
03-208-41B

03-11-42 HG 10.4 HTC RBC 2.8
WBC 10,850 DIFF. P 74 ST L 20 M 5 E 1 B

03-208-42A
03-208-42B

04-15-42 HG 11.9 HTC RBC 2.8
WBC 7000 DIFF. P 71 ST L 26 M E 3 B

03-208-43A
03-208-43B

05-27-42 HG 11.4 HTC RBC 3.0
WBC 11,200 DIFF. P 77 ST L 20 M 2 E 1 B

03-208-44A
03-208-44B

OTHER PROCEDURES SERUM CALCIUM 9.6 MG PERCENT
SERUM PHOSPHORUS 5 MG PERCENT
ALKALINE PHOSPHATASE 3 B UNITS

03-208-440
03-208-44E
03-208-44F

09-30-42 HG 11.1 HTC RBC 2.9
WBC 6100 DIFF. P 62 ST L 33 E 5 B
OTHER PROCEDURES SERUM CALCIUM 10 MG PERCENT
SERUM PHOSPHORUS 4.62 MG PERCENT
ALKALINE PHOSPHATASE 6.07 B UNITS

03-208-45A
03-208-45B
03-208-45D
03-208-45E
03-208-45F

12-16-42 HG 12.2 HTC RBC 3.4
WBC 6800 DIFF. P 68 ST L 28 M 2 E 2 B

03-208-46A
03-208-46B

03-03-43 HG 10.7 HTC RBC 2.8
WBC 7200 DIFF. P 71 ST L 24 M 1 E 4 B
SERUM CALCIUM 10.6 MG PERCENT
SERUM PHOSPHATASE 5.15 MG PERCENT
ACID PHOSPHATASE 0 B UNITS

03-208-47A
03-208-47B
03-208-47D
03-208-47E
03-208-47F

05-04-43 HG 9.5 HTC RBC 2.6
WBC 7600

03-208-48A
03-208-48B

06-03-43 HG 12.2 HTC RBC 3.8
WBC 6500

03-208-49A
03-208-49B

SPECIMENS AVAILABLE

FROM AUTOPSY
PORTIONS OF STERNUM (3 PCS.)
LUMBAR AND THORACIC VERTEBRAL BODIES
DISTAL 8 CM OF LEFT HUMERUS
SHAFT OF FEMUR (3 PCS)
PORTION OF ILIUM
HEAD AND NECK OF HUMERUS
PORTION OF TIBIA
FIBULA
HEAD OF RADIUS
FRAGMENT OF RIB
CORONAL SECTION OF SKULL
SMALL FRAGMENT OF HUMERUS (INDEFINITE)
LEFT SCAPULA, COMPLETE
SPLEEN
LIVER

LOC. ACRH
136 GMS
147 GMS
70 GMS
195 GMS
62 GMS
50 GMS
33 GMS
21 GMS
10 GMS
2.5 GMS
16 GMS
2 GMS
240 GMS
86 GMS
1000 GMS

RJH

03-208-50
03-208-50A
03-208-50B
03-208-50C
03-208-50D
03-208-50E
03-208-50F
03-208-50G
03-208-50H
03-208-50I
03-208-50J
03-208-50K
03-208-50L
03-208-50M
03-208-50N
03-208-50O
03-208-50P

RADIOCHEMICAL ANALYSIS				03-208-51
05-56	VERTEBRAE		HFL	03-208-51A
	1.36 G ASH	5430 UUG/G ASH RA-226	0.04 UUCI/G ASH TH-228	03-208-51B
01-23-58	BONE		EVANS	03-208-51C
	0.99 G ASH	1545 UUG/G ASH RA-226		03-208-51D
1957	BONE	TURNER, ROYAL CANCER HOSP., LONDON		03-208-51E
		802 UUG/G WET BONE RA-226		03-208-51F
AUTORADIOGRAPHIC ANALYSIS				03-208-53
10-61	TIBIA		RER	03-208-53A
	MAXIMUM HOT SPOT	41.	PCI RA226/MG	03-208-53B
	AVERAGE DIFFUSE LEVEL	0.5	PCI RA226/MG	03-208-53C
	CALCULATED UNIFORM LABEL	2.02	PCI RA226/MG	03-208-53D
	HOT SPOT TO DIFFUSE RATIO	82.		03-208-53E
	DIFFUSE TO UNIFORM LABEL	0.25		03-208-53F
	(A VERY LARGE NUMBER OF HOT SPOTS ARE PRESENT SUCH AS WOULD BE THE CASE IF THIS PATIENT HAD ACQUIRED RADIUM OVER A VERY LONG TIME INTERVAL, OR IF HER BONE TURNOVER RATE WERE VERY HIGH.)			03-208-53G
				03-208-53H
				03-208-53I
BLOOD DYSCRASIAS PANMYELOSIS, 1951				03-208-65
501	-9X6	HYPERPLASIA, ERYTHROID, (PANMYELOSIS)		03-208-66
502	-9X6	HYPERPLASIA, MYELOID, DUE TO UNKNOWN CAUSE (PANMYELOSIS)		03-208-66A
460	-942	GENERALIZED ARTERIOSCLEROSIS		03-208-67
ADDITIONAL INFORMATION--CLINICAL LABORATORY FINDINGS				03-208-91
04-16-47	HG	HTC 38	RBC 3.1	03-208-91A
WBC 7600				03-208-91B
11-06-47	HG 11.7	HTC	RBC	03-208-92A
WBC 5250				03-208-92B
01-15-48	HG 12.6	HTC	RBC 3.3	03-208-93A
WBC 4400				03-208-93B
04-21-48	HG 9.3	HTC	RBC 2.7	03-208-94A
WBC 4600				03-208-94B
05-17-48	HG 9.4	HTC	RBC 2.9	03-208-95A
WBC 5900				03-208-95B
06-14-50	HG 12.2	HTC	RBC 3.6	03-208-96A
WBC 6400				03-208-96B
11-21-51	HG 9.3	HTC	RBC 2.8	03-208-97A
WBC 3000	DIFF. P 55	ST	L 38 M E 7 B	03-208-97B
01-24-52	HG 6.6	HTC	RBC 2.0	03-208-98A
WBC 1850				03-208-98B
03-11-52	HG 6.1	HTC	RBC 2.1	03-208-98A
WBC 1600				03-208-98B

05-14-52	HG 6.9	HTC	RBC 2.3	03-208-98A
WBC 2350	DIFF. P 28	ST 4	L 78 M E B	03-208-98B
	2 ATYPICAL LYMPHOCYTES, 1 PATHOLOGICAL LYMPHOCYTE,			03-208-98C
	1 NORMOBLAST, FEW PLATELETS			03-208-98D

06-19-52	HG 5.4	HTC	RBC 1.6	03-208-98A
WBC 1500				03-208-98B

06-30-52	HG 5.7	HTC	RBC 1.9	03-208-98A
WBC 2050	DIFF. P 36	ST 4	L 60 M E B	03-208-98B
	4 ATYPICAL LYMPHOCYTES, 1 NORMOBLAST, VERY FEW PLATELETS			03-208-98C

DATA REVISED 10-15-68

03-208-99

PATIENT	03-209	BORN	95	03-209-01
	DECEASED			03-209-02
				03-209-02A
	MALE			03-209-05
OTHER PERTINENT NOS.	AMBH			03-209-05A
	CASE 113			03-209-05B
DECEASED	03-60			03-209-06
CAUSES OF DEATH	FIBROSARCOMA OF RIGHT SCAPULA WITH WIDESPREAD METASTATIC DISEASE			03-209-09
				03-209-09A
SOURCE OF CASE	DR. F J RECORDS			03-209-10
LITERATURE CITATION				03-209-11
	LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 113			03-209-11A
	HASTERLIK AND FINKEL, MED.CLIN.N.AMER. 49,285 (JAN. 1965).			03-209-11B
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-209-11C
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-209-11D
EXPOSURE	THERAPEUTIC--INJECTION	05		03-209-12
SOURCE	DURING PERIOD 1925-1936 PATIENT RECEIVED AN UNKNOWN NUMBER			03-209-13
	OF RADIUM INJECTIONS FROM DR. F J FOR TREATMENT OF			03-209-13A
	PSORIASIS.			03-209-13B
FAMILY HISTORY	NOT KNOWN			03-209-15
MEDICAL HISTORY				03-209-20
	IN JANUARY 1950 PATIENT DEVELOPED PAIN IN RIGHT ELBOW, ESPECIALLY			03-209-20A
	AFTER PLAYING GOLF. ROENTGENOGRAPHY REVEALED ASEPTIC NECROSIS OF			03-209-20B
	HEAD OF RIGHT RADIUS. HE WAS RELATIVELY WELL UNTIL 09-15-58 WHEN			03-209-20C
	HE WAS SEEN BY DR. ROBERT RAY (PRESBYTERIAN-ST. LUKE'S HOSP.			03-209-20D
	CHICAGO, ILL.) BECAUSE OF PAIN IN RIGHT SHOULDER OF 2 MONTHS			03-209-20E
	DURATION. ROENTGENOGRAPHY REVEALED A MASS INVOLVING THE			03-209-20F
	RIGHT SCAPULA, AND BIOPSY OF THIS DCNE 09-17-58 REVEALED THIS			03-209-20G
	TO BE A FIBROSARCOMA. RADIATION THERAPY WITH CO60 GAMMA RAYS TO			03-209-20H
	THE LESION. PATIENT DIED ABOUT MARCH, 1960 IN ARIZONA OR FLORIDA			03-209-20I
	OF WIDESPREAD METASTATIC DISEASE. (INFORMATION FROM DR. R. RAY.)			03-209-20J
COMPUTED TOTAL-BODY RADIUM				03-209-27
	1951 0.40 UCI 0.60 UCI 1.00 UCI TOTAL LOONEY A			03-209-27
X-RAY EXAMINATION				03-209-30
	PARTIAL SKELETAL SURVEY			03-209-30A
	04-25-51 U OF CHICAGO CLINICS UNIT NO.			03-209-30B
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 8			03-209-30C
	PPF ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION ON BASIS OF			03-209-30D
	ASEPTIC NECROSIS OF THE HEAD OF THE RIGHT RADIUS. MULTIPLE AREAS			03-209-30E
	OF BONE RESORPTION IN THE RIGHT AND LEFT RADIUS. COARSENING OF			03-209-30F
	THE TRABECULAR PATTERN OF THE RIGHT TIBIA, LEFT FEMUR AND LEFT			03-209-30G
	TIBIA. MULTIPLE AREAS OF BONE SCLEROSIS IN THE NECK OF THE LEFT			03-209-30H
	FEMUR.			03-209-30I

09-15-58 LOC. PRES.ST.LUKE'S HOSP., CHICAGO (MICROFILMS AT ACRH) 03-209-31B
MALIGNANCY--FIBROSARCOMA, RIGHT SCAPULA 03-209-31C

CLINICAL LABORATORY FINDINGS

04-25-51	HG 15.2	HTC	RBC 4.8	03-209-40
WBC 7700	DIFF. P 51	ST 3	L 44 M 1 E 1 B	03-209-40A
REMARKS	1 METAMYELOCYTE, 2 IMMATURE LYMPHOCYTES, 3 LYMPHOCYTES			03-209-40B
	WITH 1 AZUROPHILIC GRANULES, OCCASIONAL LARGE PLATELET			03-209-40C
OTHER PROCEDURES	SERUM CALCIUM	9.7 MG PERCENT		03-209-40D
	SERUM PHOSPHORUS	2.7 MG PERCENT		03-209-40E
	ALKALINE PHOSPHATASE	3.6 UNITS		03-209-40F
				03-209-40G

SPECIMENS AVAILABLE

MICROSCOPIC SECTION OF TUMOR, PRES.ST.LUKE'S HOSP., CHICAGO 03-209-50
KODACHROMES OF MICROSECTIONS AT ACRH 03-209-50A
03-209-50B

226 -870 FIBROSARCOMA OF THE SCAPULA (RIGHT) 03-209-66
23113-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE RADIUS (RIGHT) 03-209-66A

MALIGNANT TUMOR FIBROSARCOMA, RIGHT SCAPULA 1958 03-209-60

DATA REVISED 05-01-68 03-209-99

PATIENT 03-210	BORN 08-03-06	03-210-01
DECEASED		03-210-02
		03-210-02A
MALE		03-210-05
OTHER PERTINENT NOS.	AMBH	03-210-05A
	AMBH AUTOPSY	03-210-05B
DECEASED 02-26-58		03-210-06
DEATH CERT.NO.	AUTOPSY YES	03-210-07
INTERMENT	BRONSWOOD CEMETERY, YORK TWP., HINSDALE, ILLINOIS	03-210-08
CAUSES OF DEATH	OSTEOGENIC SARCOMA OF (LEFT) CALCANEUS WITH METASTASES, RADIUM NECROSIS OF BONE	03-210-09
		03-210-09A
SOURCE OF CASE	REFERRED BY DR. RUDOLPH JANDA	03-210-10
	SYMPTOMS	03-210-10A
LITERATURE CITATION		03-210-11
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959).		03-210-11A
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959).		03-210-11B
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN., MINNEAPOLIS (1960).		03-210-11C
		03-210-11D
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-210-11E
		03-210-11F
EXPOSURE	THERAPEUTIC--INJECTION 05	03-210-12
SOURCE	ABOUT 1926 AT ABOUT 19 YEARS OF AGE PATIENT RECEIVED A SERIES OF INJECTIONS IM AND IV FROM DR. F. J. OF CHICAGO FOR VAGUE ARTHRITIC PAINS AND NERVOUSNESS. PATIENT WAS COMPLETELY UNAWARE THAT HE HAD RECEIVED RADIUM AS A MEDICATION.	03-210-13
		03-210-13A
		03-210-13B
		03-210-13C
FAMILY HISTORY	NOT KNOWN	03-210-15
MEDICAL HISTORY		03-210-20
PATIENT ENJOYED GOOD HEALTH UNTIL ABOUT 02-56 WHEN HE NOTED PAIN IN LEFT HEEL. X-RAYS REVEALED BONY LESION OF LEFT CALCANEUS AND BIOPSY DEMONSTRATED OSTEOGENIC OSTEOSARCOMA (03-21-56). AMPUTATION BELOW KNEE WAS DONE 05-22-56. MASS WAS NOTED IN ABDOMEN 04-57. DR. R. JANDA ON VIEWING PATIENT'S FILMS NOTED BONY LESIONS TYPICAL OF RADIUM NECROSIS. PATIENT REFERRED TO ANL AND ACRH FOR FURTHER STUDY. IN 05-57 EXPLORATORY LAPARATOMY REVEALED INOPERABLE RETROPERITONEAL SARCOMA (METASTATIC OSTEOGENIC) LAPARATOMY WAS FOLLOWED BY 24 RADIATION TREATMENTS. ENTERED ACRH IN 12-57 AND WAS FOUND TO HAVE WIDESPREAD METASTATIC DISEASE. PATIENT DIED 02-26-58.	03-210-20A	
		03-210-20B
		03-210-20C
		03-210-20D
		03-210-20E
		03-210-20F
		03-210-20G
		03-210-20H
		03-210-20I
		03-210-20J
		03-210-20K
GAMMA-RAY MEASUREMENTS		03-210-25
05-21-57 RAB,RAC 0.357 UCI (NO LEFT LEG) HGS 1 TILT.CHAIR CEM		03-210-25A
02-19-58 RAB,RAC 0.064 UCI (AMP. TIBIA) HGS 1 CEM		03-210-25B
COMPUTED TOTAL-BODY RADIUM		03-210-27
05-21-57 0.357 UCI (NO LEFT LEG) 1.150 UCI		03-210-27A
02-19-58 0.064 UCI (AMP. TIBIA) 0.200 UCI		03-210-27B
1.350 UCI TOTAL 0.31		03-210-27C

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

05-21-57 ANL X-RAY NO. R-20 LOC. ANL
 MILD CHANGES ON BASIS OF RADIOGRAPHS AFTER AMPUTATION.
 ADVANCED CHANGES ON BASIS OF HISTORY OF OSTEOSARCOMA. SCORE 14
 PPF AMPUTATION AT LEVEL OF MIDDLE OF LEFT LOWER LEG BECAUSE OF
 OSTEOSARCOMA OF CALCANEUS. PROBABLE METASTASES TO BASE OF LEFT
 LUNG. AREAS OF BONE RESORPTION IN CALVARIUM, RIGHT HUMERUS, RIGHT
 AND LEFT RADIUS, RIGHT AND LEFT FIBULA, LEFT FEMUR, AND RIGHT
 TIBIA. AREAS OF BONE SCLEROSIS IN RIGHT AND LEFT HUMERUS, RIGHT
 FEMUR. THICKENING OF SHAFT OF CORTEX OF LEFT FEMUR. COARSENING OF
 TRABECULATION OF RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT
 FEMUR, RIGHT AND LEFT TIBIA AND FIBULA.

03-210-30
 03-210-30A
 03-210-30B
 03-210-30C
 03-210-30D
 03-210-30E
 03-210-30F
 03-210-30G
 03-210-30H
 03-210-30I
 03-210-30J
 03-210-30K
 03-210-30L

CLINICAL LABORATORY FINDINGS

01-03-57 HG 11.5
 WBC 8100 DIFF. P 80 ST L 11 M 3 E 6 B 0
 12-13-57 HG 12.1 HTC RBC 3.66
 WBC 6900

03-210-40
 03-210-40A
 03-210-40B

01-03-58 HT 10.3 HTC 32 RBC 3.7
 WBC 79.5 DIFF. P 81 ST L 8 M 3 E 8 B 0
 RETICS 2.1

03-210-42A
 03-210-42B
 03-210-42C

02-04-58 HG 10.3 HTC RBC 3.12
 WBC 8300 DIFF. P 88 ST L 8 M 3 E 1 B 0
 SERUM CALCIUM 8.2 MG PERCENT, SERUM PHOSPHORUS 3.2 MG PERCENT

03-210-43A
 03-210-43B
 03-210-43C

SPECIMENS AVAILABLE

	LOC. ACRH	RER
FROM AUTOPSY		
LUMBAR VERTEBRAL BODY, COMPLETE	55 GMS	
LUMBAR VERTEBRAL BODY, COMPLETE	60 GMS	
TIBIA, PROXIMAL 15 CM		
A. ANTERIOR 2.5 CM	110 GMS	
B. POSTERIOR 2 CM	125 GMS	
PORTIONS OF PATELLE		
A.	23 GMS	
B.	12 GMS	
CALVARIUM (TRIANGULAR) 6 CM ON EDGE	16 GMS	
FIBULA	50 GMS	
PETROUS PORTION OF TEMPORAL BONE	9 GMS	
RIB	11 GMS	
RIB WITH TUMOR METASTASES	22 GMS	
HALF SECTIONS OF THORACIC VERTEBRAL BODIES	108 GMS	
ABDOMINAL TUMOR MASS (WITH BONY METASTASES)	240 GMS	
LIVER (MISC. PCS.)	950 GMS	
SPLEEN	147 GMS	
LUNG (WITH BONY METASTASES)	55 GMS	
MICROSCOPIC SLICES FROM AUTOPSY		

03-210-50
 03-210-50A
 03-210-50B
 03-210-50C
 03-210-50D
 03-210-50E
 03-210-50F
 03-210-50G
 03-210-50H
 03-210-50I
 03-210-50J
 03-210-50K
 03-210-50L
 03-210-50M
 03-210-50N
 03-210-50O
 03-210-50P
 03-210-50Q
 03-210-50R
 03-210-50S

RADIOCHEMICAL ANALYSES

DATE	TISSUE	G. ASH	RA226	UUG/G ASH	TH228	UUC/G ASH	HFL
08-58	TIBIA, EPIPHY.	2.234		1004		1.34	
10-58	TIBIA	2.96		330		0.53	
11-58	TIBIA	3.47		123		0.23	
11-58	TIBIA	3.84		103		0.21	
01-59	TIBIA	2.08		129		0.20	
12-59	TIBIA	0.63		107			
12-59	TIBIA	0.58		108			

03-210-51
 03-210-51A
 03-210-51B
 03-210-51C
 03-210-51D
 03-210-51E
 03-210-51F
 03-210-51G
 03-210-51H

AUTORADIOGRAPHIC ANALYSES

10-61

TIBIA

RER

MAXIMUM HOT SPOT

6.

PCI RA-226/MG BONE

AVERAGE DIFFUSE LEVEL

C.043

PCI RA-226/MG BONE

CALCULATED UNIFORM LABEL

C.170

PCI RA-226/MG BONE

HOT SPOT TO DIFFUSE RATIO

140.

DIFFUSE TO UNIFORM LABEL

C.25

03-210-53
03-210-53A
03-210-53B
03-210-53C
03-210-53D
03-210-53E
03-210-53F

MALIGNANT TUMOR OSTEOGENIC SARCOMA, LEFT CALCANEUS 1956

03-210-60

2X2 -20 AMPUTATION OF LEG THROUGH TIBIA AND FIBULA

03-210-66

2391 -876F OSTEOGENIC SARCOMA OF THE CALCANEUS (LEFT)

03-210-66A

AUTOPSY REPORT AT ANL

03-210-70

AUTOPSY SLIDES AT ANL

03-210-72

ADDITIONAL INFORMATION

PATIENT LABELED WITH CA-45 SHORTLY BEFORE DEATH. BONE AND BLOOD STUDIES BY RER.

03-210-91
03-210-91A
03-210-91B

DATA REVISED 04-02-68

03-210-99

PATIENT 03-211	BORN 07-31-90	03-211-01
MALE		03-211-02
		03-211-05
EXPOSURE	THERAPEUTIC--INJECTION 05	03-211-12
SOURCE	PATIENT RECEIVED APPROXIMATELY 20 INTRAVENOUS RADIUM INJECTIONS AT WEEKLY INTERVALS FROM DR. F , , IN 1923. HE ALSO GAVE A NUMBER OF SUBCUTANEOUS INJECTIONS TO HIMSELF WITH MATERIAL SUPPLIED BY DR. F . HE ALSO DRANK RADIUM WATER, WHICH HE MADE WITH CARNOTITE ORE IN STONEWARE CROCK. WORE ORE IN SHEEPSKIN BELT AROUND WAIST.	03-211-13 03-211-13A 03-211-13B 03-211-13C 03-211-13D 03-211-13E
FAMILY HISTORY		03-211-15
MARRIED 1922		03-211-15A
CHILDREN	NONE	03-211-16
MEDICAL HISTORY		03-211-20
SURGERY--RUPTURED APPENDIX 1907, AND SEVEN SUBSEQUENT ABDOMINAL OPERATIONS, LAST ONE IN 1950. T AND A, AGE 19. THREE OPERATIONS FOR HEMORRHOIDS, LAST ONE 1922. THREE OPERATIONS FOR HERNIORRHAPHY. FRACTURES--PATIENT FELL 1949 AND FRACTURED 3RD CERVICAL VERTEBRA. WAS TEMPORARILY TOTALLY BLIND. NO OTHER ILLNESSES. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. PATIENT HAS HAD DOUBLE DENTURES SINCE 1922. (10-03-60)	03-211-20A 03-211-20B 03-211-20C 03-211-20D 03-211-20E 03-211-20F 03-211-20G	
GAMMA-RAY MEASUREMENTS		03-211-25
10-02-60 RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM		03-211-25A
COMPUTED TOTAL-BODY RADIUM		03-211-27
10-02-60 0.003 UCI 0.010 UCI TOTAL 0.31		03-211-27A
X-RAY EXAMINATION		03-211-30
COMPLETE SKELETAL SURVEY		03-211-30A
10-02-60 ANL X-RAY NO. R-209 LOC. ANL		03-211-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2.5		03-211-30C
PPF MARKED HYPERTROPHIC OSTEOARTHRITIS OF CERVICAL THORACIC AND LUMBAR SPINE. MULTIPLE TINY AREAS OF BONE RESORPTION SEEN IN LEFT		03-211-30D
PATELLA. QUESTIONABLE THICKENING OF LEFT CORTEX OF FEMUR, TIBIA		03-211-30E
AND FIBULA.		03-211-30F 03-211-30G
CLINICAL LABORATORY FINDINGS		03-211-40
10-03-60 HG 14.0 HTC RBC 4.47		03-211-40A
WBC 5200 DIFF. P 50 ST L 36 M 7 E 7 B		03-211-40B
66 -11 HEMORRHUIDECTOMY		03-211-67
221 -416 FRACTURE OF THE CERVICAL VERTEBRAE		03-211-67A
240 -912 OSTEOARTHRITIS		03-211-67B
661 -12 APPENDECTOMY		03-211-67C
661 -100.3 APPENDICITIS WITH PERFORATION		03-211-67D
0601 -50 INGUINAL HERNIORRHAPHY		03-211-67E
DATA REVISED 03-05-68		03-211-99

PATIENT C3-212	BCRN C6-C7-02	03-212-01
DECEASED		03-212-02
		03-212-02A
		03-212-03
FEMALE		03-212-05
OTHER PERTINENT NOS.	AMBH	03-212-05A
	AMBH AUTOPSY	03-212-05B
	CASE 112	03-212-05C
DECEASED C8-14-51		03-212-06
DEATH CERT.NO.	AUTOPSY YES	03-212-07
INTERMENT	BRONSWOOD CEMETERY, HINSDALE, ILLINOIS	03-212-08
CAUSES OF DEATH	SARCOMA, LEFT FOOT, WIDESPREAD METASTASIS	03-212-09
	RADIUM DEPOSITION IN SKELETON FROM RA WATER INTAKE	03-212-09A
	DIFFUSE BONE NECROSIS (DEATH CERT.)	03-212-09B
	FIBROSARCOMA, LEFT TARSAL SCAPHOID (ACTUAL)	03-212-09C
SOURCE OF CASE	REFERRED BY DR. THOMAS COGGAN	03-212-10
	SYMPTOMS	03-212-10A
LITERATURE CITATION		03-212-11
MORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 112.		03-212-11A
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 112.		03-212-11B
HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY		03-212-11C
11,149, GENEVA (1956).		03-212-11D
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959). CASE 112.		03-212-11E
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959). CASE 112.		03-212-11F
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, UOOF MINN.,		03-212-11G
MINNEAPOLIS (1960). CASE 112.		03-212-11H
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-212-11I
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-212-11J
EXPOSURE	THERAPEUTIC--ORAL 04	03-212-12
SOURCE	PATIENT GIVEN RADIUM ORALLY BY DR. E. C. , DESAGE	03-212-13
	UNKNOWN. PROBABLY TAKEN AT ABOUT AGE 25. TOOK 15-30 DROPS ONCE OR	03-212-13A
	TWICE DAILY FOR SEVERAL WEEKS AS MEDICATION FOR MIGRATORY	03-212-13B
	ARTHRITIS.	03-212-13C
FAMILY HISTORY	NOT KNOWN	03-212-15
MEDICAL HISTORY		03-212-20
	IN JULY 1947, ABOUT 19 YEARS AFTER ADMINISTRATION OF RADIUM,	03-212-20A
	THE PATIENT WAS SUDDENLY AFFECTED WITH A CRUSHING TYPE OF PAIN	03-212-20B
	IN LEFT FOOT. ROENTGENOGRAPHY AT BILLINGS HCSP., U OF CHICAGO,	03-212-20C
	REVEALED LARGE, IRREGULAR CAVITY IN THE BODY OF THE LEFT FOOT,	03-212-20D
	WHERE DESTRUCTION OF THE SCAPHOID WAS COMPLETE AND PARTIAL DES-	03-212-20E
	TRUCTION INVOLVED OTHER TARSALS. A BIOPSY OF THE SCAPHOID WAS	03-212-20F
	DONE BY DR. FREMONT CHANDLER, PRES.-ST. LUKE'S HOSP., AND A	03-212-20G
	DIAGNOSIS OF FIBROSARCOMA MADE. ON 02-20-51, THE LEFT LEG WAS	03-212-20H
	AMPUTATED 15 CM BELOW THE KNEE JOINT AT BILLINGS HCSP. BY DR.	03-212-20I
	DALLAS PHEMISTER. PATIENT DIED AT HOME OF GENERALIZED SARCOMA-	03-212-20J
	TOSIS ON 08-14-51, 23 YEARS AFTER ADMINISTRATION OF RADIUM AND	03-212-20K
	4 YEARS AFTER ONSET OF SYMPTOMS.	03-212-20L

COMPUTED TOTAL-BODY RADIUM						03-212-27
01-51	0.70 UCI	0.60 UCI	1.30 UCI TOTAL	LOONEY A		03-212-27A

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY						03-212-30
05-07-51	ANL	X-RAY NO. C-3	LOC. ANL			03-212-30A
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. PARTIAL SCORE 17						03-212-30B
PPF MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, ISCHIAL						03-212-30C
TUBEROSITIES, RIGHT AND LEFT HUMERUS, RIGHT METATARSALS, RIGHT						03-212-30D
AND LEFT FEMORA, AND LEFT PROXIMAL TIBIA AND FIBULA. MARKED COAR-						03-212-30E
SENSING OF THE TRABECULAR PATTERN OF THE PELVIS, HEAD AND NECK OF						03-212-30F
THE RIGHT AND LEFT FEMORA AND LEFT TIBIA AND FIBULA. PATCHY SCLER-						03-212-30G
OSIS IN THE ILIA, RIGHT AND LEFT SCAPULA, RIGHT AND LEFT HUMERUS,						03-212-30H
RIGHT AND LEFT FEMORA.						03-212-30I
						03-212-30J

CLINICAL LABORATORY FINDINGS

02-03-48	HG 12	HTC	RBC 3.88			03-212-40
WBC 5300	DIFF. P 47	ST	L 51	M 1	E 0 B 1	03-212-40A
SERUM CALCIUM 10.3 MG PERCENT, SERUM PHOSPHATE 5.4 MG PERCENT,						03-212-40B
ALKALINE PHOSPHATASE 5.2 MG PERCENT						03-212-40C
						03-212-40D
02-16-48	SERUM CALCIUM 10.4 MG PERCENT, SERUM PHOSPHATE					03-212-41C
5.7 MG PERCENT, ALKALINE PHOSPHATES 5.3 MG PERCENT						03-212-41D
03-06-48	SERUM CALCIUM 10.3 MG PERCENT, SERUM PHOSPHATE					03-212-42C
3.4 MG PERCENT						03-212-42D
02-18-51	HG 14	HT	RBC 4.85			03-212-43A
WBC	DIFF. P 66	ST	L 32	M 2	E 0 B 0	03-212-43B

RADIOCHEMICAL ANALYSES

	FEMUR			HFL	03-212-51
09-56	2.99 G ASH	177 UUG/G ASH	RA-226	0.16 UUCI/G ASH	TH-228
09-56	1.88 G ASH	162 UUG/G ASH	RA-226	0.12 UUCI/G ASH	TH-228
09-57	3.13 G ASH	547 UUG/G ASH	RA-226	0.53 UUCI/G ASH	TH-228

AUTORADIOGRAPHIC ANALYSES

10-61	TIBIA		RER	03-212-53
MAXIMUM HOT SPOT		1.4	PCI RA-226/MG BONE	03-212-53A
AVERAGE DIFFUSE		0.075	RA-226/MG BONE	03-212-53B
CALCULATED UNIFORM LABEL		0.20	RA-226/MG BONE	03-212-53C
HOT SPOT TO DIFFUSE LABEL		19.		03-212-53D
DIFFUSE TO UNIFORM LABEL		0.38		03-212-53E

OTHER ANALYSES

02-01-48	BONE MARROW--MYELOBLASTS 1, PROMYELOCYTES 3,	03-212-55
	NEUTROPHILIC MYELOCYTES 16, EOSINOPHILIC MYELOCYTES 2,	03-212-55A
	METAMYELOCYTES 16, P 23 L 10 M 1 E 1	03-212-55B
	PLASMA CELL 1, MEGAKARYOCYTES DECREASED, PROERYTHROBLASTS 1,	03-212-55C
	ERYTHROBLASTS 25	03-212-55D
		03-212-55E
02-17-48	SECTION OF STERNAL MARROW NEEDLE BIOPSY--THE MARROW	03-212-56A
	IS DISTINCTLY OVERACTIVE. THERE IS MODERATE ERYTHROBLASTIC ACTIVI-	03-212-56B
	TY WITHOUT ANY LEFT SHIFT BUT HAS TOO MANY MITOSES. THE REMAINING	03-212-56C
	CELLS ARE NORMAL. THIS IS CLEARLY NOT THE PICTURE OF A RADIUM	03-212-56D
	APLASIA. DIAGNOSIS-ERYTHROBLASTIC HYPERPLASIA.	03-212-56E

01-22-51 SURGICAL BIOPSY OF MARROW OF FIBULA--THERE IS NO HEMA-	03-212-57A
TOPCIETIC MARROW AT ALL. THE SPECIMEN CONSISTS ALMOST CCMPLETELY	03-212-57B
OF FAT MARROW WITH SOME SPICULES OF NECROTIC BONE. THERE ARE NO	03-212-57C
OSTEOBLASTS, OSTEOCLASTS OR OSTEOCYTES IN AND AROUND THE BONE.	03-212-57D
THERE IS NO EVIDENCE OF ANY CELLULAR REACTION AROUND THE BONE.	03-212-57E
THE ATROPHY IS PRIMARILY SIMPLE FAT ATROPHY WITH ONLY A SMALL	03-212-57F
AMOUNT OF MYXOMATOUS FAT ATROPHY. DIAGNOSIS--ATROPHY OF MARROW	03-212-57G
WITH BONE NECROSIS--RADIATION NECROSIS.	03-212-57H

MALIGNANT TUMOR	FIBROSARCOMA, LEFT TARSAL SCAPHOID 1951	03-212-60
2X2 -20	AMPUTATION OF LEG THROUGH TIBIA AND FIBULA (LEFT)	03-212-66
2394 -870F	FIBROSARCOMA OF THE TARSAL SCAPHOID	03-212-66A
2394 -4722.1	ASEPTIC NECROSIS OF THE TARSAL SCAPHOID	03-212-66B
AUTOPSY REPORT AT ANL		03-212-70
PRIMARY TUMOR SLIDE AT ANL		03-212-71
DATA REVISED 04-02-68		03-212-99

PATIENT	03-213	BORN	07-24-92	03-213-01
	DECEASED			03-213-02
	FEMALE			03-213-05
OTHER PERTINENT NOS.	AMBH			03-213-05A
	AMBH AUTOPSY			03-213-05B
	CASE 103			03-213-05C
DECEASED	06-25-55			03-213-06
DEATH CERT.NO.		AUTOPSY	YES	03-213-07
INTERMENT	ACACIA PARK CEMETERY, NORWOOD, ILLINOIS			03-213-08
CAUSES OF DEATH	FIBROSARCOMA OF SACRUM			03-213-09
	RADIUM GIVEN APPROX. 25 YEARS AGO			03-213-09A
SOURCE OF CASE	REFERRED BY DR. THOMAS COOGAN, CHICAGO			03-213-10
LITERATURE CITATION				03-213-11
	NCRRTS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 103.			03-213-11A
	LGONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 103.			03-213-11B
	HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY			03-213-11C
	11,149, GENEVA (1956).			03-213-11D
	ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959).			03-213-11E
	ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959).			03-213-11F
	ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN.,			03-213-11G
	MINNEAPOLIS (1960).			03-213-11H
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-213-11I
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-213-11J
EXPOSURE	UNKNOWN	07		03-213-12
SOURCE	NOT KNOWN FOR CERTAIN BUT MOST LIKELY IS THAT RADIUM WAS			03-213-13
	ADMINISTERED TO PATIENT BY DR. E C WHO WAS THE PATIENT'S			03-213-13A
	PHYSICIAN IN CHICAGO IN 1925-26. PATIENT'S FORMER HUSBAND, A			03-213-13B
	WELL-KNOWN PHYSICIAN, WAS UNAWARE OF ADMINISTRATION OF RADIUM.			03-213-13C
	DR. C WAS THE LEADING USER OF RADIUM IN THE CHICAGO AREA.			03-213-13D
FAMILY HISTORY				03-213-15
CHILDREN	MALE	L W		03-213-16
MEDICAL HISTORY				03-213-20
	ABOUT JULY 1951 PATIENT DEVELOPED SEVERE PAIN IN HER LEFT HIP,			03-213-20A
	WHICH RAPIDLY INCREASED IN SEVERITY AND LIMITED HER ABILITY TO			03-213-20B
	WALK. DURING HER PREVIOUS 28 YEARS PATIENT HAD HAD INTERMITTENT			03-213-20C
	EPISODES OF MALAISE, JOINT PAIN, AND FEVER, WHICH WERE BELIEVED			03-213-20D
	TO BE CAUSED BY CHRONIC BRUCELLOSIS. SHE HAD CONSULTED A PHYSI-			03-213-20E
	CIAN IN TUCSON, ARIZONA IN 1947 BECAUSE OF PAIN IN THE JOINTS AND			03-213-20F
	FEVER. AT THIS TIME MULTIPLE AREAS OF BONE RESORPTION WERE SEEN			03-213-20G
	IN THE RADIOGRAPHS OF THE LONG BONES AND SKULL AND IT WAS THE			03-213-20H
	IMPRESSION THAT THE PATIENT HAD MULTIPLE MYELOMA, ALTHOUGH NO			03-213-20I
	FURTHER STUDIES WERE CARRIED OUT. IN JUNE 1952 THE PATIENT CON-			03-213-20J
	SULTED DR. THOMAS COOGAN OF WHO RECOGNIZED THAT THE			03-213-20K
	SYMPTOMS AND FINDINGS WERE TYPICAL OF RADIUM POISONING AND RE-			03-213-20L
	FERRED THE PATIENT TO US FOR FURTHER STUDY AND CARE. ARTHROPLASTY			03-213-20M

FOR RELIEF OF PAIN IN THE LEFT HIP RELATED TO ASEPTIC NECROSIS OF HEAD OF THE FEMUR WAS CARRIED OUT BY DR. HOWARD HATCHER AT THE U OF CHICAGO CLINICS IN 1953. DURING 1954 SEVERE LOW BACK PAIN DEVELOPED WITH CORD SYMPTOMS. A MYELOGRAM WAS DONE WHICH INDICATED A TOTAL BLOCK IN THE SPINAL CANAL AT THE LUMBOSACRAL INTER-SPACE. DR. CHARLES W. ELKINS OF	03-213-20N 03-213-20O 03-213-20P 03-213-20Q 03-213-20R 03-213-20S
, PERFORMED A LAMINECTOMY AND FOUND A SARCOMATOUS MASS IN THE EPIDURAL SPACE AT THE LEVEL OF THE BLOCK. IT WAS NOT POSSIBLE TO RESECT THE TUMOR. THE TUMOR PROGRESSED LOCALLY, METASTASIZED, AND THE PATIENT DIED ON 06-25-55 AT BILLINGS HOSP., U OF CHICAGO CLINICS. A COMPLETE AUTOPSY WAS OBTAINED WITH THE RETENTION OF LARGE AMOUNTS OF BONE.	03-213-20T 03-213-20U 03-213-20V 03-213-20W 03-213-20X 03-213-20Y
COMPUTED TOTAL-BODY RADIUM	03-213-27
06-52 2.27 UCI 4.30 UCI 6.57 UCI TOTAL LOONEY B	03-213-27A
X-RAY EXAMINATION	03-213-30
PARTIAL SKELETAL SURVEY	03-213-30A
07-01-52 ANL X-RAY NO. R-10 LOC. ANL	03-213-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 20	03-213-30C
PPF ASEPTIC NECROSIS, HEAD OF LEFT FEMUR. MULTIPLE AREAS OF BONE RESORPTION IN CALVARIUM, RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND RIGHT ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, AND RIGHT AND LEFT METATARSALS. AREAS OF PATCHY SCLEROSIS IN DISTAL LEFT TIBIA. COARSENING OF TRABECULATION OF RIGHT AND LEFT FEMUR.	03-213-30D 03-213-30E 03-213-30F 03-213-30G 03-213-30H 03-213-30I
COMPLETE SKELETAL SURVEY	03-213-31A
01-53 TO 06-53 U OF CHICAGO CLINICS UNIT NO.	03-213-31B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 29	03-213-31C
PPF ADVANCED CHANGES ON BASIS OF ASEPTIC NECROSIS OF THE HEAD OF THE LEFT FEMUR, HEAD OF RIGHT FEMUR AND LEFT TARSAL ASTRAGALUS. MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, RIGHT ACETABULUM, RIGHT AND LEFT HUMERUS, RIGHT RADIUS AND ULNA, PHALANXES OF THE LEFT HAND, RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA AND IN THE LEFT ASTRAGALUS AND CALCANEUS. ASEPTIC NECROSIS OF THE HEADS OF THE RIGHT AND LEFT FEMUR AND LEFT ASTRAGALUS. MULTIPLE AREAS OF BONE SCLEROSIS IN THE RIGHT AND LEFT HUMERUS, RIGHT AND LEFT TIBIA.	03-213-31D 03-213-31E 03-213-31F 03-213-31G 03-213-31H 03-213-31I 03-213-31J 03-213-31K 03-213-31L
PARTIAL SKELETAL SURVEY	03-213-32A
03-53 U OF CHICAGO CLINICS UNIT NO.	03-213-32B
ADVANCED(MALIGNANT) CHANGES TYPICAL OF RADIUM DEPOSITION.	03-213-32C
PPF SARCOMA OF THE SACRAL SPINE. LUMBAR SPINE FILMS DEMONSTRATED OPAQUE CONTRAST MATERIAL IN THE SPINAL CANAL SUPERIOR TO THE MID PORTION OF THE 5TH LUMBAR VERTEBRAL BODY WITH A BLOCK BELOW THIS. DESTRUCTIVE LESION OF THE POSTERIOR ASPECT AND MID PORTION OF THE FIRST SACRAL SEGMENT OF THE VERTEBRAL SPINE. INCREASE IN DEGREE OF ASEPTIC NECROSIS OF THE LEFT ASTRAGALUS.	03-213-32D 03-213-32E 03-213-32F 03-213-32G 03-213-32H 03-213-32I
COMPLETE SKELETAL SURVEY	03-213-33A
10-53 U OF CHICAGO CLINICS UNIT NO.	03-213-33B
ADVANCED(MALIGNANT) CHANGES TYPICAL OF RADIUM DEPOSITION.	03-213-33C
PPF NO CHANGE SINCE LAST EXAMINATION EXCEPT FOR THE PRESENCE OF CHANGES IN THE HEAD OF THE LEFT FEMUR, SECONDARY TO AN ARTHROPLASTY PERFORMED 10-53.	03-213-33D 03-213-33E 03-213-33F

CLINICAL LABORATORY FINDINGS

01-31-53 HG 11.5 HTC 40 RBC 4.18
WBC 5250 DIFF. P 71 ST L 23 M 5 E 0 B 1

03-213-40
03-213-40A
03-213-40B

02-04-53 CALCIUM 9.4 MG PERCENT, PHOSPHORUS 3.6 MG PERCENT

03-213-41C

03-17-53 HG 14.7 HTC RBC 5200
WBC 5200 DIFF. P 63 ST L 26 M 9 E 1 B 1
PLATELETS 293,700, RETICS 2.1 PERCENT

03-213-42A
03-213-42B
03-213-42C

10-15-53 HG 12 HTC 40 RBC 3.3
WBC 5400 DIFF. P 46 ST L 43 M 8 E 1 B 2

03-213-43A
03-213-43B

03-12-55 HG 12.4 HTC 35 RBC 3.24
WBC 5100 DIFF. P 62 ST L 33 M 2 E 2 B 1

03-213-44A
03-213-44B

05-27-55 CALCIUM 8.5 MG PERCENT, PHOSPHORUS 3.6 MG PERCENT,
ALKALINE PHOSPHATASE 5.7 UNITS PERCENT

03-213-45C
03-213-45D

06-08-55 HG 11.2 HTC 37 RBC 3.50
WBC 7900

03-213-46A
03-213-46B

SPECIMENS AVAILABLE

FROM AUTOPSY

LOC. ACRH

RJH

STERNUM, COMPLETE

237 GMS

03-213-50
03-213-50A
03-213-50B

HALF SECTION (LONG.) LUMBAR VERTEBRAE AND TUMOR

450 GMS

03-213-50C

HEAD OF FEMUR AND ACETABULUM (SPLIT) 15X10X7 CM

350 GMS

03-213-50D

PIECES OF SOFT TISSUE TUMOR

20 GMS

03-213-50E

RIGHT FOOT MINUS SCAPHOID AND TALUS

375 GMS

03-213-50F

TRIANGULAR PC OF CALVARIUM 7.5X7X9 CM

21 GMS

03-213-50G

DISTAL 13 CM OF FEMUR

240 GMS

03-213-50H

PROXIMAL 15 CM OF TIBIA (HALF SECTION)

114 GMS

03-213-50I

FRAGMENT OF PROXIMAL END OF TIBIA 7X5X1 CM

30 GMS

03-213-50J

RIB

26 GMS

03-213-50K

HALF SECTION OF TALUS

15 GMS

03-213-50L

DISTAL 20 CM OF LEFT TIBIA AND FIBULA

165 GMS

03-213-50M

4 FRAGMENTS OF BONE

14 GMS

03-213-50N

THIN SECTION (LONG.) OF LUMBAR VERTEBRAE AND TUMOR

130 GMS

03-213-50O

LIVER

1000+ GMS

03-213-50P

SPLEEN

120 GMS

03-213-50Q

RADIOCHEMICAL ANALYSIS

06-57

FEMUR

HFL

03-213-51
03-213-51A
03-213-51B

4.68 G ASH 1238 UUG/G ASH RA-226 0.021 UUCI/G ASH TH-228

09-57

FEMUR

HFL

03-213-51D

5.92 G ASH 1089 UUG/G ASH RA-226 0.020 UUCI/G ASH TH-228 03-213-51E

AUTORADIOGRAPHIC ANALYSIS

10-61

FEMUR

RER

MAXIMUM HOT SPOT

38.

PCI RA-226/MG BONE

AVERAGE DIFFUSE LEVEL

0.3

PCI

CALC. UNIFORM LABEL

1.2

PCI

HOT SPOT TO DIFFUSE RATIO

127.0

PCI

DIFFUSE TO UNIFORM LABEL

0.25

03-213-53

03-213-53A

03-213-53B

03-213-53C

03-213-53D

03-213-53E

03-213-53F

223 -870F FIBROSARCOMA OF THE LUMBAR VERTEBRAE

03-213-66

224 -870F FIBROSARCOMA OF THE SACRAL VERTEBRAE

03-213-66A

23513-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (RIGHT, LEFT)

03-213-66B

2392 -4722.1 ASEPTIC NECROSIS OF THE ASTRAGULUS (LEFT)

03-213-66C

MALIGNANT TUMOR FIBROSARCOMA, LUMBOSACRAL SPINE 1954

03-213-60

ADDITIONAL INFORMATION

STUDIES OF RADIUM EXCRETION DONE BY WPN (ANL) DURING
PATIENT'S HOSPITALIZATION.

03-213-91

03-213-91A

03-213-91B

DATA REVISED 05-01-68

03-213-99

PATIENT 03-214	BORN 08-26-95	03-214-01
DECEASED		03-214-02
		03-214-02A
		03-214-03
FEMALE		03-214-05
OTHER PERTINENT NOS.	AMBH	03-214-05A
	CASE 114	03-214-05B
DECEASED 03-14-66		03-214-06
DEATH CERT.NO.	AUTOPSY YES	03-214-07
INTERMENT	GRACELAND CEMETERY, CHICAGO, ILL.	03-214-08
CAUSES OF DEATH	ACUTE PURULENT MENINGITIS	03-214-09
	CARCINOMA OF LEFT MASTOID	03-214-09A
	RADIUM POISONING	03-214-09B
SOURCE OF CASE	REFERRED BY DR. JHM	03-214-10
LITERATURE CITATION		03-214-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 114.		03-214-11A
MILLER, ANL-6839 (1964) PP. 18-39.		03-214-11B
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-214-11C
RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-214-11D
EXPOSURE	UNKNOWN, PROB. THERAPEUTIC 05	03-214-12
SOURCE	POSSIBLY INTRAVENOUS INJECTIONS FOR THYROID DISEASE FROM	03-214-13
DR. E C	, OR FROM DR. JHM.	03-214-13A
MEDICAL HISTORY		03-214-20
PATIENT WAS FIRST SEEN IN 04-51 AFTER A REFERRAL BY HER DENTIST		03-214-20A
WHO NOTED A PECULIAR PINKISH DISCOLCRATION OF THE TEETH AND DES-		03-214-20B
TRUCTIVE CHANGES IN THE ROOT CANAL AND ROOTS OF THE TEETH. HE		03-214-20C
RECOGNIZED THESE AS POSSIBLY BEING RELATED TO THE PRESENCE OF RA-		03-214-20D
DIUM IN THE SKELETON. SHE REMAINED IN GOOD HEALTH UNTIL APPROX-		03-214-20E
IMATELY THE MIDDLE OF 1958 AT WHICH TIME SHE BEGAN TO NOTE PAIN		03-214-20F
BEHIND THE LEFT EAR. BECAUSE OF PERSISTENT PAIN IN THIS REGION,		03-214-20G
THE AREA IMMEDIATELY POSTERIOR TO THE EAR WAS EXPLORED BY DR.		03-214-20H
ERIC OLDBERG AT ST. LUKE S HOSPITAL AND A DENSE MASS OVERLYING		03-214-20I
THE MASTOID NOTED. BIOPSY OF THIS MASS REVEALED SQUAMCUS CELL		03-214-20J
CARCINOMA. THE PATIENT WAS REFERRED TO THE U OF CHICAGO CLINICS		03-214-20K
WHERE THE LEFT MASTOID WAS EXPLORED ON 04-16-59. A LARGE TUMOR		03-214-20L
MASS ARISING IN THE LEFT MASTOID EXTENDED INTO AND INVOLVED THE		03-214-20M
SIGMOID SINUS, TRANSVERSE SINUS, CEREBELLUM AND JUGULAR BULB.		03-214-20N
IT WAS NOT POSSIBLE TO RESECT ALL OF THE TUMOR AND THE PATIENT		03-214-20O
WAS TREATED WITH 6000 R OF CO-60 GAMMA RADIATION. THE PATIENT DID		03-214-20P
EXTREMELY WELL UNTIL 02-04-65 WHEN SHE NOTED A WEEPING CERD-		03-214-20Q
SANGUINOUS FLUID FROM THE SITE OF THE INCISION BEHIND THE LEFT		03-214-20R
EAR. EXAMINATION REVEALED A 1 X 1 CM OPENING WHICH LED DIRECTLY		03-214-20S
INTO THE MASTOID. THE AREA CONTINUED TO BREAK DOWN UNTIL A LARGE,		03-214-20T
GAPING HOLE, THE FLOOR OF WHICH WAS THE DURA, REMAINED. APPROX-		03-214-20U
IMATELY 2 MONTHS BEFORE HER DEATH COPIOUS DRAINAGE OF CEREBRO-		03-214-20V
SPINAL FLUID FROM THE WOUND OCCURRED. THE PATIENT DEVELOPED AN		03-214-20W
ACUTE PURULENT MENINGITIS DURING THE NIGHT OF 03-13-66 AND WAS		03-214-20X
FOUND DEAD AT HOME ON THE MORNING OF 03-15-66.		03-214-20Y

GAMMA-RAY MEASUREMENTS					03-214-25
03-30-59	RAB,RAC	0.456 UCI	HGS 1 TILTING CHAIR	CEM	03-214-25B
04-10-64	RAB,RAC	0.381 UCI	HGS 1 TILTING CHAIR	CEM	03-214-25C
04-10-64	RAB,RAC	0.428 UCI	HGS 1 7-CRYST-POS	CEM	03-214-25D

COMPUTED TOTAL-BODY RADIUM					03-214-27
04-27-51	0.61 UCI	1.00 UCI	1.60 UCI TOTAL	LOONEY A	03-214-27A
03-30-59	0.456 UCI		1.435 UCI TOTAL	0.31	03-214-27B
04-10-64	0.381 UCI		1.230 UCI TOTAL	0.31	03-214-27C
04-10-64	0.428 UCI		1.382 UCI TOTAL	0.31	03-214-27D

X-RAY EXAMINATION					03-214-30
PARTIAL SKELETAL SURVEY					03-214-30A
05-03-51	ANL	X-RAY NO. R-02A	LOC. ANL		03-214-30B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 14.5					03-214-30C
PPF AREAS OF BONE RESORPTION IN SKULL, RIGHT AND LEFT HUMERUS,					03-214-30D
RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA,					03-214-30E
AND RIGHT METATARSALS. AREAS OF BONE SCLEROSIS IN LEFT HUMERUS,					03-214-30F
AND IN THE LEFT PROXIMAL FIBULA. MODERATE COARSENING OF TRABECU-					03-214-30G
LATION IN THE LEFT TIBIA.					03-214-30H

PARTIAL SKELETAL SURVEY					03-214-31A
03-31-59	ANL	X-RAY NO. R-02B	LOC. ANL		03-214-31B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 30					03-214-31C
PPF INCREASE IN THE NUMBER AND SIZE OF AREAS OF BONE RESORPTION					03-214-31D
IN THE SKULL. POSSIBILITY OF SPACE-OCCUPYING TUMOR IN THE LEFT					03-214-31E
MASTOID AIR CELLS. AREAS OF BONE RESORPTION SEEN IN THE PELVIS,					03-214-31F
RIGHT SCAPULA, RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND					03-214-31G
ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, AND					03-214-31H
RIGHT METATARSALS.					03-214-31I

PARTIAL SKELETAL SURVEY					03-214-32A
04-10-64	ANL	X-RAY NO. R-02C	LOC. ANL		03-214-32B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18					03-214-32C
PPF ADVANCED CHANGES ON BASIS OF HISTORY OF SQUAMOUS CELL CAR-					03-214-32D
CINOMA OF LEFT MASTOID. SURGICAL RESECTION OF LEFT MASTOID FOR					03-214-32E
CARCINOMA. AREAS OF BONE RESORPTION IN MANDIBLE, RIGHT HUMERUS,					03-214-32F
RIGHT AND LEFT RADIUS AND ULNA, LEFT PATELLA, LEFT TIBIA AND FIB-					03-214-32G
ULA. AREA OF BONE SCLEROSIS IN LEFT HUMERUS, COARSENING OF TRABE-					03-214-32H
CULATION OF RIGHT AND LEFT TIBIA AND FIBULA.					03-214-32I

CLINICAL LABORATORY FINDINGS					03-214-40
04-27-51	HG 13.8	HTC 43	RBC 4.26		03-214-40A
WBC 6400	DIFF. P 64	ST	L 34	M 1	E 1
SERUM CALCIUM 10.4 MG PERCENT, SERUM PHOSPHORUS 4.0 MG PERCENT,					03-214-40B
ALKALINE PHOSPHATASE 3.0 KA UNITS					03-214-40C
					03-214-40D

04-13-59					03-214-41A
	HG 13	HTC	RBC		03-214-41B
WBC 4800	DIFF. P 76	ST	L 19	M 5	E
CALCIUM 9.3 MG PERCENT, PHOSPHORUS 3.3 MG PERCENT,					03-214-41C
ALKALINE PHOSPHATASE 2.9 UNITS PERCENT					03-214-41D

01-23-61	HG 13.1	HTC 39	RBC						
WBC 4700	DIFF. P 66	ST	L 22	M 12	E 0	B 0			
09-12-63	HG 10.5	HTC 34	RBC						
WBC 4300	DIFF. P 68	ST	L 23	M 9	E 0	B 0			
04-10-64	HG 10.8	HTC	RBC 3.77						
WBC 4400	DIFF. P 65	ST	L 31	M 3	E	B 1			
12-30-65	HG 31.5	HTC	RBC						
WBC 3700	DIFF. P 68	ST	L 31	M 1	E 0	B 0			

03-214-42A
03-214-42B

03-214-43A
03-214-43B

03-214-44A
03-214-44B

03-214-45A
03-214-45B

RADIOCHEMICAL ANALYSIS

JAW
05-59 0.126 G ASH 78 UUG/ASH RA-226 0.036 UUCI/G ASH TH-228

03-214-51
03-214-51A
03-214-51B

MALIGNANT TUMOR CARCINOMA LEFT MASTOID 1959

2134 -814 EPIDERMOID CARCINOMA OF THE MASTOID (LEFT)

910 -100 ACUTE MENINGITIS

03-214-60

03-214-66

03-214-67

TOOTH MEASUREMENT

SAMPLE 30.01	TOOTH MOLAR FRAGMENT				
TOTAL WT. 0.6993	CALC.GMS.CA. 0.1958				
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY		
48.33		246.8	0.1763		

03-214-73
03-214-73A
03-214-73B
03-214-73C
03-214-73D

SAMPLE	TOOTH PREMOLAR				
TOTAL WT. 0.5299	CALC.GMS.CA. 0.1484				
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY		
14.2 55.4	21.2	373.4	0.2667		

03-214-74A
03-214-74B
03-214-74C
03-214-74D

SAMPLE 30.03	TOOTH 2 CANINE FRAGMENTS				
TOTAL WT. 0.9003	CALC. GMS.CA. 0.2521				
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY		
50.51 117.4	46.39	465.7	0.3327		

03-214-75A
03-214-75B
03-214-75C
03-214-75D

SAMPLE 30.04	TOOTH MOLAR FRAGMENT				
TOTAL WT. 0.7865	CALC.GMS.CA. 0.2202				
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY		
18.9 99.28	18.4	450.8	0.322		

03-214-76A
03-214-76B
03-214-76C
03-214-76D

DATA REVISED 05-14-68

03-214-99

PATIENT 03-215	BORN 04-18-96	03-215-01
		03-215-02
MALE		03-215-02A
		03-215-05
SOURCE OF CASE	REFERRED BY DR. HOWARD HATCHER	03-215-10
	SYMPTOMS	03-215-10A
LITERATURE CITATION		03-215-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-215-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-215-11B
EXPOSURE	PROBABLY THERAPEUTIC--INJECTION 05	03-215-12
SOURCE SOURCE OF RADIUM IS UNKNOWN. IN 1920-1930 ERA HE RECEIVED A		03-215-13
SERIES OF INJECTIONS FROM HIS PHYSICIAN, DR.		03-215-13A
, CHICAGO. PATIENT'S WIFE NEGATIVE FOR		03-215-13B
RADIUM.		03-215-13C
FAMILY HISTORY		03-215-15
MARRIED		03-215-15A
MEDICAL HISTORY		03-215-20
IN MID 1957 PATIENT BEGAN TO HAVE PAIN IN HIS RIGHT ELBOW.		03-215-20A
RADIOGRAPHS DEMONSTRATED A BONY TUMOR ARISING IN RIGHT OLECRANON		03-215-20B
PROCESS OF THE ULNA. HIS PHYSICIAN, DR. FRED HARK, CALLED DR.		03-215-20C
HOWARD HATCHER OF U OF CHICAGO IN CONSULTATION, WHO RECOGNIZED		03-215-20D
OTHER BONY LESIONS AS TYPICAL OF RADIUM NECROSIS AND REFERRED		03-215-20E
PATIENT TO RJH. GAMMA-RAY SPECTROSCOPY DEMONSTRATED PRESENCE OF		03-215-20F
RA-226 IN SKELETON. RIGHT MID-HUMERAL AMPUTATION PERFORMED IN		03-215-20G
02-58 AT PRES.-ST. LUKE'S HOSP., BY DR. HARK. TISSUE DIAG-		03-215-20H
NOSIS WAS FIBROSARCOMA. ON 08-16-61 METASTATIC MASS WAS RESECTED		03-215-20I
FROM RIGHT AXILLA (FIBROSARCOMA) AT ST. LUKE'S BY DR. JOHN CLWIN.		03-215-20J
PATIENT HAS CONTINUED TO BE APPARENTLY WELL SINCE THEN. (03-68)		03-215-20K
GAMMA-RAY MEASUREMENTS		03-215-25
03-07-58 RAB,RAC 1.238 UCI HGS 1 TILTING CHAIR CEM		03-215-25A
07-19-61 RAB,RAC 1.070 UCI HGS 1 TILTING CHAIR CEM		03-215-25B
COMPUTED TOTAL-BODY RADIUM		03-215-27
03-07-58 1.238 UCI 4.000 UCI TOTAL 0.31		03-215-27A
07-19-61 1.070 UCI 3.450 UCI TOTAL 0.31		03-215-27B
X-RAY EXAMINATION		03-215-30
COMPLETE SKELETAL SURVEY		03-215-30A
07-19-61 ANL X-RAY NO. R-220 LOC. ANL		03-215-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 29		03-215-30C
PPF MALIGNANCY (HISTORY) OF RIGHT ULNA. MULTIPLE LARGE AREAS OF		03-215-30D
BONE NECROSIS IN LONG BONES. MULTIPLE AREAS OF BONE RESORPTION		03-215-30E
IN THE CALVARIUM, ISCHIUM, RIGHT HUMERUS, LEFT CLAVICLE, LEFT		03-215-30F
HUMERUS, LEFT ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA		03-215-30G
AND FIBULA AND RIGHT AND LEFT METATARSALS. BONY SCLEROSIS OF		03-215-30H
THE MASTOIDS, PETROUS PYRAMIDS, ILIA, HEAD AND NECK OF BOTH		03-215-30I
FEMORA. COARSENING OF THE TRABECULAR PATTERN OF THE PELVIS, RIGHT		03-215-30J
HUMERUS, LEFT CLAVICLE, LEFT HUMERUS AND THE RIGHT AND LEFT FEMUR.		03-215-30K

CLINICAL LABORATORY FINDINGS

07-09-61 HG 10.7 HTC RBC 3.59
WBC 6600 DIFF. P 72 ST L 20 M 6 E 2 B

03-215-40
03-215-40A
03-215-40B

SPECIMENS AVAILABLE

SURGICAL SPECIMENS

HEAD OF RADIUS AND SOFT TISSUE

SECTION OF ULNA AND TUMOR

ARTICULAR SURFACES OF HUMERUS, 2 PCS

BONE CHIPS, 3 PCS

LOC. ACRH RJH

42 G

17 G

31 G

4 G

03-215-50
03-215-50A
03-215-50B
03-215-50C
03-215-50D
03-215-50E

MALIGNANT TUMOR FIBROSARCOMA, RIGHT ULNA 1957

03-215-60

23211-870F FIBROSARCOMA OF THE OLECRANON PROCESS OF THE ULNA

03-215-66

PRIMARY TUMOR SLIDE AT ANL

03-215-71

DATA REVISED 04-02-68

03-215-99

PATIENT	03-216	BORN	06-26-07	03-216-01
	DECEASED			03-216-02
				03-216-02A
	FEMALE			03-216-05
DECEASED	10-28-61			03-216-06
	DEATH CERT.NO.	AUTOPSY	NONE	03-216-07
INTERMENT	OAK LAWN CEMETERY,	CCRVALLIS,	OREGON	03-216-08
CAUSES OF DEATH	OSTEOGENIC SARCOMA WITH METASTASES (DEATH CERT.)			03-216-09
	OSTEOGENIC SARCOMA OF LEFT FEMUR WITH			03-216-09A
	PULMONARY METASTASES (ACTUAL)			03-216-09B
SOURCE OF CASE	ROUTINE RA ANALYSIS ON BONE FROM MAYO CLINIC (HFL)			03-216-10
LITERATURE CITATION				03-216-11
	LUCAS, ET AL, AM.J.ROENT. 90,1042 (NOV. 1963). CASE 03-216.			03-216-11A
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-216-11B
	RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-216-11C
EXPOSURE	UNKNOWN	07		03-216-12
SOURCE	PROBABLY ACQUIRED MEDICALLY BY INJECTION ABOUT 1922.			03-216-13
FAMILY HISTORY				03-216-15
	MARRIED 1939	PARA 0	GRAVIDA C	03-216-15A
MEDICAL HISTORY				03-216-20
	TREATED BY DERMATOLOGIST IN PORTLAND, OREGON IN 1922 OR 1923			03-216-20A
	ALLEGEDLY FOR PSORIASIS BY SERIES OF INJECTIONS AND ORAL MEDICA-			03-216-20B
	TION. SURGERY--APPENDECTOMY 1925, UNILATERAL OVARIECTOMY 1930,			03-216-20C
	COMPLETE HYSTERECTOMY 1941, EXCISION OF BENIGN TUMOR FROM NECK			03-216-20D
	1954. PAINFUL DISCOMFORT IN LEFT KNEE STARTING 1958, CRIGINALLY			03-216-20E
	THOUGHT TO BE BENIGN AND LESION EXCISED AND REPLACED WITH BCNE			03-216-20F
	CHIPS, LESION SUBSEQUENTLY DISCOVERED TO BE MALIGNANT 1959.			03-216-20G
	MID-THIGH AMPUTATION OF LEFT LEG AT MAYO CLINIC 1959. DOWNHILL			03-216-20H
	COURSE WITH DEATH ON 10-28-61.			03-216-20I
GAMMA-RAY MEASUREMENTS				03-216-25
	06-07-61	RAB,RAC	C.140 UCI	03-216-25A
			FIELD MEASUREMENT	CEM
BREATH MEASUREMENTS				03-216-26
	06-07-61	EM-222	C.170 UCI	03-216-26A
			BREATH RADON BOTTLE	HFL
COMPUTED TOTAL-BODY RADIUM				03-216-27
	06-07-61	0.140 UCI	0.450 UCI TOTAL	0.31
				03-216-27A
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON				03-216-28
	06-07-61	0.170 UCI	0.246 UCI TOTAL	0.69
				03-216-28A

X-RAY EXAMINATION		03-216-30
PARTIAL SKELETAL SURVEY--COMPOSITE FILMS 11-13-58 TO 06-12-61		03-216-30A
1958-1961 LOC. MAYO CLINIC AND PHYSICIAN'S OFFICE		03-216-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 15		03-216-30C
HISTORY OF OSTEOGENIC SARCOMA, LEFT FEMUR.		03-216-30D
PPF TUMOR OF THE DISTAL END OF THE THE LEFT FEMUR. MULTIPLE		03-216-30E
AREAS OF BONE RESORPTION IN THE SKULL, RIGHT AND LEFT RADIUS AND		03-216-30F
ULNA, RIGHT TIBIA AND FIBULA. MID-THIGH AMPUTATION, LEFT FEMUR.		03-216-30G
CLINICAL LABORATORY FINDINGS		03-216-40
10-01-59 MAYO CLINIC	RBC 4.06	03-216-40A
WBC 12,600 DIFF. P 73 ST	L 20 M 5.5 E 1.5 B	03-216-40B
10-02-59 HG 11.5		03-216-41A
ALKALINE PHOSPHATASE 22.5		03-216-41C
10-07-59 HG 10.3		03-216-42A
10-17-59 HG 11.4		03-216-43A
RADIOCHEMICAL ANALYSES		03-216-51
08-61 FEMUR OR TIBIA	HFL	03-216-51A
8.32 G ASH 442 UUG/G ASH RA-226	0.004 UUCI/G ASH TH-228	03-216-51B
08-61 FECAL	HFL	03-216-52A
AVERAGE = 35.4 UUG/DAY RA-226		03-216-52B
AUTORADIOGRAPHIC ANALYSES		03-216-53
10-61 BONE	RER	03-216-53A
MAXIMUM HOT SPOT	36. PCI RA-226/MG BONE	03-216-53B
AVERAGE DIFFUSE	0.2 PCI RA-226/MG BONE	03-216-53C
CALCULATED UNIFORM LABEL		03-216-53D
HOT SPOT TO DIFFUSE LABEL	180.	03-216-53E
DIFFUSE TO UNIFORM LABEL		03-216-53F
MALIGNANT TUMOR OSTEOGENIC SARCOMA, LEFT FEMUR 1959		03-216-60
235 -2C MID-THIGH AMPUTATION OF FEMUR		03-216-66
23513-876F OSTEOGENIC SARCOMA, HEAD OF FEMUR (LEFT)		03-216-66A
111 -961 PSORIASIS		03-216-67
661 -12 APPENDECTOMY		03-216-67A
782 -12 HYSTERECTOMY		03-216-67B
788 -10 UNILATERAL OOPHORECTOMY		03-216-67C
DATA REVISED 10-16-68		03-216-99

PATIENT 03-217	BORN 04-15-12	03-217-01
MALE		03-217-02
		03-217-05
EXPOSURE	THERAPEUTIC--INJECTION 05	03-217-12
SOURCE	PATIENT RECEIVED INTRAVENOUS RADIUM INJECTIONS DURING WINTER OF 1921-1922, TOTAL OF 8 OR 9 INJECTIONS.	03-217-13
		03-217-13A
FAMILY HISTORY	NOT KNOWN	03-217-15
MEDICAL HISTORY		03-217-20
1916--PATIENT HAD RHEUMATOID ARTHRITIS. 1921--HE RECEIVED		03-217-20A
INJECTIONS FROM DR. B C , FELT BETTER		03-217-20B
FOR ABOUT 5 YEARS BUT HIS PHYSICIAN REFUSED TO GIVE FURTHER		03-217-20C
INJECTIONS. LATER AT NORTHWESTERN MEDICAL SCHOOL HE RECEIVED		03-217-20D
MANY PRESCRIPTIONS FOR ARTHRITIS. 1942-43--RECEIVED X-RAY		03-217-20E
THERAPY TO WHOLE BODY. SINCE THEN HAS RECEIVED LOCAL X-RAY WHEN-		03-217-20F
EVER JOINT FLARES UP. 1958--PATIENT'S TEETH BECAME LOOSE, DENTAL		03-217-20G
RADIOLOGIST SENT TOOTH TO DENTAL PATHOLOGIST IN PITTSBURGH, WHO		03-217-20H
SUGGESTED EXPOSURE TO RADIATION. (NOTES BASED ON CONVERSATION		03-217-20I
WITH CEM, 11-17-63.)		03-217-20J
GAMMA-RAY MEASUREMENTS		03-217-25
11-17-63 RAB,RAC 0.143 UCI HGS 1 TILTING CHAIR CEM		03-217-25A
COMPUTED TOTAL-BODY RADIUM		03-217-27
11-17-63 0.143 UCI 0.460 UCI TOTAL 0.31		03-217-27A
X-RAY EXAMINATION		03-217-30
COMPLETE SKELETAL SURVEY		03-217-30A
11-17-63 ANL X-RAY NO. R-225 LOC. ANL		03-217-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 6.5		03-217-30C
PPF MARKED RHEUMATOID ARTHRITIC CHANGES OF HANDS AND LEFT KNEE.		03-217-30D
MODERATE CHANGES TYPICAL OF RHEUMATOID ARTHRITIS IN RIGHT AND		03-217-30E
LEFT FEET. AREAS OF BONE RESORPTION IN THE CALVARIUM. MULTIPLE		03-217-30F
LINEAR AREAS OF BONE RESORPTION IN THE CORTEX OF THE LEFT RADIUS		03-217-30G
AND ULNA, DISTAL RIGHT FEMUR. BONE SCLEROSIS IN THE DISTAL RIGHT		03-217-30H
FEMUR. DISTAL RIGHT TIBIA, DISTAL LEFT FEMUR AND DISTAL LEFT		03-217-30I
FEMUR.		03-217-30J
CLINICAL LABORATORY FINDINGS	NOT DONE	03-217-40
SPECIMENS AVAILABLE		03-217-50
TEETH	ANL	03-217-50A
240 -952 ARTHRITIS, RHEUMATOID, MULTIPLE		03-217-67

TOOTH MEASUREMENT

SAMPLE 19.0

TOOTH CANINE

TOTAL WT. 1.0207

CALC.GMS.CA. 0.2858

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

911.3

1354.

67

4737.6

10.3

03-217-73

03-217-73A

03-217-73B

03-217-73C

03-217-73D

SAMPLE 19.01

TOOTH MOLAR FRAGMENT

TOTAL WT. 0.8220

CALC.GMS.CA. 0.2302

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

163

282.6

58

1227.8

2.669

03-217-74A

03-217-74B

03-217-74C

03-217-74D

SAMPLE 19.02

TOOTH CANINE

TOTAL WT. 1.0959

CALC.GMS.CA. 0.3069

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

392.3

592.0

66

1929.3

4.194

03-217-75A

03-217-75B

03-217-75C

03-217-75D

SAMPLE 19.03

TOOTH CANINE

TOTAL WT. 0.5840

CALC.GMS.CA. 0.1635

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

305.6

502.2

60

3071.2

6.676

03-217-76A

03-217-76B

03-217-76C

03-217-76D

SAMPLE 19.04

TOOTH MOLAR

TOTAL WT. 2.2582

CALC.GMS.CA. 0.6323

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

1291.

2030.

63.6

3210.5

6.979

03-217-77A

03-217-77B

03-217-77C

03-217-77D

SAMPLE 19.05

TOOTH MOLAR

TOTAL WT. 1.9862

CALC.GMS.CA. 0.5561

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

2890.

3675.

78.6

6608.

14.365

03-217-78A

03-217-78B

03-217-78C

03-217-78D

DATA REVISED 07-19-67

03-217-99

PATIENT 03-218

MALE

03-218-01
03-218-02
03-218-05

EXPOSURE

THERAPEUTIC

03-218-12

SOURCE PATIENT RECEIVED RADIUM FROM DR. C D

03-218-13

GAMMA-RAY MEASUREMENTS

09-02-59 RAB,RAC

0.006 UCI

HGS 1 TILTING CHAIR

CEM

03-218-25

03-218-25A

COMPUTED TOTAL-BODY RADIUM

09-02-59 0.006 UCI

0.018 UCI TOTAL

0.31

03-218-27

03-218-27A

PATIENT 03-219	BORN 01-10-89	03-219-01
		03-219-02
FEMALE		03-219-05
OTHER PERTINENT NOS.	CASE 109	03-219-05A
	AMBH	03-219-05B
SOURCE OF CASE	REFERRED BY DR. CHESTER COGGESHALL, CHGO.	03-219-10
LITERATURE CITATION		03-219-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 109.		03-219-11A
EXPOSURE	THERAPEUTIC--ORAL 04	03-219-12
SOURCE	DRANK RADIUM WATER AS TONIC, 1919 TO 1923. SHE STATED THAT SHE CONSUMED CONTENTS OF ABOUT 5 OR 6 BOTTLES, 4 OZ. EACH.	03-219-13
		03-219-13A
MEDICAL HISTORY		03-219-20
PHYSICAL EXAMINATION 04-30-51 ESSENTIALLY NEGATIVE EXCEPT FOR		03-219-20A
BLOOD PRESSURE OF 180/95. SKELETAL AND DENTAL X-RAY SURVEY		03-219-20B
REPORTED AS ESSENTIALLY NEGATIVE.		03-219-20C
COMPUTED TOTAL-BODY RADIUM		03-219-27
1951 0.03 UCI 0.04 UCI 0.06 UCI TOTAL LOONEY		03-219-27A
X-RAY EXAMINATION		03-219-30
01-31-51 U OF CHICAGO UNIT NO.		03-219-30A
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		03-219-30C
CLINICAL LABORATORY FINDINGS		03-219-40
01-31-51 Hg 13.7 HTC 41 RBC 4.67		03-219-40A
WBC 5650 DIFF. P 48 ST L 40 M 7 E 5 B		03-219-40B
SERUM CA 9.5 MG SERUM P 3.7 MG ALK. PHOSPHATASE 4.5 UNITS		03-219-40C
DATA REVISED 12-12-68		03-219-99

PATIENT 03-220	BORN 08-28-20	03-220-01
MALE		03-220-02
		03-220-05
OTHER PERTINENT NOS.	CASE 120	03-220-05A
SOURCE OF CASE	REFERRED BY DR. W.W. WAINWRIGHT	03-220-10
	SYMPTOMS	03-220-10A
LITERATURE CITATION		03-220-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 120.		03-220-11A
HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY		03-220-11B
11,149, GENEVA (1956).		03-220-11C
EXPOSURE	THERAPEUTIC--ORAL 04	03-220-12
SCOURCE PATIENT WAS ADMINISTERED RADIUM WATER AS A TONIC BY		03-220-13
DR. A.C., WHEN PATIENT WAS BETWEEN AGES OF 8 TO 12.		03-220-13A
FAMILY HISTORY		03-220-15
MARRIED 1943		03-220-15A
CHILDREN	FEMALE 1941	03-220-16
	MALE 1947	03-220-16A
	MALE 1952	03-220-16B
MEDICAL HISTORY		03-220-20
PATIENT HAD BEEN WELL UNTIL 1951 WHEN HIS DENTIST, DR. IRVING		03-220-20A
STRANSKY, BEGAN TO NOTE RESORPTION OF THE TEETH NEAR THE GUM LINE.		03-220-20B
THIS HAS PROGRESSED AND HE WAS REFERRED TO DR. W. WAINWRIGHT		03-220-20C
(THEN OF THE U OF ILLINOIS, NOW IN), WHC		03-220-20D
RECGNIZED THE INTERNAL RESORPTION AS RESEMBLING THAT CAUSED BY		03-220-20E
RADIUM AND REFERRED THE PATIENT TO ANL FOR MEASUREMENT.		03-220-20F
GAMMA-RAY MEASUREMENTS		03-220-25
04-09-64 RAB,RAC 0.060 UCI HGS 1 7-CRYST-POS CEM		03-220-25B
04-09-64 RAB,RAC 0.055 UCI HGS 1 TILTING CHAIR CEM		03-220-25C
COMPUTED TOTAL-BODY RADIUM		03-220-27
04-09-64 0.060 UCI 0.194 UCI TOTAL 0.31		03-220-27B
04-09-64 0.055 UCI 0.177 UCI TOTAL 0.31		03-220-27C
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-220-28
10-52 0.097 UCI 0.150 UCI TOTAL LOONEY A		03-220-28A
X-RAY EXAMINATION		03-220-30
COMPLETE SKELETAL SURVEY		03-220-30A
10-06-52 ANL X-RAY NO. C-11 LOC. ACRH		03-220-30B
SKELETON NEGATIVE FOR DEPOSITION OF RADIUM, ADVANCED CHANGES		03-220-30C
LIMITED TO TEETH. SCORE 4		03-220-30D
PPF WIDENING OF THE DENTINAL CANALS OF THE UPPER INCISRS.		03-220-30E
MARKED RESORPTION OF THE ROOTS OF THE RIGHT LOWER LATERAL INCISCR,		03-220-30F
LEFT LOWER INCISOR AND THE LEFT UPPER SECOND MOLAR. THESE CHANGES		03-220-30G
ARE TYPICAL OF RADIUM DEPOSITION IN THE TEETH. SKELETON OTHER-		03-220-30H
WISE NEGATIVE.		03-220-30I

COMPLETE SKELETAL SURVEY	03-220-31A
11-28-56 ANL X-RAY NO. R-018 LOC. ANL	03-220-31B
SKELETON NEGATIVE FOR DEPOSITION OF RADIUM, ADVANCED CHANGES	03-220-31C
LIMITED TO TEETH. SCORE 5	03-220-31D
PPF SCLEROSIS NOTED IN PROXIMAL 1/3 OF FEMUR SINCE LAST EXAM.	03-220-31E
 COMPLETE SKELETAL SURVEY	03-220-32A
04-09-64 ANL X-RAY NO. R-011C LOC. ANL	03-220-32B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION, SCORE 5	03-220-32C
RIGHT MASTOID CELLS ONLY.	03-220-32D
PPF LOSS OF CELLULAR DETAIL OF RIGHT MASTOID AIR CELLS.	03-220-32E
 CLINICAL LABORATORY FINDINGS	03-220-40
10-06-52 HG 14.4 HTC 42 RBC 4.4	03-220-40A
WBC 8000 DIFF. P 58 ST 0 L 23 M 12 E 5 B 2	03-220-40B
 04-09-64 HG 15.2 HTC 48 RBC 4.77	03-220-41A
WBC 10,500 DIFF. P 65 ST 2 L 25 M 4 E 2 B 1	03-220-41B
OTHER PROCEDURES 1952 ACID PHOSPHATASE 0.7 KA UNITS	03-220-41C
ALKALINE PHOSPHATASE 1.6 KA UNITS	03-220-41D
SERUM CA 8.66 MG, SERUM P 2.6 MG, TOTAL PROTEINS 6.85 GMS	03-220-41E
 ADDITIONAL INFORMATION BROTHER OF PATIENT 03-225.	03-220-91
 DATA REVISED 05-07-68	03-220-99

PATIENT	03-221	BORN	08-12-08	03-221-01
	DECEASED			03-221-02
	MALE			03-221-05
OTHER PERTINENT NOS.	CASE 117			03-221-05A
DECEASED	12-18-63			03-221-06
DEATH CERT.NO.		AUTOPSY	NONE	03-221-07
INTERMENT	NORTH SHORE GARDEN OF MEMORIES, NORTH CHICAGO, ILL.			03-221-08
CAUSES OF DEATH	GENERALIZED CARCINOMATOSIS,			03-221-09
	CARCINOMA OF TONGUE (DEATH CERT.)			03-221-09A
	CARCINOMA OF ORAL CAVITY (ACTUAL)			03-221-09B
SOURCE OF CASE	DR. F	J	RECORDS	03-221-10
LITERATURE CITATION				03-221-11
	LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 117			03-221-11A
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-221-11B
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-221-11C
EXPOSURE	THERAPEUTIC--INJECTION	05		03-221-12
SOURCE	PATIENT RECEIVED RADIUM INJECTIONS INTRAVENOUSLY OR INTRA-			03-221-13
	MUSCULARLY DURING WINTER 1924 AT AGE 17 FOR POLIOMYELITIS. AMOUNT			03-221-13A
	RECEIVED UNKNOWN.			03-221-13B
MEDICAL HISTORY				03-221-20
	SINCE INJECTION OF RADIUM PATIENT HAS HAD NO SERIOUS ILLNESSES,			03-221-20A
	NO INCREASED LIMITATION OF MOTION OF ANY OF THE JOINTS OF THE			03-221-20B
	BODY OR ANY OTHER SYMPTOMS THAT MIGHT BE CAUSED BY RADIUM			03-221-20C
	TOXICITY.			03-221-20D
	PATIENT DEVELOPED A SQUAMOUS CARCINOMA OF TONGUE 12-26. HAD A			03-221-21A
	RESECTION AT THAT TIME OF THE RIGHT HALF OF TONGUE. TWO MONTHS			03-221-21B
	LATER A RADICAL NECK DISSECTION WAS PERFORMED FOR METASTATIC			03-221-21C
	CANCER OF THE CERVICAL LYMPH NODES. FOLLOWING THE NECK DISSECTION			03-221-21D
	THE PATIENT RECEIVED 3600 R OF CO-60 GAMMA-RAY THERAPY. SOME			03-221-21E
	TIME LATER A FISTULA DEVELOPED IN THE RIGHT SUBMENTAL FOLD. HIS			03-221-21F
	GENERAL PHYSICAL CONDITION CONTINUED TO DETERIORATE AND HE DIED			03-221-21G
	AT RAVENSWOOD HOSPITAL ON 12-18-63 OF ACUTE SUPPURATIVE TRACHEO-			03-221-21H
	BRONCHITIS. AUTOPSY PERFORMED 12-19-63.			03-221-21I
GAMMA-RAY MEASUREMENTS				03-221-25
08-08-57	RAB,RAC	C.190 UCI	HGS 1 TILTING CHAIR	CEM
				03-221-25B
COMPUTED TOTAL-BODY RADIUM				03-221-27
	0.11 UCI	0.40 UCI	0.50 UCI TOTAL	LOONEY A
08-08-57	0.190 UCI		0.620 UCI TOTAL	0.31
				03-221-27A
				03-221-27B

X-RAY EXAMINATION				03-221-30
PARTIAL SKELETAL SURVEY				03-221-30A
05-19-51	ANL	X-RAY NO. R-04	LOC. ANL	03-221-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 8				03-221-30C
PPF SEVERE POLIOMYELITIS. COARSENING OF THE TRABECULAR PATTERN				03-221-30D
OF THE RIGHT AND LEFT FEMUR AND THE LEFT TIBIA. MULTIPLE AREAS OF				03-221-30E
BONE RESORPTION IN THE CORTICES OF THE RIGHT FEMUR, RIGHT TIBIA				03-221-30F
AND FIBULA, RIGHT METATARSALS, LEFT FEMUR, LEFT TIBIA AND FIBULA				03-221-30G
AND LEFT METATARSALS.				03-221-30H
COMPLETE SKELETAL SURVEY				03-221-31A
08-08-57	ANL	X-RAY NO. R-04B	LOC. ANL	03-221-31B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 16				03-221-31C
PPF SEVERE POLIOMYELITIS. MULTIPLE AREAS OF BONE RESORPTION IN				03-221-31D
THE CALVARIUM IN ADDITION TO A MARKED PROGRESSION IN THE NUMBER				03-221-31E
AND SIZE OF AREAS OF BONE RESORPTION IN THE BONES PREVIOUSLY				03-221-31F
EXAMINED. IN ADDITION AREAS OF BONE RESORPTION IN THE PATELLAE				03-221-31G
AND IN THE LEFT TARSAL SCAPHOID.				03-221-31H
CLINICAL LABORATORY FINDINGS				03-221-40
11-25-63	HG	HTC 51	RBC	03-221-40A
WBC 7550	DIFF.	NORMAL		03-221-40B
MALIGNANT TUMOR CARCINOMA OF ORAL CAVITY 1962				03-221-60
553 -14	RADICAL EXCISION OF CERVICAL LYMPH NODES			03-221-66
6102 -8191	CARCINOMA OF FLOOR OF MOUTH			03-221-66A
612 -13	HEMIGLOSSECTOMY			03-221-66B
972 -171	POLIOMYELITIS			03-221-67
DATA REVISED 03-25-68				03-221-99

PATIENT	03-222	BORN	72	03-222-01
	DECEASED			03-222-02
	MALE			03-222-05
OTHER PERTINENT NOS.	AMBH			03-222-05A
	CASE 102			03-222-05B
DECEASED AFTER 1951				03-222-06
CAUSES OF DEATH	CARDIAC DISEASE			03-222-09
SOURCE OF CASE	REFERRED BY DR. DALLAS PHEMISTER			03-222-10
LITERATURE CITATION				03-222-11
	LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 102.			03-222-11A
EXPOSURE	UNKNOWN C7			03-222-12
SOURCE	UNKNOWN, HOWEVER, PATIENT'S WIFE, CASE 03-233, WAS KNOWN			03-222-13A
	IATROGENIC RADIUM DISEASE CASE. PATIENT OF DR. E C			03-222-13B
FAMILY HISTORY	NOT KNOWN			03-222-15
MEDICAL HISTORY				03-222-20
	PATIENT DEVELOPED OSTEOMYELITIS OF THE LEFT MANDIBLE ABOUT 1939.			03-222-20A
	TREATED BY DR. DALLAS PHEMISTER, U OF CHICAGO CLINICS. MANDIBLE			03-222-20B
	SURGICALLY RECONSTRUCTED. BECAUSE OF WIFE'S HISTORY PATIENT WAS			03-222-20C
	REFERRED TO ANL FOR RADIUM STUDIES. MEDICAL HISTORIES ON FILE--			03-222-20D
	BILLINGS HOSPITAL, U OF CHICAGO. ALSO WAS PATIENT OF DR. GEORGE			03-222-20E
	COLEMAN (DECEASED). DR. R C			03-222-20F
	HAS DR. COLEMAN'S FILES.			03-222-20G
COMPUTED TOTAL-BODY RADIUM				03-222-27
04-51	0.50 UCI	1.10 UCI	1.60 UCI TOTAL	LOONEY A
				03-222-27A
X-RAY EXAMINATION				03-222-30
	COMPLETE SKELETAL SURVEY			03-222-30A
	04-04-51 U OF CHICAGO CLINICS, 1941 - 1951			03-222-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE		03-222-30C
	PPF NECROSIS OF MANDIBLE.			03-222-30D
DENTAL EXAMINATION				03-222-31A
	04-07-51 ZOLLER DENTAL CLINIC, U OF CHICAGO CLINICS			03-222-31B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE		03-222-31C
	OLD DEFECT OF LEFT MANDIBLE. NEGATIVE MAXILLA.			03-222-31D

CLINICAL LABORATORY FINDINGS

04-41 HG 14.4 HTC RBC 4.56
WBC 11,200

03-222-40
03-222-40A
03-222-40B

10-41 HG 15.5 HTC RBC 4.92
WBC 12,600

03-222-41A
03-222-41B

04-51 HG 14.9 HTC 52 RBC 5.04
WBC 10,000 DIFF. P 61 ST 3 L 30 M 4 E 1 B 1
1 BASO METAMYELOCYTE, 3 IMMATURE LYMPHS,, 1 MITOTIC LYMPHOCYTE
SERUM CALCIUM 10.3 MG SERUM PHOSPHORUS 3.0 MG
ALK. PHOSPHATASE 9.3 UNITS

03-222-42A
03-222-42B
03-222-42C
03-222-42D
03-222-42E

219 -4722.1 ASEPTIC NECROSIS OF THE MANDIBLE (LEFT)

03-222-67

DATA REVISED 02-05-68

03-222-99

PATIENT	03-223	BORN	86	03-223-01 03-223-02 03-223-05
	FEMALE			
OTHER PERTINENT NOS.	CASE 111			03-223-05A
SOURCE OF CASE	DR. F J FILES			03-223-10
LITERATURE CITATION				03-223-11 03-223-11A
	LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 111.			
EXPOSURE	THERAPEUTIC--INJECTION	05		03-223-12
SOURCE	IN 1929 AND SUBSEQUENTLY, PATIENT WAS GIVEN RA-226 CL, POSSIBLY INTRAMUSCULARLY, BY HER HUSBAND FOR AN INTERMITTENT TACHYCARDIA. PROBABLY RECEIVED ABOUT 400 UG OVER A 2-3 YEAR PERIOD.			03-223-13 03-223-13A 03-223-13B 03-223-13C
FAMILY HISTORY				03-223-15
MARRIED				03-223-15A
HUSBAND	DECEASED			03-223-15B
MEDICAL HISTORY				03-223-20
	AT AGE 60 YEARS PATIENT WAS TOLD SHE HAD INSUFFICIENT CALCIUM IN HER SKELETON. AT AGE 62 THE PATIENT CAUGHT HER HEEL ON A STEP AND FELL AND FRACTURED A LEG, WAS ON CRUTCHES FOR 14 WEEKS. OTHERWISE PATIENT HAS BEEN IN RATHER GOOD HEALTH. (10-30-51)			03-223-20A 03-223-20B 03-223-20C 03-223-20D
	PATIENT COMPLETELY BEDRIDDEN WITH DESTRUCTIVE BONE DISEASE. NOW RESIDES IN . (11-03-66)			03-223-21A 03-223-21B 03-223-21C
COMPUTED TOTAL-BODY RADIUM	2.00 UCI	2.20 UCI	4.20 UCI TOTAL LOONEY A	03-223-27 03-223-27A
X-RAY EXAMINATION				03-223-30
PARTIAL SKELETAL SURVEY				03-223-30A
	10-12-47 TO 12-29-47	WESLEY MEM.HCSP.,CHICAGO	X-RAY NO.	03-223-30B
	PPF	RECENT FRACTURE OF THE PROXIMAL THIRD OF THE RIGHT FEMUR		03-223-30D
		WITH BONY SCLEROSIS OF THE HEAD AND COARSENING OF THE TRABECULAR PATTERN OF THE HEAD AND NECK OF THE RIGHT FEMUR. FRACTURE OF THE LEFT ULNA WITH MULTIPLE AREAS OF BONE RESORPTION IN THE RADIUS, ULNA AND HUMERUS. ASEPTIC NECROSIS OF THE HEAD OF THE LEFT RADIUS.		03-223-30E 03-223-30F 03-223-30G 03-223-30H
PARTIAL SKELETAL SURVEY				03-223-31A
	10-29-51	ACRH	X-RAY NO. R-07 LOC. ACRH	03-223-31B
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 32			03-223-31C
	PPF	MARKED COARSENING OF THE TRABECULAR PATTERN THROUGHOUT THE SKELETON. MULTIPLE LARGE AREAS OF BONE RESORPTION IN THE CALVARIUM, MANDIBLE, RIGHT AND LEFT RADIUS AND ULNA, LEFT HUMERUS, RIGHT AND LEFT FEMUR AND RIGHT AND LEFT TIBIA AND FIBULA. BONY SCLEROSIS IN THE PELVIS AND RIGHT AND LEFT CALCANEUS, RIGHT TIBIA AND FIBULA. MARKED ASEPTIC NECROSIS OF THE HEADS OF BOTH FEMORA. OLD HEALED FRACTURES OF THE SHAFT OF THE LEFT ULNA AND OF THE RIGHT FEMUR. ASEPTIC NECROSIS OF THE HEAD OF THE LEFT RADIUS.		03-223-31D 03-223-31E 03-223-31F 03-223-31G 03-223-31H 03-223-31I 03-223-31J 03-223-31K

CLINICAL LABORATORY FINDINGS

NOT DONE

03-223-40

23113-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE RADIUS (LEFT)

03-223-66

2321 -416 FRACTURE OF THE ULNA (LEFT)

03-223-66A

23513-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (RIGHT, LEFT)

03-223-66B

23521-416 FRACTURE OF PROXIMAL THIRD OF FEMUR (RIGHT)

03-223-66C

ADDITIONAL INFORMATION THIS PATIENT IS WIFE OF 03-224.

03-223-91

DATA REVISED 02-06-68

03-223-99

PATIENT 03-225	BORN 07-07-22	03-224-01
DECEASED		03-224-02
MALE		03-224-02A
		03-224-05
OTHER PERTINENT NOS.	CASE 110	03-224-05A
DECEASED 09-11-60		03-224-06
DEATH CERT.NO.	AUTOPSY NONE	03-224-07
INTERMENT	THOMPSON CREMATORY, MEMPHIS, TENNESSEE	03-224-08
CAUSES OF DEATH	TERMINAL PNEUMONIA,	03-224-09
	NUTRITIVE FAILURE RESULTING FROM CANCER	03-224-09A
OF PANCREAS (TAIL),		03-224-09B
	ARTERIOSCLEROSIS, GENERALIZED (DEATH CERT.)	03-224-09C
	CANCER OF THE PANCREAS,	03-224-09D
	CHRONIC PYELITIS,	03-224-09E
	GENERALIZED ARTERIOSCLEROSIS (ACTUAL)	03-224-09F
SOURCE OF CASE	SEARCH BY LOONEY	03-224-10
	KNOWN FROM LITERATURE (BARKER PAPERS)	03-224-10A
LITERATURE CITATION:		03-224-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 110.		03-224-11A
EXPOSURE	THERAPEUTIC--ORAL 04	03-224-12
SOURCE	PATIENT DRANK RADIUM WATER ORALLY FOR 6 TO 8 WEEKS IN 1922.	03-224-13
	THEN UNTIL 1929 HE TOOK RADIUM INTRAMUSCULARLY INTERMITTENTLY	03-224-13A
	AND ESTIMATES THAT HE TOOK A TOTAL CF 700-800 UG.	03-224-13B
FAMILY HISTORY		03-224-15
MARRIED		03-224-15A
MEDICAL HISTORY		03-224-20
PATIENT WAS 81 YEARS OF AGE WHEN LAST SEEN 10-30-51. WAS IN GOOD		03-224-20A
HEALTH EXCEPT FOR MODERATE HYPERTENSION FOR ONE OF HIS YEARS.		03-224-20B
HE WAS ACTIVE IN USE OF RADIUM SALTS AS A THERAPEUTIC AGENT		03-224-20C
ORALLY AND PARENTERALLY. AT THE TIME LAST SEEN HE PERSISTED IN		03-224-20D
BELIEF THAT CLINICAL ADMINISTRATION OF RADIUM IS AN INNOCUOUS		03-224-20E
PROCEDURE AND NOT ATTENDED BY ANY LATE SEQUELAE. (10-30-51)		03-224-20F
DEVELOPED CANCER OF THE PANCREAS SOMETIME AFTER 1955 AND EXPIRED		03-224 21A
WITH NUTRITIVE FAILURE DUE TO CANCER OF THE PANCREAS IN ABERDEEN,		03-224-21B
MISSISSIPPI.		03-224-21C
COMPUTED TOTAL-BODY RADIUM		03-224-27
10-30-51 1.60 UCI (3.80 UCI 5.40 UCI TOTAL LOONEY A		03-224-27A

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

10-30-51 ACRH X-RAY NO. R-08 LOC. ACRH
MODERATE OR ADVANCED CHANGES TYPICAL OF RA DEPOSITION. SCORE 22
PPF POSSIBLE ASEPTIC NECROSIS OF RIGHT TARSAL SCAPHOID.
COARSENING OF THE TRABECULAR PATTERN OF THE PELVIS, RIGHT RADIUS
AND ULNA, RIGHT SCAPULA, LEFT SCAPULA, LEFT RADIUS AND ULNA,
RIGHT TIBIA AND FIBULA AND LEFT TIBIA AND FIBULA AND RIGHT AND
LEFT METATARSALS. MULTIPLE AREAS OF BONE RESORPTION IN THE CAL-
VARIUM, RIGHT AND LEFT ULNA, RIGHT AND LEFT RADIUS, RIGHT FEMUR,
RIGHT TIBIA AND FIBULA, LEFT FEMUR AND LEFT FIBULA. SCATTERED
AREAS OF BONE SCLEROSIS.

03-224-30
03-224-30A
03-224-30B
03-224-30C
03-224-30D
03-224-30E
03-224-30F
03-224-30G
03-224-30H
03-224-30I
03-224-30J
03-224-30K

MALIGNANT TUMOR CANCER OF THE PANCREAS

03-224-60

2394 -4722.1 ASEPTIC NECROSIS OF THE TARSAL SCAPHOID (RIGHT)
460 -942 GENERALIZED ARTERIOSCLEROSIS
47X -X30 ESSENTIAL HYPERTENSION
690 -8191 CARCINOMA, NOT OTHERWISE SPECIFIED, OF PANCREAS
722 -100 CHRONIC PYELITIS

03-224-67
03-224-67A
03-224-67B
03-224-67C
03-224-67D

DATA REVISED 05-03-68

03-224-99

PATIENT 03-225	BORN 06-22	03-225-01
MALE		03-225-02
		03-225-05
OTHER PERTINENT NOS.	CASE 119	03-225-05A
SOURCE OF CASE	REFERRED BY DR. W.W. WAINWRIGHT	03-225-10
LITERATURE CITATION		03-225-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 119.		03-225-11A
SOURCE PATIENT REFERRED BECAUSE BROTHER, PATIENT 03-220, WAS FOUND TO HAVE 0.14 UG RADIUM AND HAD DENTAL CHANGES. PATIENT'S BROTHER RECALLED THAT THEY AND THEIR MOTHER WERE GIVEN A TONIC TO DRINK WHEN THIS PATIENT WAS BETWEEN 6 AND 8 YEARS OF AGE BY THEIR FATHER, DR. A.C. OF CHICAGO, WHO WAS A WELL-KNOWN USER OF RADIUM IN HIS PRACTICE AND TOOK IT HIMSELF (SEE SCHLUNDT NOTES).		03-225-13 03-225-13A 03-225-13B 03-225-13C 03-225-13D 03-225-13E 03-225-13F
FAMILY HISTORY		03-225-15
NO CHILDREN ALTHOUGH PATIENT AND WIFE HAVE HAD INVESTIGATION FOR STERILITY AND NO CAUSES FOUND.		03-225-15A 03-225-15B
MEDICAL HISTORY	NO PERTINENT HISTORY.	03-225-20
GAMMA-RAY MEASUREMENTS		03-225-25
09-16-64 RAB,RAC 0.009 UCI HGS 1 TILTING CHAIR CEM		03-225-25B
COMPUTED TOTAL-BODY RADIUM		03-225-27
01-14-53 0.01 UCI 0.02 UCI 0.03 UCI TOTAL LOONEY A		03-225-27A
09-16-64 0.009 UCI 0.030 UCI TOTAL 0.31		03-225-27B
X-RAY EXAMINATION		03-225-30
01-14-53 ANL X-RAY NO. C-12 LOC. ANL		03-225-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-225-30C
PPF NONE.		03-225-30D
DENTAL RADIOGRAPHS		03-225-31A
06-17-53 U OF ILL. COLLEGE OF DENTISTRY		03-225-31B
WIDENING OF THE DENTINAL CANALS OF THE UPPER MOLARS AND INTERNAL RESORPTION IN THE UPPER RIGHT FIRST AND SECOND BICUSPIDS AND CUSPID, UPPER LEFT LATERAL INCISOR, CUSPID, AND FIRST AND SECOND BICUSPIDS, AND THE LOWER LEFT AND RIGHT CENTRAL INCISOR, CUSPIDS AND FIRST AND SECOND BICUSPIDS. CHANGES SUGGESTIVE OF THOSE RELATING TO THE PRESENCE OF RADIUM IN THE TEETH.		03-225-31C 03-225-31D 03-225-31E 03-225-31F 03-225-31G 03-225-31H
09-16-64 ANL X-RAY NO. R-012B LOC. ANL		03-225-32B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-225-32C
PPF NONE.		03-225-32D

CLINICAL LABORATORY FINDINGS

01-14-53 HG 16.6 HTC 44 RBC 5.48
WBC 6400 DIFF. P 47 ST 3 L 43 M 5 E 2 B 0 0

09-16-64 HG 15.8 HTC 48 RBC
WBC 8800 DIFF. P 61 ST L 33 M 5 E 1 B 0
ACID PHOSPHATASE 0.6 K-A UNITS, ALK. PHOSPHATASE 0.6 K-A UNITS
SERUM CA 8.49 MG SERUM PROTEINS 6.67 GMS

03-225-40
03-225-40A
03-225-40B

03-225-41A
03-225-41B
03-225-42C
03-225-42D

ADDITIONAL INFORMATION BROTHER OF PATIENT 03-220.

03-225-91

DATA REVISED C5-03-68

03-225-99

PATIENT 03-226	BORN 11-05-74	03-226-01
DECEASED		03-226-02
MALE		03-226-02A
		03-226-05
OTHER PERTINENT NOS.	ACRH	03-226-05A
	CASE 104	03-226-05B
	COLUMBUS HCSP. AUTOPSY	03-226-05C
DECEASED 01-08-53		03-226-06
DEATH CERT.NO.	AUTOPSY YES	03-226-07
INTERMENT	OAK RIDGE CEMETERY, SANDWICH, ILLINOIS	03-226-08
CAUSES OF DEATH	APLASTIC ANEMIA	03-226-09
	EXTENSIVE ARTERIOSCLEROSIS	03-226-09A
SOURCE OF CASE	DR. F J RECORDS	03-226-10
LITERATURE CITATION		03-226-11
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 104.		03-226-11A
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 104.		03-226-11B
HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY		03-226-11C
11,149, GENEVA (1956).		03-226-11D
HASTERLIK AND FINKEL, MED.CLIN.N.AMER. 49,285 (JAN. 1965).		03-226-11E
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-226-11F
RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-226-11G
EXPOSURE	THERAPEUTIC--INJECTION (05)	03-226-12
SOURCE TREATED BY DR. F J IN ABOUT 1934 WITH RA-226 CL		03-226-13
INTRAVENOUSLY FOR VAGUE ARTHRITIC PAIN IN BOTH SHOULDERS. GIVEN		03-226-13A
2 AMPULES (10 UG EACH ABOUT) WEEKLY FOR 9 MONTHS (POSSIBLY ABOUT		03-226-13B
720 UG). WIFE AND SON ALSO GIVEN RADIUM.		03-226-13C
FAMILY HISTORY		03-226-15
MARRIED		03-226-15A
CHILDREN (3)		03-226-16
MEDICAL HISTORY		03-226-20
PATIENT HAD ARTHRITIC PAINS IN BOTH SHOULDERS IN THE 1930S. HE		03-226-20A
THOUGHT THIS WAS RELATED TO THE POSITION IN WHICH HE STOOD WORK-		03-226-20B
ING OVER PATIENTS AS A DENTIST. HE WAS GIVEN RA-226 INTRAVENOUSLY		03-226-20C
IN 1934. APPROXIMATELY 2 YEARS AFTER INJECTIONS HE BEGAN TO HAVE		03-226-20D
DIFFICULTIES WITH TEETH AND MANDIBLE. OVER SUCCEEDING YEARS HE		03-226-20E
LOST ALL OF HIS TEETH AND A LARGE PORTION OF HIS MANDIBLE BECAUSE		03-226-20F
OF BONE NECROSIS. IN 1949 HE BEGAN TO HAVE CRIPPLING PAIN IN THE		03-226-20G
RIGHT HIP. WAS STUDIED EXTENSIVELY IN ILLINOIS RESEARCH AND		03-226-20H
EDUCATIONAL HOSPITAL. IN 1949 (OR LATER) PATIENT DEVELOPED A		03-226-20I
REFRACTORY ANEMIA NECESSITATING REPEATED BLOOD TRANSFUSIONS.		03-226-20J
DIED AT COLUMBUS HOSPITAL IN CHICAGO, 01-08-53, OF APLASTIC		03-226-20K
ANEMIA. AUTOPSY PERFORMED.		03-226-20L

COMPUTED TOTAL-BODY RADIUM								03-226-27
04-13-51	5.00 UCI	5.70 UCI	10.70 UCI	TOTAL	LOONEY	8		03-226-27A
X-RAY EXAMINATION								03-226-30
COMPLETE SKELETAL SURVEY								03-226-30A
03-13-51	U OF CHICAGO CLINICS UNIT NO.						03-226-30B	
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.							SCORE 32	03-226-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, RIGHT								03-226-30D
AND LEFT HUMERI, RIGHT AND LEFT TIBIA AND FIBULA, RIGHT AND LEFT								03-226-30E
METATARSALS. SPECTACULAR OSTEOPOROSIS AND RADIATION NECROSIS OF								03-226-30F
THE THORACIC VERTEBRAL BODIES. ASEPTIC NECROSIS IN THE ILIUM IN								03-226-30G
THE REGION OF THE RIGHT ACETABULUM. MULTIPLE AREAS OF BONE SCLER-								03-226-30H
OSIS IN BOTH HUMERI, AND BOTH FEMURS. MARKED COARSENING OF THE								03-226-30I
TRABECULAR PATTERN IN BOTH FEMURS AND BOTH TIBIA AND FIBULA.								03-226-30J
CLINICAL LABORATORY FINDINGS								03-226-40
04-13-51	HG 11.9	HTC 35	RBC 3.56					03-226-40A
WBC 10,600	DIFF. P 67	ST 7	L 23	M 1	E 1	B 1	0	03-226-40B
SERUM CA 9.9 MG,	SERUM P 3.1 MG,	ALK. PHOSPHATASE 2.8 UNITS						03-226-40C
SPECIMENS AVAILABLE								03-226-50
VERTEBRAL BODY			5 GMS		RJH			03-226-50A
RIB			2 GMS					03-226-50B
BLOOD DYSCRASIAS APLASTIC ANEMIA 1949								03-226-65
219	-4722.1 ASEPTIC NECROSIS OF THE MANDIBLE							03-226-66
500	-7901.9 APLASTIC ANEMIA							03-226-66A
460	-942 GENERALIZED ARTERIOSCLEROSIS							03-226-67
ADDITIONAL INFORMATION								03-226-91
BONE STUDIES--STEHNEY (FEB. 1955)								03-226-91A
HUSBAND OF PATIENT 03-227.								03-226-91B
FATHER OF PATIENT 03-228.								03-226-91C
DATA REVISED 05-01-68								03-226-99

PATIENT 03-227	BORN 02-28-78	03-227-01
DECEASED		03-227-02
		03-227-02A
FEMALE		03-227-05
OTHER PERTINENT NOS.	CASE 105	03-227-05A
DECEASED 10-08-52		03-227-06
DEATH CERT.NO.	AUTOPSY YES	03-227-07
INTERMENT	OAK RIDGE CEMETERY, SANDWICH, ILLINOIS	03-227-08
CAUSES OF DEATH	GENERALIZED METASTASIS FROM PRIMARY OSTEOCARCOMA	03-227-09
SOURCE OF CASE	REFERRED BY DR. EGBERT FELL	03-227-10
LITERATURE CITATION		03-227-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 105.		03-227-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-227-11D
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-227-11E
SOURCE NOT KNOWN. PATIENT'S HUSBAND AND SON BOTH RECEIVED RADIUM		03-227-13
INJECTIONS FROM DR. F J AND IT IS MOST PROBABLE THAT THIS		03-227-13A
PATIENT RECEIVED RADIUM FROM HIM ALSO. PICKED UP BECAUSE OF		03-227-13B
RECOGNITION BY DR. JOHN CLARK THAT THE RADIOGRAPHIC CHANGES WERE		03-227-13C
TYPICAL OF RADIUM POISONING. PATIENT REFERRED TO ANL FOR STUDY.		03-227-13D
FAMILY HISTORY		03-227-15
CHILDREN	MALE (2), FEMALE (1)	03-227-16
MEDICAL HISTORY		03-227-20
IN 1947 PATIENT STRUCK RIGHT LEG. SOUGHT MEDICAL CARE BECAUSE OF		03-227-20A
CONTINUING PAIN. IT WAS BELIEVED THAT BONE LESIONS SEEN IN THE		03-227-20B
PROXIMAL RIGHT TIBIA WERE SECONDARY TO OSTEOMYELITIS AND PATIENT		03-227-20C
WAS TREATED WITH 10 TREATMENTS OF X-IRRADIATION THERAPY. IN 1947		03-227-20D
A BIOPSY OF THE TIBIAL LESION READ AT FIRST AS OSTEOID OSTEOMA.		03-227-20E
IN 04-49 CURETTAGE YIELDED MATERIAL (WHICH WAS READ AS		03-227-20F
OSTEOGENIC SARCOMA.) IN 1949 A PATHOLOGICAL FRACTURE WAS SUS-		03-227-20G
TAINED IN THIS LEG AND A HIGH THIGH AMPUTATION WAS DONE AT PRES-		03-227-20H
BYTERIAN ST. LUKE'S HOSPITAL. IN 1952 A CHEST RADIOGRAPH REVEALED		03-227-20I
BONE-FORMING TUMORS THROUGHOUT BOTH LUNG FIELDS. SHORTLY THERE-		03-227-20J
AFTER THE PATIENT SUFFERED A CEREBROVASCULAR ACCIDENT (VASCULAR		03-227-20K
DISEASE OR TUMOR METASTASIS) AND DIED 10-08-52 AT COLUMBUS HOSP.		03-227-20L
CLINICAL HISTORY AT PRESBYTERIAN-ST. LUKE'S HOSP., CHICAGO, ILL.		03-227-20M
IN THE CASE OF THIS PATIENT, THE INGESTION OF A MSH-RA CONTAIN-		03-227-20N
ING ORAL PREPARATION CANNOT BE EXCLUDED. BONE SAMPLES ARE NOT		03-227-20O
AVAILABLE FOR ASSAY.		03-227-20P
COMPUTED TOTAL-BODY RADIUM		03-227-27
02-19-52 0.17 UCI 0.69 UCI 0.860 UCI TOTAL LOONEY A		03-227-27A

X-RAY EXAMINATION		03-227-30
SPECIAL VIEWS--TIBIA AND CHEST		03-227-30A
1947	PRESBYTERIAN-ST. LUKE'S HOSP., CHICAGO, ILL.	03-227-30B
POSSIBLE OSTEIOD OSTEOMA. LUNG METASTASES. SCORE 9-10		03-227-30C
CLINICAL LABORATORY FINDINGS		03-227-40
OTHER PROCEDURES	SERUM CALCIUM 9.9 MG, SERUM PHOSPHORUS 3.3 MG	03-227-40D
	SERUM ALKALINE PHOSPHATASE 43 UNITS	03-227-40E
MALIGNANT TUMOR	OSTEOGENIC SARCOMA, RIGHT TIBIA 1949	03-227-60
235 -20	AMPUTATION OF THIGH THROUGH FEMUR (RIGHT)	03-227-66
237 -416	FRACTURE OF TIBIA (RIGHT)	03-227-66A
23721-876.OF OSTEOGENIC SARCOMA, PROX. 1/3 TIBIA SHAFT, METASTATIC		03-227-66B
ADDITIONAL INFORMATION	WIFE OF PATIENT 03-226.	03-227-91
	MOTHER OF PATIENT 03-228.	03-227-91A
DATA REVISED 03-06-68		03-227-99

PATIENT 03-228	BORN	99	03-228-01
MALE			03-228-05
OTHER PERTINENT NOS.	ACRH CASE 106		03-228-05A 03-228-05B
SOURCE OF CASE	DR. F J RECCROS		03-228-10
LITERATURE CITATION			03-228-11
LOONEY, ET AL, AM.J.RGENT. 73,1006 (JUNE 1955). CASE 106.			03-228-11A
EXPOSURE	THERAPEUTIC--INJECTION (05)		03-228-12
SOURCE AT AGE OF 27 YEARS PATIENT WAS GIVEN A SERIES OF RA-226 CL			03-228-13
INJECTED INTRAVENOUSLY FOR TREATMENT OF ACNE ROSACEA. RECEIVED			03-228-13A
ABOUT 20 INJECTIONS FROM DR. F J			03-228-13B
MEDICAL HISTORY			03-228-20
PATIENT TREATED WITH RA-226 ABOUT 1927. IN 1948 A SEQUESTRUM			03-228-20A
DEVELOPED AND WAS EXTRUDED FROM THE LEFT MANDIBLE. OVER THE NEXT			03-228-20B
4 YEARS HE LOST ABOUT 5 OR 6 MORE SIMILAR BONY SEQUESTRA FROM			03-228-20C
THE SAME SITE--ALL ABOUT 3/8 INCHES IN DIAMETER. PATIENT LOST			03-228-20D
ALL OF HIS TEETH. IN 1942 HE WAS TURNED DOWN BY ARMY BECAUSE OF			03-228-20E
ELEVATED B.P., ABOUT 180/240. PHYSICAL EXAMINATION DONE 4-24-51			03-228-20F
REVEALED NEGATIVE FINDINGS EXCEPT THOSE IN THE EYES SECONDARY			03-228-20G
TO MILD ARTERIOSCLEROSIS AND A B.P. OF 210/130. ACNE ROSACEA			03-228-20H
STILL PRESENT.			03-228-20I
COMPUTED TOTAL-BODY RADIUM			03-228-27
04-51 2.30 UCI 3.30 UCI 5.60 UCI TOTAL LOONEY A			03-228-27A
X-RAY EXAMINATION			03-228-30
COMPLETE SKELETAL SURVEY			03-228-30A
4-24-51 ACRH X-RAY NO. R-01 LOC. ACRH			03-228-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 17			03-228-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN CALVARIUM, LEFT RADIUS,			03-228-30D
LEFT FEMUR AND LEFT FIBULA. COARSENING OF THE TRABECULAR PATTERN			03-228-30E
OF THE MANDIBLE, FACIAL BONES, VERTEBRAL BODIES, PELVIS, RIGHT			03-228-30F
AND LEFT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA. BONY			03-228-30G
SCLEROSIS OF THE HEAD, NECK AND GREATER TROCHANTER OF THE LEFT			03-228-30H
FEMUR. PARTIAL COLLAPSE OF THE SIXTH AND SEVENTH THORACIC			03-228-30I
VERTEBRAL BODIES.			03-228-30J
DENTAL FILMS			03-228-31A
4-20-51 ZOLLER DENTAL CLIN., U OF C X-RAY NO.			03-228-31B
MARKED SCLEROSIS OF MANDIBLE, EDENTULOUS.			03-228-31C
CLINICAL LABORATORY FINDINGS			03-228-40
04-51 HG 16.0 HTC 50.5 RBC 4.0			03-228-40A
WBC 9750 DIFF. P 65 ST 1 L 31 M 1 E 2 B 0			03-228-40B
219 -4722.1 ASEPTIC NECROSIS OF THE MANDIBLE (LEFT)			03-228-66
47X -X30 ESSENTIAL HYPERTENSION			03-228-67
ADDITIONAL INFORMATION SON OF PATIENT 03-226 AND 03-227.			03-228-91
DATA REVISED 02-23-68			03-228-99

PATIENT 03-229	BORN 01-16-99	03-229-01
DECEASED		03-229-02
		03-229-02A
FEMALE		03-229-05
OTHER PERTINENT NOS.	AMBH	03-229-05A
	MIT 01-302	03-229-05B
DECEASED 08-03-66		03-229-06
DEATH CERT.NO.	AUTOPSY NONE	03-229-07
INTERMENT DUNCAN CEMETERY, DUNCAN, OKLAHOMA (REMOVAL)		03-229-08
CAUSES OF DEATH	CONGESTIVE HEART FAILURE,	03-229-09
	ARTERIOSCLEROTIC HEART DISEASE,	03-229-09A
	RADIUM POISONING (DEATH CERT.)	03-229-09B
SOURCE OF CASE	REFERRED BY DR. L. PETERSON, MAYO CLINIC	03-229-10
EXPOSURE	THERAPEUTIC--INJECTION 05	03-229-12
SOURCE PROBABLY RECEIVED RADIUM CHLORIDE BY INTRAVENOUS INJECTION		03-229-13
ABOUT 1928 FOR PSORIASIS.		03-229-13A
FAMILY HISTORY		03-229-15
NOT MARRIED		03-229-15A
MEDICAL HISTORY		03-229-20
PATIENT WAS KNOWN TO HAVE RECEIVED RADIUM IN OKLAHOMA CITY FROM		03-229-20
A PROMINENT PHYSICIAN WHO USED RADIUM IN HIS PRACTICE.		03-229-20A
		03-229-20B
		03-229-20C
IN 1942 THE PATIENT SUSTAINED MULTIPLE PATHOLOGICAL FRACTURES.		03-229-20D
IN 1942 THE PATIENT FRACTURED THE NECK OF THE LEFT FEMUR. THIS		03-229-20E
WAS PINNED AND REPINNED. ON 09-05-54 PATIENT FELL AND FRACTURED		03-229-20F
THE RIGHT FEMUR, WHICH WAS REPINNED ON SEVERAL OCCASIONS AND BONE		03-229-20G
GRAFTS INSERTED. A CHRONIC OSTEOMYELITIS DEVELOPED AND WAS		03-229-20H
TREATED UNSUCCESSFULLY. THE RIGHT LEG WAS AMPUTATED AT THE HIP		03-229-20I
IN 1956. DURING THE PAST 6 TO 8 YEARS THE PATIENT SUFFERED A		03-229-20J
FRACTURE OF THE RIGHT ULNA INCURRED WHILE THE PATIENT WAS EXTENDING		03-229-20K
HER HAND BEHIND HER BACK. THE ULNA, ALTHOUGH IT WAS PINNED		03-229-20L
ON SEVERAL OCCASIONS, HAS NOT UNITED. ON 04-28-64 THE PATIENT		03-229-20M
FRACTURED THE NECK OF HER LEFT FEMUR WHILE STEPPING FROM A WHEEL-		03-229-20N
CHAIR TO THE BED. NON-UNION HAS PERSISTED. PATIENT WAS SEEN AT		03-229-20O
MAYO CLINIC AND REFERRED TO DR. R.J. HASTERLIK AT U OF CHICAGO		03-229-20P
WHEN RADIOGRAPHS DEMONSTRATED CHANGES TYPICAL OF RADIUM DEPOSITION.		03-229-20Q
PHYSICAL EXAMINATION DEMONSTRATED ABSENCE OF THE RIGHT LEG.		03-229-20R
THE RIGHT ARM DEMONSTRATED THAT THE PROXIMAL PORTION OF THE ULNA		03-229-20S
WAS DISPLACED COMPLETELY FROM THE HUMERAL CONDYLE. (09-08-64)		03-229-20T

GAMMA-RAY MEASUREMENTS			03-229-25
09-11-64	RAB,RAC	FIELD MEASUREMENT	03-229-25A
CEM			
COMPUTED TOTAL-BODY RADIUM			03-229-27
09-11-64		3.0 UCI TOTAL	03-229-27A
X-RAY EXAMINATION			03-229-30
SPECIAL VIEWS--SINUSES AND MASTOID AND LAMINAGRAMS			03-229-30A
09-08-64,09-10-64	U OF C CLINICS UNIT NO.		03-229-30B
EROSION OF WALLS OF FRONTAL SINUSES. BILATERAL DESTRUCTION OF			03-229-30C
MASTOID AIR CELLS TYPICAL OF RADIUM DESTRUCTION, LEFT MASTOID			03-229-30D
AIR CELLS APPEAR TO BE REPLACED BY SOFT TISSUE SUCH AS SQUAMOUS			03-229-30E
CELL CARCINOMA.			03-229-30F
CLINICAL LABORATORY FINDINGS			03-229-40
09-08-64	HG 10.8 HTC 34 RBC		03-229-40A
WBC 13,000 DIFF.			03-229-40B
PLATELETS 151,800, RETICS 1.9			03-229-40C
OTHER PROCEDURES	SERUM CALCIUM 8.8, 9.3 MG PERCENT,		03-229-40D
SERUM PHOSPHATE 2.6, 3.7, 3.8 MG PERCENT			03-229-40E
ALKALINE PHOSPHATASE 12.5 UNITS, ACID PHOSPHATASE 4.0 UNITS			03-229-40F
2134 -4722.1 ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE			03-229-66
ADDITIONAL INFORMATION	R.D. EVANS HAS CADAVER.		03-229-91
DATA REVISED 11-14-68			03-229-99

PATIENT 03-230	BORN 07-01-99	03-230-01
		03-230-02
		03-230-03
		03-230-05
FEMALE		
OTHER PERTINENT NOS.	AMBH CASE 116	03-230-05A 03-230-05B
SOURCE OF CASE	REFERRED BY DR. ROBERT POTTER	03-230-10
LITERATURE CITATION		03-230-11
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 116.		03-230-11A
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 116.		03-230-11B
EXPOSURE	THERAPEUTIC--INJECTION 05	03-230-12
SOURCE IN MARCH 1927 AT AGE 28 YEARS, PATIENT RECEIVED 12 INJECTIONS RA-226 CL (120 UG) FOR A POST PARTUM DEPRESSION. AT AGE 34 YEARS AGAIN GIVEN RA (40 UG) FOR A SECOND DEPRESSION. RA SOURCE--DR. M. S , CHICAGO.		03-230-13 03-230-13A 03-230-13B 03-230-13C
FAMILY HISTORY		03-230-15
MARRIED 1919	PARA 7 GRAVIDA 5	03-230-15A
HUSBAND DECEASED 1955		03-230-15B
CHILDREN	MALE 07-24-20 L W	03-230-16
	MALE 01-24-23 L W	03-230-16A
	MALE 01-14-27 L W	03-230-16B
	MISCARRIAGE	03-230-16C
	ABORTION	03-230-16D
	FEMALE 07-07-33 L W	03-230-16E
	MALE 09-22-40 L W	03-230-16F
MEDICAL HISTORY		03-230-20
PATIENT HAD NO DIFFICULTIES UNTIL 1949 (21 YEARS AFTER FIRST RA INJECTIONS) WHEN SHE BEGAN TO NOTICE A PULLING SENSATION IN RIGHT GROIN AFTER STRENUOUS WALKING. PAIN AND DISABILITY INCREASED AND WAS ACCOMPANIED BY STIFFNESS AND PAIN IN RIGHT HIP AND KNEE JOINTS. NO HISTORY OF TRAUMA, ETC. PATIENT CONSULTED DR. HAROLD SOFIELD, IN JUNE 1950. DR. ROBERT POTTER, RADIOLOGIST, , WHO VIEWED THE RADIOGRAPHS THOUGHT THE ASEPTIC NECROSIS OF THE HEAD OF RIGHT FEMUR WAS MOST SUGGESTIVE OF RA POISONING AND THE PATIENT WAS REFERRED TO ANL.		03-230-20A 03-230-20B 03-230-20C 03-230-20D 03-230-20E 03-230-20F 03-230-20G 03-230-20H 03-230-20I 03-230-20J 03-230-20K 03-230-20L 03-230-20M 03-230-20N 03-230-20O 03-230-20P 03-230-20Q
ILLNESSES AND SURGERY--1948 MENOPAUSE, TREATED WITH SEDATIVES. 1951 BONE GRAFT, RIGHT FEMORAL HEAD. 1954 PROSTHESIS, LEFT FEMORAL HEAD. 1957 PROSTHESIS IN RIGHT FEMORAL HEAD BECAUSE OF BREAKDOWN. PATIENT USES CRUTCH ON LEFT SIDE SINCE 1957. TEETH ALL EXTRACTED BY 1934 BECAUSE LOOSE, WEARS DENTURES. PATIENT NOW HAS PAIN AND SLIGHT SWELLING, MEDIAL MALLEOLUS, LEFT ANKLE AND PAIN IN FOURTH AND FIFTH TOES OF LEFT FOOT. INQUIRY BY SYSTEMS NEGATIVE. (04-01-65)		

GAMMA-RAY MEASUREMENTS						03-230-25
04-01-65	RAB,RAC	0.134 UCI	HGS 1 TILTING CHAIR	CEM		03-230-25B
04-01-65	RAB,RAC	0.170 UCI	HGS 1 7-CRYSTAL-POS	CEM		03-230-25C
COMPUTED TOTAL-BODY RADIUM						03-230-27
11-17-50	0.21 UCI	0.50 UCI	0.70 UCI TOTAL	LOONEY B		03-230-27A
04-01-65	0.134 UCI		0.432 UCI TOTAL	0.31		03-230-27B
04-01-65	0.170 UCI		0.549 UCI TOTAL	0.31		03-230-27C
X-RAY EXAMINATION						03-230-30
PARTIAL SKELETAL SURVEY						03-230-30A
11-17-50	U OF CHICAGO CLINICS UNIT NO.					03-230-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.					SCORE 6	03-230-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM AND LEFT						03-230-30D
FEMUR. SLIGHT COARSENING OF THE TRABECULATION PATTERN OF THE LEFT						03-230-30E
CLAVICLE AND RIGHT TIBIA. ASEPTIC NECROSIS OF THE HEAD OF THE						03-230-30F
RIGHT FEMUR.						03-230-30G
COMPLETE SKELETAL SURVEY						03-230-31A
03-31-54	U OF CHICAGO CLINICS UNIT NO.					03-230-31B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.					SCORE 12	03-230-31C
PPF ADVANCED CHANGES ON BASIS OF ASEPTIC NECROSIS OF HEADS OF						03-230-31D
BOTH FEMURS. MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM						03-230-31E
AND THE RIGHT AND LEFT TIBIA AND FIBULA. SURGICAL RECONSTRUCTIVE						03-230-31F
PROCEDURE OF THE HEAD AND NECK OF THE RIGHT FEMUR. ASEPTIC NECRO-						03-230-31G
SIS OF THE HEAD OF THE LEFT FEMUR.						03-230-31H
COMPLETE SKELETAL SURVEY						03-230-32A
04-01-65	ANL	X-RAY NO. R-238A	LOC. ANL			03-230-32B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.					SCORE 15	03-230-32C
PPF AREAS OF BONE RESORPTION IN THE CALVARIUM, AND RIGHT TARSAL						03-230-32D
BONES. COARSENING OF THE TRABECULAR PATTERN OF THE RIGHT AND						03-230-32E
LEFT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA. RESECTION						03-230-32F
OF THE HEADS OF BOTH FEMORA WITH REPLACEMENT WITH PROSTHESES.						03-230-32G
CLINICAL LABORATORY FINDINGS						03-230-40
04-01-65	HG 15.9	HTC 47	RBC			03-230-40A
WBC 9800	DIFF. P 56	ST	L 40	M 2	E 1 B 1	03-230-40B
23513-516	BONE GRAFT, HEAD OF FEMUR (RIGHT)					03-230-66
23513-544	INSERTION OF PROSTHESIS, HEAD OF FEMUR (RIGHT,LEFT)					03-230-66A
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (RIGHT,LEFT)					03-230-66B
DATA REVISED 05-01-68						03-230-99

PATIENT 03-231 FEMALE	BORN	83	03-231-01 03-231-05
SOURCE OF CASE	KNOWN FROM LITERATURE		03-231-10
LITERATURE CITATION			03-231-11 03-231-11A
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 115.			
EXPOSURE	THERAPEUTIC--PROBABLY INJECTION	05	03-231-12
SOURCE	PATIENT OF DR. F J		03-231-13
	IN 1939 PATIENT RECEIVED INTRA-		03-231-13A
	MUSCULAR INJECTIONS OF RA CL IN LOWER BACK FOR ARTHRITIS OF		03-231-13B
	LOWER SPINE. TOTAL OF 10 TO 15 INJECTIONS GIVEN, QUANTITY OF RA		03-231-13C
	PER INJECTION NOT KNOWN.		
COMPUTED TOTAL-BODY RADIUM			03-231-27
1952	0.06 UCI TOTAL	LOONEY A	03-231-27A
X-RAY EXAMINATION			03-231-30
COMPLETE SKELETAL SURVEY			03-231-30A
03-18-52	COLUMBIA HOSP., MILWAUKEE, WISC.		03-231-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 0		03-231-30C
PPF OSTEOPOROSIS OF THE LUMBAR SPINE.			03-231-30D
CLINICAL LABORATORY FINDINGS			03-231-40
SERUM CALCIUM 4.46 ME/LITER, SERUM PHOSPHORUS 2.6 MG PERCENT,			03-231-40C
ACID PHOSPHATASE 0.63 KA UNITS, ALKALINE PHOSPHATASE 0.42 KA UNITS			03-231-40D
TOTAL PROTEINS 7.45 G PERCENT			03-231-40E
223 -798	OSTEOPOROSIS, SENILE, OF LUMBAR SPINE		03-231-67

PATIENT 03-232	BORN 03-04-98	03-232-01
DECEASED		03-232-02
		03-232-02A
FEMALE		03-232-05
OTHER PERTINENT NOS.	AMBH	03-232-05A
	PRES.-ST. LUKE'S AUTOPSY	03-232-05B
	OF 1957	
DECEASED 07-10-57		03-232-06
DEATH CERT.NO.	AUTOPSY YES	03-232-07
INTERMENT	OAK WOODS CEMETERY, CHICAGO, ILL.	03-232-08
CAUSES OF DEATH	INTRACRANIAL CARCINOMA,	03-232-09
	CARCINOMA OF EXTERNAL AUDITORY CANAL (DEATH CERT.)	03-232-09A
	CARCINOMA OF LEFT MASTOID EXTENDING INTO MIDDLE EAR,	03-232-09B
	EXTERNAL AUDITORY CANAL AND MIDDLE CRANIAL FOSSA (ACTUAL)	03-232-09C
SOURCE OF CASE	SYMPTOMS	03-232-10
LITERATURE CITATION		03-232-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-232-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-232-11B
EXPOSURE	THERAPEUTIC--INJECTION (05)	03-232-12
SOURCE NOT DEFINITELY KNOWN. HOWEVER, AT ONE TIME SHE WAS PATIENT		03-232-13
OF DR. M. S. , WHO WAS PROBABLY SOURCE OF RADIUM.		03-232-13A
PATIENT REMEMBERED TAKING INJECTIONS FROM HIM AT AGE 19 FOR		03-232-13B
DYSMENORRHEA.		03-232-13C
FAMILY HISTORY		03-232-15
NEVER MARRIED		03-232-15A
MEDICAL HISTORY		03-232-20
PATIENT WAS FIRST SEEN AT THE U OF CHICAGO CLINICS 06-56 BECAUSE		03-232-20A
OF SWELLING AND PAIN BEHIND THE LEFT EAR AND DRAINAGE OF YELLOW		03-232-20B
PURULENT MATERIAL FROM THE EAR OF 5 YEARS DURATION. A BIOPSY AND		03-232-20C
SIMPLE MASTOIDECTOMY DEMONSTRATED A TUMOR MASS IN THE LEFT MAS-		03-232-20D
TOID. ON HISTOLOGIC EXAMINATION THIS PROVED TO BE A TRANSITIONAL		03-232-20E
CELL EPIDERMOID CARCINOMA. THE PATIENT AGAIN ENTERED THE HOSPI-		03-232-20F
TAL ON 04-01-57 WITH AN 18-LB. WEIGHT LOSS, SWELLING IN THE LEFT		03-232-20G
PAROTID AREA, AND STRABISMUS, DIPLOPIA, AND PROPTOSIS OF THE LEFT		03-232-20H
EYE SINCE 12-56. THE PATIENT WAS REMOVED FROM THE HOSPITAL SO NO		03-232-20I
FURTHER THERAPY WAS CARRIED OUT. THE PATIENT DIED ON 07-17-57 AT		03-232-20J
ST. LUKE'S HOSPITAL, CHICAGO, AND AUTOPSY DONE.		03-232-20K
TOTAL-BODY COMPUTED FROM BREATH RADON		03-232-28
07-56	3.300 UCI 4.700 UCI TOTAL. HFL	03-232-28A

CLINICAL LABORATORY FINDINGS

05-21-56	HG 13.1	HTC	RBC	03-232-40
WBC 4900				03-232-40A
				03-232-40B
07-09-57	HG 10.5	HTC 33	RBC	03-232-41A
WBC 9600	DIFF. P 86	ST	L 7 M 4 E 3 B	03-232-41B
04-03-57	HG 10.9		RBC 3.40	03-232-42A
WBC 11,500	DIFF. P 84	ST	L 8 M 7 E 1 B 0	03-232-42B
CALCIUM 9.4 MG PER CENT,	PHOSPHORUS 4.1 MG PERCENT,			03-232-42C
ALKALINE PHOSPHATASE 3.9 UNITS PERCENT				03-232-42D
MALIGNANT TUMOR	CARCINOMA, LEFT MASTOID 1956			03-232-60
2134 -814	EPIDERMOID CARCINOMA OF THE MASTOID (LEFT)			03-232-66
AUTOPSY REPORT AT ANL				03-232-70
PRIMARY TUMOR SLIDE AT ANL				03-232-71
DATA REVISED 05-08-68				03-232-99

PATIENT 03-233 DECEASED	BORN 08-03-79	03-233-01 03-233-02 03-233-02A 03-233-03 03-233-05
FEMALE		
OTHER PERTINENT NOS.	AMBH CASE KB	03-233-05A 03-233-05B
LITERATURE CITATION LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE KB.		03-233-11 03-233-11A
EXPOSURE	THERAPEUTIC--INJECTION 05	03-233-12
SOURCE PATIENT RECEIVED 12 INJECTIONS RA CL (PROBABLY 120 UCI) FROM HER PHYSICIAN IN 1922 AS A TONIC.		03-233-13 03-233-13A
MEDICAL HISTORY IN 1944 PATIENT DEVELOPED ARTHRITIS, WHICH GRADUALLY INVOLVED RIGHT HIP JOINT AND BOTH KNEES AND BY 1946 WAS BEDRIDDEN MOST OF THE TIME AS RESULT OF THE JOINT CHANGES.		03-233-20 03-233-20A 03-233-20B 03-233-20C
COMPUTED TOTAL-BODY RADIUM 1947	EST. 2-10 UCI TOTAL LOONEY A	03-233-28 03-233-28A
X-RAY EXAMINATION		03-233-30
PARTIAL SKELETAL SURVEY 04-23-46 DR. GEORGE COLEMAN (DR. ROBERT POTTER'S OFFICE) ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. PPF ADVANCED CHANGES ON THE BASIS OF ASEPTIC NECROSIS OF THE FEMUR AND ASTRAGALUS WITH PATHOLOGICAL FRACTURE OF THE LEFT PATELLA. ASEPTIC NECROSIS OF THE HEAD OF THE RIGHT FEMUR WITH SECONDARY HYPERTROPHIC OSTEOARTHRITIC CHANGES.		03-233-30A 03-233-30B 03-233-30C 03-233-30D 03-233-30E 03-233-30F 03-233-30G
PARTIAL SKELETAL SURVEY 09-06-46 DR. GEORGE COLEMAN (DR. ROBERT POTTER'S OFFICE) ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. PPF MULTIPLE AREAS OF BONE RESORPTION OF THE PATELLA AND ASEPTIC NECROSIS OF THE HEAD OF THE RIGHT FEMUR.		03-233-31A 03-233-31B 03-233-31C 03-233-31D 03-233-31E
PARTIAL SKELETAL SURVEY 04-47 U OF CHICAGO CLINICS UNIT NO. ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. PPF MARKED ASEPTIC NECROSIS OF HEAD OF RIGHT FEMUR, MODERATE NECROSIS OF LEFT ASTRAGALUS, COLLAPSE OF VERTEBRAL BODIES T-8 AND T-12, FRAGMENTATION OF LEFT PATELLA, MOTTLING OF HEAD OF FEMUR AND MULTIPLE AREAS OF BONE NECROSIS WITH COARSENING OF THE TRA- BECULATION PATTERN.		03-233-32A 03-233-32B 03-233-32C 03-233-32D 03-233-32E 03-233-32F 03-233-32G 03-233-32H

CLINICAL LABORATORY FINDINGS

04-17-47 HG 12.6 HTC RBC 3.89
WBC 9650 DIFF. P 75 ST L 20 M 3 E 2 B 0

03-233-40
03-233-40A
03-233-40B

OTHER ANALYSES

04-18-47 STERNAL MARROW BIOPSY DR. MATTHEW H. BLOCK
THE MARROW IS ABSOLUTELY ATROPHIC, EVEN CONSIDERING THE PATIENT'S
AGE. THERE IS ONLY ONE VERY SMALL AREA OF ERYTHROPOIESIS. THE
REST OF THE MARROW IS MADE UP OF FAT CELLS AND EXTENDED VESSELS
WITH A GREAT DEAL OF ERYTHROCYTIC EXTRAVASATION, SOME OF WHICH
MAY BE DUE TO HANDLING DURING STERNAL PUNCTURE. OCCASIONAL PERI-
PHERAL BLOOD CELLS ARE SEEN. THERE IS NO SIGN OF EXCESS DESTRUC-
TION, OF GEL FORMATION (SEROUS FAT ATROPHY) OR OF FIBROSIS.

03-233-55
03-233-55A
03-233-55B
03-233-55C
03-233-55D
03-233-55E
03-233-55F
03-233-55G
03-233-55H

23513-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT,RIGHT)

03-233-66

236 -416 FRACTURE OF PATELLA (LEFT)

03-233-66A

2392 -4722.1 ASEPTIC NECROSIS OF THE ASTRAGALUS (LEFT)

03-233-66B

400 -533 HYPERTENSIVE CARDIOVASCULAR DISEASE

03-233-67

ADDITIONAL INFORMATION

WIFE OF PATIENT 03-222.

03-233-91

DATA REVISED 05-13-68

03-233-99

PATIENT 03-234	BORN 07-10-90	03-234-01
DECEASED		03-234-02
		03-234-02A
FEMALE		03-234-05
OTHER PERTINENT NOS.	PRESBYTERIAN-ST. LUKE'S	03-234-05A
DECEASED 02-01-65		03-234-06
DEATH CERT.NO.	AUTOPSY YES	03-234-07
INTERMENT	ST. LUCAS CEMETERY, CHICAGO, ILLINOIS	03-234-08
CAUSES OF DEATH	FIBROSARCOMA OF RIGHT FEMUR WITH METASTASES	03-234-09
SOURCE OF CASE	REFERRED BY RELATIVE-DR. RICHARD BUENGER	03-234-10
	SYMPTOMS	03-234-10A
LITERATURE CITATION		03-234-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-234-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-234-11B
EXPOSURE	THERAPEUTIC--INJECTION 05	03-234-12
SOURCE AT AGE 15 PATIENT STATED THAT SHE HAD RHEUMATISM FOR ONE		03-234-13
YEAR AND WAS GIVEN MULTIPLE INJECTIONS OF RADIUM SALTS BY		03-234-13A
DR. F. J.		03-234-13B
FAMILY HISTORY	NEVER MARRIED	03-234-15
MEDICAL HISTORY		03-234-20
THIS 74-YEAR OLD FEMALE WAS ADMITTED TO PRESBYTERIAN-ST. LUKE'S		03-234-20A
HOSP., CHICAGO, ILLINOIS, ON 08-22-64 BECAUSE OF PROGRESSIVE		03-234-20B
PAIN IN THE RIGHT HIP. IN 03-64 THE PATIENT HAD HAD A HIP		03-234-20C
PROSTHESIS INSERTED ON THE RIGHT BECAUSE OF A FRACTURE OF THE		03-234-20E
RIGHT FEMORAL NECK. SHE HAD DONE WELL UNTIL APPROXIMATELY 2 WEEKS		03-234-20F
PRIOR TO ADMISSION WHEN SHE NOTED INCREASED PAIN AND DECREASED		03-234-20G
MOBILITY OF THE RIGHT HIP. DURING THE FIRST WEEK OF 10-64 WHILE		03-234-20H
THE PATIENT WAS PLACED ON A CART SHE NOTED SHARP INCREASE IN		03-234-20I
RIGHT HIP BONE AND A RADIOGRAPH DONE AT THAT TIME REVEALED A DEF-		03-234-20J
INITE BREAK IN THE FEMORAL CORTEX WITH MARKED DESTRUCTION OF		03-234-20K
ADJACENT CORTICAL BONE RAISING THE POSSIBILITY OF A TUMOR. ON		03-234-20L
10-12-64 THE PROSTHESIS WAS REMOVED, THE AFFECTED AREA BIOPSIED		03-234-20M
AND THE PATHOLOGICAL DIAGNOSIS OF FIBROSARCOMA OBTAINED. BECAUSE		03-234-20N
THE SKELETAL RADIOGRAPHS SHOWED CHANGES WHICH LOOKED SUSPICIOUSLY		03-234-20O
LIKE THOSE RELATED TO THE PRESENCE OF RADIUM IN THE SKELETON, THE		03-234-20P
PATIENT WAS REFERRED TO OUR GROUP FOR DETERMINATION OF THE PRE-		03-234-20Q
SENCE OF RADIUM. GAMMA-RAY SPECTROMETRY DONE BY OUR GROUP AT THE		03-234-20R
HOSPITAL IDENTIFIED THE PRESENCE OF RA-226 AND QUANTITATED THE		03-234-20S
AMOUNT IN THE SKELETON. FURTHER QUESTIONING OF THE PATIENT THEN		03-234-20T
REVEALED THAT AT THE AGE OF 15 SHE WAS SAID TO HAVE HAD RHEUMA-		03-234-20U
TISM FOR ONE YEAR AND WAS GIVEN MULTIPLE INJECTIONS OF RADIUM		03-234-20V
SALTS BY DR. F. J. THE PATIENT DIED ON 02-01-65 OF GEN-		03-234-20W
ERALIZED METASTATIC DISEASE. (02-65)		

GAMMA-RAY MEASUREMENTS					03-234-25
02-01-65	RAB,RAC	0.285 UCI	FIELD MEASUREMENT	CEM	03-234-25A
COMPUTED TOTAL-BODY RADIUM					03-234-27
02-01-65	0.285 UCI		0.920 UCI TOTAL	0.31	03-234-27A
X-RAY EXAMINATION					03-234-30
PARTIAL SKELETAL SURVEY					03-234-30A
02-03-60, 11-09-62, 03-07-64, 06-19-64	PRES.ST.LUKE'S	LOC. ANL			03-234-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 12				03-234-30C
PPF (ADVANCED CHANGES ON THE BASIS OF PATHOLOGICAL FRACTURE AND					03-234-30D
FIBROSARCOMA OF THE HEAD OF THE RIGHT FEMUR). ASEPTIC NECROSIS					03-234-30E
OF THE HEAD OF THE RIGHT HUMERUS AND HEAD OF THE LEFT FEMUR.					03-234-30F
MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, MANDIBLE,					03-234-30G
HEAD OF THE LEFT FEMUR, SHAFT OF RIGHT FEMUR. MULTIPLE AREAS OF					03-234-30H
BONE SCLEROSIS IN THE RIGHT FEMUR. PATHOLOGICAL FRACTURE THROUGH					03-234-30I
THE NECK OF THE RIGHT FEMUR IMMEDIATELY INFERIOR TO THE HEAD.					03-234-30J
CLINICAL LABORATORY FINDINGS					03-234-40
08-22-64	HG 12.8	HTC	RBC		03-234-40A
WBC 10,300 DIFF. P 66	ST 0	L 18	M 4	E 12 B 0	03-234-40B
B.U.N. 23 MG PERCENT, ALKALINE PHOSPHATASE NORMAL					03-234-40C
MALIGNANT TUMOR	FIBROSARCOMA, RIGHT FEMUR	1964			03-234-60
2301 -4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE HUMERUS (RIGHT)				03-234-66
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT)				03-234-66A
23514-870F	FIBROSARCOMA OF NECK OF FEMUR, METASTATIC (RIGHT)				03-234-66B
AUTOPSY REPORT AT ANL					03-234-70
PRIMARY TUMOR SLIDE AT ANL					03-234-72
DATA REVISED 03-06-68					03-234-99

PATIENT 03-235	BORN 10-09-00	03-235-01 03-235-02 03-235-03 03-235-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-235-05A
DECEASED 10-25-68 DEATH CERT.NO. INTERMENT	AUTOPSY YES	03-235-06 03-235-07 03-235-08
CAUSES OF DEATH	TERMINAL BRONCHOPNEUMONIA	03-235-09
SOURCE OF CASE	REFERRED BY DR. GEORGE TURNBULL, EVANSTON	03-235-10
LITERATURE CITATION		03-235-11
HASTERLIK, ET AL, AMER.J.OPHTH. 66,55 (JULY 1968).	03-235.	03-235-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-235-11B
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-235-11C
EXPOSURE	UNKNOWN 07	03-235-12
SOURCE	NOT KNOWN	03-235-13
FAMILY HISTORY		03-235-15
MARRIED 1928	PARA 0 GRAVIDA C	03-235-15A
MEDICAL HISTORY		03-235-20
IN 1962 PATIENT BEGAN TO COMPLAIN OF DULL OCCIPITAL PAIN WHICH		03-235-20A
RADIATED TO BOTH TEMPORAL AREAS. A DIAGNOSIS OF CERVICAL SPONDY-		03-235-20B
LITIS WAS MADE. THE PAIN PERSISTED AND EXTENDED ANTERIORLY TO		03-235-20C
INCLUDE THE PERIORBITAL AREAS. IN 11-64 DIPLOPIA SUDDENLY OC-		03-235-20D
CURRED. THE PATIENT WAS ADMITTED TO THE U OF CHICAGO CLINICS ON		03-235-20E
01-65. PHYSICAL EXAMINATION DEMONSTRATED A PARESIS OF THE RIGHT		03-235-20F
LATERAL RECTUS MUSCLE OF 10 PRISM DIOPTERS. HISTOLOGY INDICATED		03-235-20G
THAT THE PATIENT WAS TREATED AT PRESBYTERIAN HOSP. IN 1928 FOR		03-235-20H
INFERTILITY AND IT IS POSSIBLE THAT SHE RECEIVED RADIUM INJEC-		03-235-20I
TIONS AT THAT TIME. SKULL FILMS DEMONSTRATED A PACIFICATION OF		03-235-20J
SPHENOID SINUS WITH MARKED SCLEROSIS AND THICKENING OF ITS WALLS.		03-235-20K
TRANSPHENOIDAL BIOPSY OF THE SPHENOID MUCOSA WAS DONE IN 01-65		03-235-20L
AND DEMONSTRATED AN UNDIFFERENTIATED CARCINOMA OF THE SPHENOID		03-235-20M
SINUS. DURING 02 AND 03-65 PATIENT RECEIVED 6000 R CO-60		03-235-20N
GAMMA RADIATION TO THE SPHENOID SINUS THROUGH OPPOSING LATERAL		03-235-20O
PORTS. SUBSEQUENTLY, THE DEVIATION OF THE RIGHT EYE WAS MARKEDLY		03-235-20P
IMPROVED BUT WHEN THE PATIENT WAS LAST EXAMINED IN 03-68, SHE HAD		03-235-20Q
A PARALYSIS OF ALL OF THE EXTRA OCULAR MUSCLES OF THE RIGHT EYE		03-235-20R
AND COMPLETE BLINDNESS IN THAT EYE. DURING THE PAST 2 WEEKS SHE		03-235-20S
HAS HAD FREQUENT NOSE BLEEDS OF A SEROSANGUINOUS FLUID.(03-07-68)		03-235-20T
PATIENT DIED OF A TERMINAL BRONCHOPNEUMONIA ON 10-25-68.(12-04-68)		03-235-21A

GAMMA-RAY MEASUREMENTS					03-235-25
04-30-65	RAB,RAC	0.356 UCI	HGS 1 TILTING CHAIR	CEM	03-235-25A
04-30-65	RAB,RAC	0.400 UCI	HGS 1 7-CRYSTAL-POS	CEM	03-235-25B
COMPUTED TOTAL-BODY RADIUM					03-235-27
04-30-65	0.356 UCI		1.147 UCI TOTAL	0.31	03-235-27A
04-30-65	0.400 UCI		1.290 UCI TOTAL	0.31	03-235-27B
X-RAY EXAMINATION					03-235-30
SPECIAL VIEWS--LAMINAGRAPHY OF THE PETROUS PYRAMIDS					03-235-30A
01-27-65	U OF CHICAGO CLINICS NO.		LOC. U OF C		03-235-30B
NO ABNORMALITIES OF THE PETROUS PYRAMIDS NOR OF THE INTERNAL AUDITORY CANALS ARE DETECTED.					03-235-30C
					03-235-30D
SPECIAL VIEWS--LAMINAGRAPHY OF THE MASTOIDS					03-235-31A
02-06-65	U OF CHICAGO CLINICS NO.		LOC. U OF C		03-235-31B
DESTRUCTION OF THE MASTOID AIR CELLS ON THE RIGHT AS COMPARED WITH THE LEFT, PROBABLE RADIATION NECROSIS RATHER THAN TUMOR.					03-235-31C
					03-235-31D
COMPLETE SKELETAL SURVEY					03-235-32A
04-30-65	ANL	X-RAY NO. R-239	LOC. ANL		03-235-32B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.					03-235-32C
PPF ANAPLASTIC CARCINOMA OF SPHENOID SINUS. EARLY INFARCTION OF RIGHT HUMERAL HEAD.					03-235-32D
					03-235-32E
CLINICAL LABORATORY FINDINGS					03-235-40
01-12-65	HG 12.8	HTC 39	RBC		03-235-40A
WBC 6300	DIFF. P 79	ST	L 18 M 3 E 0 B 0		03-235-40B
CALCIUM 10.6 MG PERCENT, PHOSPHORUS 3.8 MG PERCENT,					03-235-40C
ALKALINE PHOSPHATASE 6.2 UNITS PERCENT					03-235-40D
					03-235-41A
03-15-65	HG 12.4	HTC 39	RBC		03-235-41B
WBC 8200	DIFF. P 77	ST	19 M 2 E 2 B 0		
MALIGNANT TUMOR CARCINOMA, SPHENOID SINUS 1965					03-235-60
324 -814 EPIDERMOID CARCINOMA OF THE SPHENOID SINUS					03-235-66
661 -12 APPENDECTOMY					03-235-67
AUTOPSY REPORT NOT AVAILABLE AS OF 12-26-68					03-235-70
PRIMARY TUMOR SLIDE AT ACRH					03-235-71
AUTOPSY SLIDE AT EVANSTON HOSP., EVANSTON, ILL.					03-235-72
DATA REVISED 12-03-68					03-235-99

PATIENT 03-236	BORN 02-03-80	03-236-01
DECEASED		03-236-02
		03-236-02A
		03-236-03
		03-236-05
FEMALE		
OTHER PERTINENT NOS.	CASE 101	03-236-05A
	CASE III	03-236-05B
DECEASED 09-27-61		03-236-06
DEATH CERT.NO.	AUTOPSY NONE	03-236-07
INTERMENT	FOREST HOME CEMETERY, CHICAGO, ILL.	03-236-08
CAUSES OF DEATH	ARTERIOSCLEROTIC HEART DISEASE	03-236-09
SOURCE OF CASE	RECORDS OF DR. F J	03-236-10
LITERATURE CITATION		03-236-11
BARKER, ET AL, AM.J.ROENT. 24,418 (CCT. 1930). CASE III.		03-236-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 101.		03-236-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 101.		03-236-11C
EXPOSURE	THERAPEUTIC--INJECTION (05)	03-236-12
SOURCE IN JUNE 1918, AT AGE OF 37 YEARS, PATIENT HAD EPISODE OF		03-236-13
ARTHRITIS OF WRISTS, SHOULDERS, KNEES. RECURRENT EPISODES		03-236-13A
OCCURRED. IN 1926-1927 DR. F J OF CHICAGO GAVE PATIENT		03-236-13B
RADIUM INJECTIONS I.M. HAS HAD CONTINUING DIFFICULTIES FROM		03-236-13C
ARTHRITIS.		03-236-13D
FAMILY HISTORY	NOT KNOWN	03-236-15
MEDICAL HISTORY		03-236-20
INTERMITTENT ARTHRITIS THROUGH THE YEARS. CHOLECYSTECTOMY 1930.		03-236-20A
PEPTIC ULCER 1951. PHYSICAL EXAMINATION (1951)--BP 180/90. MOST		03-236-20B
OF TEETH ABSENT. SOME GENERALIZED CARDIAC ENLARGEMENT. LIMITATION		03-236-20C
OF MOTION OF JOINTS OF HANDS AND ANKLES. PATIENT HAD BEEN UNDER		03-236-20D
CARE OF DR. EDWIN N. IRONS,		03-236-20E
HOSPITALIZED IN THE PAST AT PRESBYTERIAN-ST. LUKE'S HOSP.,		03-236-20F
CHICAGO (AT THE TIME IT WAS PRESBYTERIAN HOSP., WHERE		03-236-20G
WAS THE SUPERINTENDENT). FROM 1956 ON THE PATIENT		03-236-20H
SUFFERED FROM SEVERE CARDIAC DISEASE SECONDARY TO ARTERIAL AND		03-236-20I
ARTERIOSCLEROSIS AND DIED ON 09-27-61 OF CARDIAC DISEASE. NO		03-236-20J
EVIDENCE OF MALIGNANCY ALTHOUGH AN AUTOPSY WAS NOT DONE. PATIENT		03-236-20K
HAD BEEN UNDER THE CARE OF DR. LEON P. COMSTOCK, JR.,		03-236-20L
		03-236-20M

COMPUTED TOTAL-BODY RADIUM				03-236-27
09-20-51	0.10 UCI	0.41 UCI	0.50 UCI TOTAL LOONEY C	03-236-27A
CLINICAL LABORATORY FINDINGS				03-236-40
09-20-51	HG 13	HTC 43	RBC 4.41	03-236-40A
WBC 4900	DIFF. P 55	ST 1	L 39 M 5 E 0 B 0 0	03-236-40B
SED. RATE 45 MM	2 LARGE PLATELETS SEEN			03-236-40C
CALCIUM 9.8 MG	PHOSPHORUS 3.1 MG	ALKALINE PHOSPHATASE 3.2 UNITS		03-236-40D
410 -516	ARTERIOSCLEROTIC HEART DISEASE			03-236-67
651 -951	DUODENAL ULCER			03-236-67A
687 -12	CHOLECYSTECTOMY, COMPLETE			03-236-67B
DATA REVISED 02-13-68				03-236-99

PATIENT 03-237	BORN 04-27-90	03-237-01
		03-237-02
FEMALE		03-237-05
SOURCE OF CASE	SEARCH BY CEM	03-237-10
EXPOSURE	THERAPEUTIC--ORAL (04)	03-237-12
SOURCE TOOK RADIUM CAPSULES 1923-1926, WHICH HAD BEEN PREPARED BY		03-237-13
DR. B C , A TOTAL OF ABOUT 500 CAPSULES. NONE TAKEN		03-237-13A
SINCE 1926. WORE RADIUM COLLAR DURING SAME PERIOD. NEVER RECEIVED		03-237-13B
INJECTIONS OF RADIUM.		03-237-13C
FAMILY HISTORY	NEVER MARRIED	03-237-15
MEDICAL HISTORY		03-237-20
NO SURGERY. NO SERIOUS ILLNESSES. FRACTURE OF FIFTH FINGER AND		03-237-20A
LEFT RIB ABOUT 1931. INQUIRY BY SYSTEMS NEGATIVE. TEETH--DENTURES		03-237-20B
SINCE 1930, EXTRACTIONS BECAUSE OF PYORRHEA.		03-237-20C
GAMMA-RAY MEASUREMENTS		03-237-25
02-28-61 RAB,RAC	0.001 UCI VA HOSP., LA, CALIF. CEM	03-237-25A
COMPUTED TOTAL-BODY RADIUM		03-237-27
02-28-61 0.001 UCI	0.003 UCI TOTAL 0.31	03-237-27A
X-RAY EXAMINATION	NOT DONE	03-237-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-237-40
229 -416 FRACTURE OF RIBS (LEFT)		03-237-67
234X -416 FRACTURE OF THE FIFTH FINGER		03-237-67A
DATA REVISED 02-13-68		03-237-99

PATIENT	03-238	BORN	83	03-238-01
	DECEASED			03-238-02
	MALE			03-238-05
OTHER PERTINENT NOS.	AMBH			03-238-05A
	CASE 107			03-238-05B
DECEASED 1957				03-238-06
DEATH CERT.NO.		AUTOPSY	NONE	03-238-07
CAUSES OF DEATH	CORONARY OCCLUSION WITH MYOCARDIAL INFARCTION			03-238-09
SOURCE OF CASE	DR. F J RECORDS			03-238-10
LITERATURE CITATION				03-238-11
	LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 107.			03-238-11A
	HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY			03-238-11B
	11,149, GENEVA (1956).			03-238-11C
EXPOSURE	THERAPEUTIC--PROB. INJECTION (05)			03-238-12
SOURCE	PATIENT RECEIVED AN UNKNOWN AMOLNT OF RADIUM IN 1926 AT THE			03-238-13
	AGE OF 43 YEARS, NOT KNOWN IF IV OR IM, FROM DR. F J .			03-238-13A
FAMILY HISTORY	NOT KNOWN			03-238-15
MEDICAL HISTORY				03-238-20
	AT AGE 58 PATIENT HAD ARTHRITIS IN RIGHT SHOULDER, FEET AND			03-238-20A
	KNEES, WITH INCREASING DISABILITY AT THESE SITES. PATIENT DIED			03-238-20B
	ABOUT 1957 OF MYOCARDIAL INFARCTION. NO EVIDENCE OF BONE OR			03-238-20C
	OTHER TUMOR. PHYSICIAN--DR. J.B. PEARSON,			03-238-20D
				03-238-20E
COMPUTED TOTAL-BODY RADIUM				03-238-27
10-04-51	4.40 UCI	9.50 UCI	13.9 UCI TOTAL LOONEY A	03-238-27A
CLINICAL LABORATORY FINDINGS				03-238-40
10-04-51	HG 11.0	HTC 37	RBC 3.8	03-238-40A
WBC 7000	DIFF. P 66	ST	L 29 M 2 E 3 B 0 C	03-238-40B
SERUM CA--8.6 MG	SERUM P--3.4 MG	ALK. PHOSPHATASE--5.3 UNITS		03-238-40C
430 -516.7	MYOCARDIAL INFARCTION			03-238-67
DATA REVISED	02-13-68			03-238-99

PATIENT 03-239	BORN	84	03-239-01
FEMALE			03-239-02
			03-239-05
OTHER PERTINENT NOS.	CASE 108		03-239-05A
SOURCE OF CASE	SEARCH BY LOONEY		03-239-10
LITERATURE CITATION			03-239-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 108.			03-239-11A
EXPOSURE	UNKNOWN (C7)		03-239-12
SOURCE UNKNOWN, PROBABLY FROM A PHYSICIAN.			03-239-13
MEDICAL HISTORY			03-239-20
PATIENT DOES NOT REMEMBER RECEIVING RADIUM. IN THE 1940S, PATIENT			03-239-20A
HAD RESECTION OF THE MANDIBLE FOR NECROSIS. SINCE THEN DEVELOPED			03-239-20B
SEVERE DEGENERATIVE CHANGES IN BOTH HIPS, WHICH MADE HER AN			03-239-20C
INVALID WHEN LAST SEEN IN 1951.			03-239-20D
COMPUTED TOTAL-BODY RADIUM			03-239-27
1951 4.40 UCI 6.90 UCI 11.30 UCI TOTAL LOONEY A			03-239-11A
X-RAY EXAMINATION			03-239-30
1951			03-239-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.			03-239-30C
219 -4722.1 ASEPTIC NECROSIS OF THE MANDIBLE			03-239-66
23513-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT,RIGHT)			03-239-66A
DATA REVISED 08-21-68			03-239-99

PATIENT 03-240	BCRN	18	03-240-01
DECEASED			03-240-02
			03-240-02A
			03-240-03
OTHER PERTINENT NOS.	LENNOX HILL HOSP. JOURNAL		03-240-05A
	LENNOX HILL HOSP.		03-240-05B
DECEASED 01-13-55			03-240-06
SOURCE OF CASE	REFERRED AFTER DEATH BY RELATIVE		03-240-10
LITERATURE CITATION			03-240-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-240-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-240-11B
EXPOSURE	THERAPEUTIC--PROBABLY INJECTION	05	03-240-12
SOURCE	PATIENT WAS A DAUGHTER OF MR. S.C. OF CHICAGO WHO		03-240-13
	HAD BEEN ADMINISTERED RADIUM BY DR. F J. MR. C. WAS		03-240-13A
	MEASURED AT ANL, SITE B, IN ABOUT 1952 AND WAS DEMONSTRATED TO		03-240-13B
	CONTAIN A SIGNIFICANT CONTENT OF RADIUM. THE PROBABILITY EXISTS		03-240-13C
	AND WAS SO STATED BY REFERRING RELATIVE THAT THE PATIENT HAD		03-240-13D
	ALSO RECEIVED RADIUM DURING THE SAME PERIOD FROM DR. F J		03-240-13E
	A TEST WAS DONE WITH A GEIGER-MULLER COUNTER AT THE LENNOX HILL		03-240-13F
	HOSP., NEW YORK CITY, WHICH DEMONSTRATED THAT THE PATIENT WAS		03-240-13G
	RADIOACTIVE MUCH ABOVE BACKGROUND.		03-240-13H
MEDICAL HISTORY			03-240-20
	IN 05-52 PATIENT FIRST NOTED A SENSATION OF STUFFINESS IN THE		03-240-20A
	LEFT EAR. X-RAY EXAMINATION AT THAT TIME WAS NEGATIVE. SIX MONTHS		03-240-20B
	LATER THERE OCCURRED A SWELLING OVER THE LEFT MASTOID WITH TENDER-		03-240-20C
	NESS ON TOUCH. A SIMPLE MASTOIDECTOMY WAS DONE IN 04-53 IN		03-240-20D
	BUFFALO, NEW YORK AND REVEALED AN ANAPLASTIC SQUAMOUS CARCINOMA.		03-240-20E
	RADIATION THERAPY THEN CARRIED OUT. TUMOR MASS DEVELOPED AT THE		03-240-20F
	SURGICAL SITE AND A RADICAL MASTOIDECTOMY WAS DONE IN PORTLAND,		03-240-20G
	MAINE 09-53 BUT 2 TO 3 MONTHS LATER THE MASS RECURRED. IN 06-54		03-240-20H
	THE PATIENT ENTERED LENNOX HILL HOSP., NEW YORK CITY, AT WHICH		03-240-20I
	TIME THERE WAS RECURRENT TUMOR IN THE REGION OF THE LEFT EAR.		03-240-20J
	THE TUMOR WAS PARTIALLY RESECTED SURGICALLY AND MOHS PASTE WAS		03-240-20K
	APPLIED. ON 09-10-54 PATIENT DEVELOPED NEUROLOGIC SIGNS CONSIS-		03-240-20L
	ENT WITH METASTASES TO THE SPINAL CORD, LATER WITH DESTRUCTION OF		03-240-20M
	THE THIRD AND FOURTH THORACIC VERTEBRAL BODIES. PATIENT DIED AT		03-240-20N
	HOME ON 01-13-55.		03-240-20O
MALIGNANT TUMOR	CARCINOMA, LEFT MASTOID		03-240-60
X84 -14	RADICAL MASTOIDECTOMY		03-240-66
2134 -814	EPIDERMIOID CARCINOMA OF THE MASTOID		03-240-66A
DATA REVISED 05-08-68			03-240-99

PATIENT 03-401	BORN 11-01-00	03-401-01
DECEASED		03-401-02
		03-401-02A
FEMALE		03-401-05
DECEASED 09-24-63		03-401-06
DEATH CERT.NO.	AUTOPSY NONE	03-401-07
INTERMENT	SUMMIT VIEW CEMETERY, OTTAWA, ILLINOIS	03-401-08
CAUSES OF DEATH	CANCER OF LUNG (DEATH CERTIFICATE)	03-401-09
	FIBROSARCOMA, PRIMARY SITE UNCERTAIN,	03-401-09A
	WITH METASTASES TO LUNG (ACTUAL)	03-401-09B
SOURCE OF CASE	REFERRED BY RJH. (FROM DR. THEODORE FOX)	03-401-10
	SYMPTOMS	03-401-10A
LITERATURE CITATION		03-401-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-401-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-401-11B
EXPOSURE	DIAL PAINTER 01	03-401-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1923 TO 1925, 18 TO 24 MO.		03-401-13
PAINTED DIALS. POINTED BRUSH IN HER MOUTH. NEVER PAINTED HER OWN		03-401-13A
PERSON BUT STATED THAT HER TEETH WOULD OCCASIONALLY GLOW.		03-401-13B
ASSUMED WORK PERIOD 06-01-1923 TO 04-01-1925		03-401-13*
22.57 YEARS OF AGE WHEN FIRST EMPLOYED.		03-401-13Z
FAMILY HISTORY		03-401-15
NEVER MARRIED		03-401-15A
MEDICAL HISTORY		03-401-20
1937 GOITER EXCISION. 1938 FRACTURE RIGHT HUMERUS, SLIPPED AND		03-401-20A
FELL AGAINST WALL. 09-47 FRACTURE OF RIGHT LEG, LEG SNAPPED WHILE		03-401-20B
ENTERING AUTO, NO FALL. 03-55 TOTAL ABDOMINAL HYSTERECTOMY DONE		03-401-20C
AT CHICAGO WESLEY MEMORIAL HOSPITAL FOR SEVERE MENORRHAGIA AND		03-401-20D
ALSO REMOVAL OF SOLITARY THYROID NODULE. TISSUE DIAGNOSES--FIBRO-		03-401-20E
MYOMAS OF THE MYOMETRIUM AND COLLOID ADENOMA OF THE THYROID.		03-401-20F
READMITTED TO CHICAGO WESLEY MEMORIAL HOSP. 06-11-62. COMPLAINT		03-401-20G
OF MASS ON THE MEDIAL ASPECT OF THE LEFT THIGH IMMEDIATELY SUPER-		03-401-20H
IOR TO THE KNEE, PRESENT FOR 6 MONTHS AND GRADUALLY INCREASING IN		03-401-20I
SIZE. ON EXCISION THE MASS WAS 7 CM IN GREATEST DIAMETER, LYING		03-401-20J
IN FAT OVER THE SAPHENOUS VEIN ABOVE THE KNEE. DENSE GRAY SEMI-		03-401-20K
ENCAPSULATED MASS LYING IN FAT SUBJACENT TO SKIN AND EXTENDING		03-401-20L
DOWN TO THE FASCIA OVERLYING THE ADDUCTOR MUSCLES. HISTOLOGIC		03-401-20M
DIAGNOSIS--PLEOMORPHIC SARCOMA. ON 06-20-62 LEFT SUBINGUINAL		03-401-20N
LYMPH NODE DISSECTION DONE AND NO TUMOR DEMONSTRATED IN THESE		03-401-20O
NODES. PATIENT DEVELOPED RIGHT LUNG MASS AND LEFT PLEURAL EFFU-		03-401-20P
SION IN 07-62 AND DIED 09-24-63 OF EXTENSIVE PULMONARY AND		03-401-20Q
PLEURAL METASTASES. (11-67)		03-401-20R

GAMMA-RAY MEASUREMENTS					03-401-25
03-18-57	RAB,RAC	0.760 UCI	HGS 1 TILTING CHAIR	CEM	03-401-25A
07-15-60	RAB,RAC	0.709 UCI	HGS 1 TILTING CHAIR	CEM	03-401-25B
COMPUTED TOTAL-BODY RADIUM					03-401-27
03-18-57	0.760 UCI		2.450 UCI TOTAL	0.31	03-401-27A
07-15-60	0.709 UCI		2.287 UCI TOTAL	0.31	03-401-27B
X-RAY EXAMINATION					03-401-30
COMPLETE SKELETAL SURVEY					03-401-30A
03-18-57	ANL	X-RAY NO. R-19	LOC. ANL		03-401-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 39.5					03-401-30C
PPF SCATTERED SMALL AREAS OF BONE RESORPTION IN THE SKULL, MANDI-					03-401-30D
BLE, LEFT TIBIA AND FIBULA. COARSENING OF THE TRABECULAR PATTERN					03-401-30E
OF THE VERTEBRAL BODIES, BONES OF PELVIS, BOTH SCAPULAS, BOTH					03-401-30F
FEMURS AND BOTH TIBIAE AND FIBULAE. ASEPTIC NECROSIS OF THE HEADS					03-401-30G
OF BOTH FEMORA. ASEPTIC NECROSIS OF HEAD OF RIGHT HUMERUS AND					03-401-30H
LEFT HUMERUS. MULTIPLE LARGE AREAS OF BONE RESORPTION IN SHAFTS					03-401-30I
OF RIGHT RADIUS, LEFT HUMERUS, RIGHT TIBIA, LEFT FEMUR AND LEFT					03-401-30J
TIBIA AND FIBULA. PATHOLOGICAL FRACTURE OF RIGHT FEMUR.					03-401-30K
COMPLETE SKELETAL SURVEY					03-401-31A
07-15-60	ANL	X-RAY NO. R-19B	LOC. ANL		03-401-31B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 43.5					03-401-31C
PPF SAME FINDINGS AS ON PREVIOUS EXAMINATION WITH ADDITION OF					03-401-31D
PATHOLOGICAL FRACTURE WITH MARKED COMPRESSION AND NECROSIS OF					03-401-31E
LEFT TARSAL SCAPHOID.					03-401-31F
CLINICAL LABORATORY FINDINGS					03-401-40
03-04-55	HG 11.6	HTC 36.5	RBC		03-401-40A
WBC 7200	DIFF. P 50	ST 2	L 46	M 2 E 0 B 0	03-401-40B
CHICAGO WESLEY MEMORIAL HOSPITAL					03-401-40C
02-10-62	HG	HTC 35	RBC		03-401-41A
WBC 7341	DIFF. P 70	ST 0	L 22	M 5 E 3 B 1	03-401-41B
CHICAGO WESLEY MEMORIAL HOSPITAL					03-401-41C
SPECIMENS AVAILABLE					03-401-50
TUMOR, MICROSECTION			ACRH	RJH	03-401-50A
MALIGNANT TUMOR FIBROSARCOMA, LEFT THIGH 1963					03-401-60
230 -416	FRACTURE OF THE HUMERUS				03-401-66
2352 -416	FRACTURE OF SHAFT OF FEMUR				03-401-66A
297X -879	FASCIA OF THIGH, SARCOMA UNSPECIFIED				03-401-66B
301 -4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE HUMERUS				03-401-66C
782 -12	HYSTERECTOMY, TOTAL				03-401-67
782 -866A	MYOMA OF UTERUS (FIBROID)				03-401-67A
810 -13	THYROIDECTOMY, PARTIAL				03-401-67B
810 -952	NONTXIC NODULAR GOITER				03-401-67C
PRIMARY TUMOR SLIDE AT ANL					03-401-71
DATA REVISED 04-04-68					03-401-99

PATIENT C3-402

BORN 01-14-05

03-402-01
03-402-02
03-402-03
03-402-04
03-402-04A
03-402-04B
03-402-05

FEMALE

OTHER PERTINENT NOS.

AMBH
CASE 1J

03-402-05A
03-402-05B

SOURCE OF CASE

REFERRED BY RJH

03-402-10

LITERATURE CITATION

ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959). CASE 1J. 03-402-11
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959). CASE 1J. 03-402-11A
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN., 03-402-11C
MINNEAPOLIS (1960). 03-402-11D
WALD, ET AL, REP. SAM-TCR-63-1, USAF SCH.AEROSP.MED. (APRIL 1963). 03-402-11E
MILLER, ANL-6839 (1964) PP. 18-39. 03-402-11F
MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P.67, IAEA, 03-402-11G
VIENNA (1964). 03-402-11H
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING 03-402-11I
RADIOISOTOPES, U OF UTAH, SALT LAKE CITY (1969). 03-402-11J

EXPOSURE

DIAL PAINTER 01

03-402-12

SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1923 TO 1926, ABOUT 3 YEARS
TOTAL. PAINTED DIALS. POINTED BRUSH IN MOUTH OCCASIONALLY, AL-
THOUGH EMPLOYEES WERE INSTRUCTED NOT TO DO SO. HER HANDS WERE
COVERED WITH RADIUM. NEVER PAINTED HER OWN PERSON.
ASSUMED WORK PERIOD 07-01-1923 TO 07-01-1926
18.45 YEARS OF AGE WHEN FIRST EMPLOYED.

03-402-13
03-402-13A
03-402-13B
03-402-13C
03-402-13*
03-402-13Z

FAMILY HISTORY

MARRIED 1928 PARA 1 GRAVIDA 1
MARRIED 1944

03-402-15
03-402-15A
03-402-15B

CHILDREN

FEMALE

L W

03-402-16

MEDICAL HISTORY

BEGINNING ABOUT 01-53 PATIENT BEGAN TO HAVE PAIN IN THE LEFT
FEMUR IN THE REGION OF THE GREATER TROCHANTER, WHICH RADIATED
DOWN THE LEFT LEG. SHE HAD BEEN TOLD THAT SHE HAD SCIATICA AND
ARTHRITIS BUT BECAUSE NO RELIEF WAS FORTHCOMING, SHE CONSULTED
DR. HOWARD CARROLL OF PASSAVANT HOSPITAL, CHICAGO. UPON HEARING
THAT THE PATIENT HAD BEEN A FORMER RADIUM DIAL PAINTER, DR.
CARROLL REFERRED THE PATIENT TO R.J. HASTERLIK. RADIOGRAPHY
DEMONSTRATED TYPICAL SKELETAL CHANGES OF RADIUM POISONING PLUS A
LARGE AREA OF BONE NECROSIS IN THE GREATER TROCHANTER OF THE LEFT
FEMUR WITH QUESTIONABLE REVISION OF THE PERIOSTEUM. A BIOPSY OF
THIS AREA WAS DONE ON 12-11-53 BY DR. HOWARD HATCHER OF THE
THE U OF CHICAGO HOSPITALS AND REVEALED A FIBROSARCOMA. ON
01-08-54 A BLOCK RESECTION OF THE PROXIMAL THIRD OF THE LEFT
FEMUR AND THE SURROUNDING SOFT TISSUES WAS DONE WITH AN ISCHIAL-
FEMORAL ARTHRODESIS USING A MODIFIED JEWETT NAIL PLATE. THE
ARTHRODESIS WAS SUCCESSFUL AND TO THIS DATE THE PATIENT HAS NO
EVIDENCE OF LOCAL OR DISTANT METASTASIS FROM THIS EXTENSIVE FIBRO-

03-402-20
03-402-20A
03-402-20B
03-402-20C
03-402-20D
03-402-20E
03-402-20F
03-402-20G
03-402-20H
03-402-20I
03-402-20J
03-402-20K
03-402-20L
03-402-20M
03-402-20N
03-402-20O
03-402-20P
03-402-20Q

SARCOMA. IN 12-63 PATIENT ENTERED THE U OF CHICAGO HOSP. WITH A PAIN IN THE LEFT EYE OF 6 MONTHS DURATION. STUDIES DEMONSTRATED THAT THE PATIENT HAD A GLAUCOMA OF ANGLE CLOSURE MECHANISM, AND WAS PLACED ON MEDICATION. ON 01-08-64 THE PATIENT ENTERED THE HOSPITAL COMPLAINING OF A BUZZING SENSATION IN THE RIGHT SIDE OF THE HEAD OF 3 MONTHS DURATION. LAMINAGRAPHY OF THE RIGHT MASTOID AND PETROUS PYRAMID DEMONSTRATED DESTRUCTION OF THE WALLS OF THE MASTOID AIR CELLS IN THE REGION OF THE RIGHT MASTOID ANTRUM. THESE FINDINGS WERE CONSISTENT WITH RADIATION NECROSIS OF BONE,

03-402-20R
03-402-20S
03-402-20T
03-402-20U
03-402-20V
03-402-20W
03-402-20X
03-402-20Y
03-402-20Z

ALTHOUGH THE POSSIBILITY OF MALIGNANT DESTRUCTION WAS STRONGLY CONSIDERED. ON 01-21-64 A RIGHT SIMPLE MASTOIDECTOMY WAS PERFORMED. MICROSCOPIC EXAMINATION OF THE TISSUE REMOVED DEMONSTRATED SQUAMOUS CELL CARCINOMA OF THE MASTOID EPITHELIUM WITH RADIATION NECROSIS OF BONE. THE PATIENT WAS SUBSEQUENTLY GIVEN 6000 RADS OF CO60 GAMMA RADIATION THERAPY TO THE MASTOID AREA BETWEEN 02-04-64 AND 03-12-64. SHE HAS HAD NO EVIDENCE OF RECURRENCE OF THIS CARCINOMA TO THIS DATE. A LEFT IRIDECTOMY WAS DONE IN 1964 FOR THE RELIEF OF THE GLAUCOMA. IN 08-65 THE PATIENT HAD SYMPTOMS ON THE LEFT SIDE SIMILAR TO THOSE IN THE RIGHT EAR, AND SHE WAS ADMITTED FOR STUDY. LAMINAGRAPHY OF THE LEFT MASTOID DEMONSTRATED DESTRUCTIVE CHANGES IN THE LEFT MASTOID, WHICH RESEMBLED THOSE ON THE RIGHT, AND THEREFORE A LEFT MASTOIDECTOMY WAS DONE ON 08-09-65. ON THIS OCCASION THE TISSUE REMOVED AT SURGERY DEMONSTRATED ONLY FIBROUS REACTIVE CHANGES AND BONE FRAGMENTS DEMONSTRATING RADIATION NECROSIS. THERE WAS NO EVIDENCE OF CARCINOMA IN THIS MASTOID. DURING THE FIRST WEEK OF 10-66 THE PATIENT DEVELOPED PAIN IN THE RIGHT LOWER QUADRANT OF HER ABDOMEN AND OBSTIPATION. PHYSICAL EXAMINATION DEMONSTRATED A MASS IN THE RIGHT LOWER QUADRANT AT THE SITE OF A PREVIOUS APPENDECTOMY. ON 10-19-66 AN EXPLORATION OF THE ABDOMINAL MASS WAS DONE AND THIS DEMONSTRATED A MASS WHICH INVOLVED THE TISSUE UNDERLYING THE RECTUS SHEATH AND THE RECTUS MUSCLE. MICROSCOPIC EXAMINATION OF THIS RESECTED MASS REVEALED A DIFFUSE INFLAMMATORY REACTION WITH FOREIGN BODY GIANT CELLS, MULTIPLE GRANULOMAS, MUCH FIBROUS AND FOCAL AREAS OF FAT NECROSIS WITH INFLAMMATORY INFILTRATES. THE IMPRESSION WAS THAT

03-402-21A
03-402-21B
03-402-21C
03-402-21D
03-402-21E
03-402-21F
03-402-21G
03-402-21H
03-402-21I
03-402-21J
03-402-21K
03-402-21L
03-402-21M
03-402-21N
03-402-21O
03-402-21P
03-402-21Q
03-402-21R
03-402-21S
03-402-21T
03-402-21U
03-402-21V
03-402-21W
03-402-21X
03-402-21Y
03-402-21Z

THIS REPRESENTED A FOREIGN BODY REACTION WITH FAT NECROSIS AND INFLAMMATION OF SKELETAL MUSCLE. THE PATIENT RECOVERED UNEVENTFULLY FROM THIS PROCEDURE AND HAS NO RECURRENCE OF THIS DIFFICULTY. INCIDENTAL FINDINGS SINCE THE PATIENT WAS FIRST SEEN IN 1953 HAVE BEEN PRESENCE OF A LARGE MEDIASTINAL MASS OF UNDETERMINED ETIOLOGY BUT NOT LARGE BLOOD VESSEL, WHICH HAS NOT CHANGED IN SIZE DURING THE PAST 15 YEARS. IN ADDITION, SHE HAS A THYROID ADENOMA. WHEN LAST SEEN IN 10-68 SHE REMAINED IN RELATIVELY GOOD HEALTH WITH NO EVIDENCE OF RECURRENCE OF MALIGNANCIES. (10-68)

03-402-22A
03-402-22B
03-402-22C
03-402-22D
03-402-22E
03-402-22F
03-402-22G
03-402-22H
03-402-22I

GAMMA-RAY MEASUREMENTS

08-13-57	RAB,RAC	0.370 UCI	HGS 1 TILTING CHAIR	CEM	03-402-25
11-10-59	RAB,RAC	0.350 UCI	HGS 1 TILTING CHAIR	CEM	03-402-25A
03-09-62	RAB,RAC	0.361 UCI	HGS 1 TILTING CHAIR	CEM	03-402-25B
03-09-62	RAB,RAC	0.441 UCI	HGS 1 7-CRYST-POS	CEM	03-402-25C
08-18-65	RAB,RAC	0.328 UCI	HGS 1 TILTING CHAIR	CEM	03-402-25D
06-26-63	RAB,RAC	0.440 UCI	ACRH 4-CRYST	RJH	03-402-25E
02-05-64	RAB,RAC	0.473 UCI	ACRH 4-CRYST	RJH	03-402-25F
06-15-65	RAB,RAC	0.512 UCI	ACRH 4-CRYST	RJH	03-402-25G
10-20-65	RAB,RAC	0.519 UCI	ACRH 4-CRYST	RJH	03-402-25H
					03-402-25I

BREATH MEASUREMENTS

11-10-59	EM-222	0.820 UCI	RADON BREATH HELMET	HFL	03-402-26
					03-402-268

COMPUTED TOTAL-BODY RADIUM

08-13-57	0.370 UCI	1.200 UCI TOTAL	0.31	03-402-27
11-10-59	0.350 UCI	1.170 UCI TOTAL	0.31	03-402-27A
03-09-62	0.361 UCI	1.163 UCI TOTAL	0.31	03-402-27B
03-09-62	0.441 UCI	1.420 UCI TOTAL	0.31	03-402-27C
08-18-65	0.328 UCI	1.059 UCI TOTAL	0.31	03-402-27E
06-26-63	0.440 UCI	1.420 UCI TOTAL	0.31	03-402-27F
02-05-64	0.473 UCI	1.520 UCI TOTAL	0.31	03-402-27G
06-15-65	0.512 UCI	1.650 UCI TOTAL	0.31	03-402-27H
10-20-65	0.519 UCI	1.670 UCI TOTAL	0.31	03-402-27I

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON

11-10-59	0.820 UCI	1.188 UCI TOTAL	0.69	03-402-28
				03-402-288

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY				03-402-30
08-13-57	ANL	X-RAY NO. R-21	LOC. ANL	03-402-30A
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. PREVIOUS SARCOMA				03-402-30B
OF GREATER TROCHANTER OF LEFT FEMUR SURGICALLY RESECTED. SCORE 24				03-402-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, RIGHT				03-402-30D
ISCHIUM, RIGHT AND LEFT HUMERUS, LEFT RADIUS AND ULNA, RIGHT AND				03-402-30E
LEFT FEMUR, LEFT TIBIA AND FIBULA, ASEPTIC NECROSIS OF THE HEAD				03-402-30F
OF THE RIGHT RADIUS, COARSENING OF THE TRABECULAR PATTERN OF THE				03-402-30G
PELVIS. PATCHY BONY SCLEROSIS, THE DISTAL END OF THE RIGHT FEMUR.				03-402-30H
SURGICAL RESECTION OF THE PROXIMAL THIRD OF THE LEFT FEMUR FOR				03-402-30I
FIBROSARCOMA OF THE GREATER TROCHANTER WITH BONY UNION BETWEEN				03-402-30J
THE DISTAL FEMORAL FRAGMENT AND THE LEFT PUBIS AND ILIUM.				03-402-30K
				03-402-30L

COMPLETE SKELETAL SURVEY

11-10-59	ANL	X-RAY NO. R-21B	LOC. ANL	03-402-31A
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. HISTORY FIBROSAR-				03-402-31B
COMA OF LEFT FEMUR.				03-402-31C
PPF FINDINGS AS ON LAST EXAMINATION WITH THE ADDITION OF THE				03-402-31D
SCORE 26				03-402-31E
PRESENCE OF A LARGER NUMBER OF SMALL AREAS OF BONE RESORPTION				03-402-31F
SCATTERED THROUGH MOST OF THE BONES OF THE SKELETON.				03-402-31G

COMPLETE SKELETAL SURVEY

03-09-62	ANL	X-RAY NO. R-21C	LOC. ANL	03-402-32A
ADVANCED CHANGES TYPICAL OF DEPOSITION OF RADIUM.				03-402-32B
SCORE 33				03-402-32C
PPF AS IN 1959 WITH SLIGHT PROGRESSION IN THE NUMBER AND SIZE				03-402-32D
OF THE AREAS OF BONE RESORPTION.				03-402-32E

CLINICAL LABORATORY FINDINGS

11-10-59	HG 12.3	HTC	RBC 4.21					03-402-40
WBC 8800	DIFF. P 47	ST 2	L 41	M 7	E 2	B 1		03-402-40A
								03-402-40B
02-21-67	HG 12.3	HTC 36	RBC 4.8					03-402-41A
WBC 6300	DIFF. P 54	ST	L 30	M 8	E 8	B 0		03-402-41B
PLATELETS 169,000								03-402-41C

SPECIMENS AVAILABLE				03-402-50
FEMUR	LOC. ACRH, ANL	RJH, RER		03-402-50A
RADIOCHEMICAL ANALYSES				03-402-51
FEMUR			HFL	03-402-51A
09-57	2.42 G ASH	558 UUG/G ASH RA-226	0.54 UUCI/G ASH TH-228	03-402-51B
06-58	2.98 G ASH	627 UUG/G ASH RA-226	0.60 UUCI/G ASH TH-228	03-402-51C
06-58	2.87 G ASH	683 UUG/G ASH RA-226	0.63 UUCI/G ASH TH-228	03-402-51D
MICRORADIOGRAPHIC ANALYSES				03-402-52
10-61 FEMUR			RER	03-402-52A
MICRORADIOGRAPHS SHOW GREAT DEAL OF HYPERCALCIFICATION--PLUGS				03-402-52B
AND HYPERCALCIFIED OSTEONS.				03-402-52C
AUTORADIOGRAPHIC ANALYSIS				03-402-53
10-61 FEMUR			RER	03-402-53A
MAXIMUM HOT SPOT	4.7	PCI RA-226/MG BONE		03-402-53B
AVERAGE DIFFUSE LEVEL	0.046	PCI RA-226/MG BONE		03-402-53C
CALCULATED UNIFORM LABEL	0.20	PCI RA-226/MG BONE		03-402-53D
HOT SPOT TO DIFFUSE RATIO	102.			03-402-53E
DIFFUSE TO UNIFORM LABEL	0.23			03-402-53F
OTHER ANALYSES				03-402-55
01-25-66	FASTING BLOOD SUGAR 88 MG PERCENT, SERUM CALCIUM			03-402-55A
	9.5 MG PERCENT, SERUM PHOSPHORUS 3.7 MG PERCENT, SERUM ALKALINE			03-402-55B
	PHOSPHATASE 54 UNITS PERCENT, PLASMA PROTEINS 6.1 GM PERCENT,			03-402-55C
	PLASMA ALBUMIN 3.2 GM PERCENT, GLOBULIN 2.9 GM PERCENT			03-402-55D
02-21-67	URINALYSIS NEGATIVE			03-402-56A
MALIGNANT TUMOR	FIBROSARCOMA, LEFT FEMUR 1954			03-402-60
	CARCINOMA, RIGHT MASTOID 1964			03-402-60A
X84 -13	SIMPLE MASTOIDECTOMY (LEFT)			03-402-66
X84 -14	RADICAL MASTOIDECTOMY (RIGHT)			03-402-66A
2134X-814E	EPIDERMOID CARCINOMA OF THE MASTOID, NON-INFILTRATING			03-402-66B
2134 -4722.1	ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE			03-402-66C
23113-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE RADIUS (RIGHT)			03-402-66D
23517-870F	FIBROSARCOMA OF THE GREATER TROCHANTER OF THE FEMUR			03-402-66E
X18 -610	GLAUCOMA, TYPE NOT SPECIFIED (BOTH EYES)			03-402-67
039XX-8Y00	TUMOR OF MEDIASTINUM, UNDETERMINED ETIOLOGY			03-402-67A
180XX-438.6	SUBCUTANEOUS TISSUE, FOREIGN BODY REACTION			03-402-67B
661 -12	APPENDECTOMY			03-402-67C
PRIMARY TUMOR SLIDE AT ANL				03-402-71
DATA REVISED 10-09-68				03-402-99

PATIENT	C3-403	BORN	02-10-15	03-403-01
	DECEASED			03-403-02
				03-403-02A
				03-403-03
				03-403-04
				03-403-05
	FEMALE			
OTHER PERTINENT NOS.	AMBH			03-403-05A
DECEASED	03-27-64			03-403-06
DEATH CERT.NO.		AUTOPSY	NONE	03-403-07
INTERMENT	CENTRAL CEMETERY, CHICAGO, ILLINOIS			03-403-08
CAUSES OF DEATH	CARCINOMA OF OVARY			03-403-09
	CARCINOMATOSIS OF PERITONEAL CAVITY			03-403-09A
SOURCE OF CASE	SEARCH BY CEM			03-403-10
LITERATURE CITATION				03-403-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BCNE-SEEKING			03-403-11A
	RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-403-11B
EXPOSURE	DIAL PAINTER 01			03-403-12
SOURCE	LUMINOUS PROCESSES, INC., OTTAWA, ILL., MARCH 1935 TO SEPT.			03-403-13
	1943, AND 3 MONTHS 1946. PAINTED DIALS 6 YEARS, WORKED AT			03-403-13A
	WEIGHING LUMINOUS MATERIAL 1-1/2 MONTHS, LATER WORKED AS			03-403-13B
	INSPECTOR. NEVER POINTED BRUSHES IN MOUTH. PAINTED RINGS ON			03-403-13C
	HER FINGERS OCCASIONALLY.			03-403-13D
	ASSUMED WORK PERIOD 03-01-1935 TO 09-01-1943			03-403-13*
	20.24 YEARS OF AGE WHEN FIRST EMPLOYED.			03-403-13Z
FAMILY HISTORY				03-403-15
MARRIED	PARA 1 GRAVIDA 1			03-403-15A
MEDICAL HISTORY				03-403-20
	DEVELOPED COCCYODYNIA IMMEDIATELY AFTER PREGNANCY 1950.			03-403-20A
	DEVELOPED NUMBNESS AND LACK OF VIBRATION SENSE 1954, AT PRESENT			03-403-20B
	TIME CANNOT STAND OR WALK WITHOUT EYES BEING OPEN, STAGGERS AND			03-403-20C
	FALLS OCCASIONALLY. INQUIRY BY SYSTEMS ESSENTIALLY NEGATIVE			03-403-20D
	EXCEPT FOR SOME FREQUENCY OF URINATION. DENTAL HISTORY--PATIENT			03-403-20E
	HAS WORN PARTIAL UPPER DENTURE PAST 15 YEARS. (09-18-57)			03-403-20F
	PATIENT REFERRED TO DR. SIDNEY SCHULMAN, NEUROLOGY CLINIC AT			03-403-21A
	U OF CHICAGO CLINICS. DR. SCHULMAN REPORTED 10-28-57 PATIENT HAS			03-403-21B
	FAMILIAL SPINOCEREBELLAR ATAXIA, HOSPITALIZED U OF C 10-57.			03-403-21C
	LARGE RIGHT OVARIAN CYST EXCISED 10-63, BY DR. DEVRIES,			03-403-22A
	PATHOLOGICAL REPORT--CYSTADENOCARCINOMA.			03-403-22B
GAMMA-RAY MEASUREMENTS				03-403-25
09-18-57	RAB,RAC	C.003 UCI	HGS 1 TILTING CHAIR	CEM
				03-403-25A
COMPUTED TOTAL-BODY RADIUM				03-403-27
09-18-57	0.003 UCI	0.008 UCI TOTAL	0.31	03-403-27A

X-RAY EXAMINATION		03-403-30
COMPLETE SKELETAL SURVEY		03-403-30A
05-08-58	ANL X-RAY NO. R-35 LOC. ANL	03-403-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		03-403-30C
PPF	NONE. SCORE 0	03-403-30D
CLINICAL LABORATORY FINDINGS		03-403-40
05-08-58	HG 11.0 HTC RBC 3.73	03-403-40A
WBC 3800	DIFF. P 60 ST 4 L 35 M 1 E B	03-403-40B
MALIGNANT TUMOR CARCINOMA OF OVARY 1964		03-403-60
788 -10	UNILATERAL OOPHORECTOMY	03-403-67
788 -8033F	CYSTADENOCARCINOMA OF OVARY	03-403-67A
959 -992	SPINO CEREBELLAR ATROPHY, HEREDITARY	03-403-67B
DATA REVISED 11-07-67		03-403-99

PATIENT 03-404	BORN 01-18-97	03-404-01
		03-404-02
FEMALE		03-404-03
		03-404-05
OTHER PERTINENT NOS.	AMBH	03-404-05A
SOURCE OF CASE	SEARCH BY CEM	03-404-10
LITERATURE CITATION		03-404-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-404-11A
HASTERLIK AND FINKEL, MED.CLIN.N.AMER. 49,285 (JAN. 1965).		03-404-11B
EXPOSURE	DIAL PAINTER 01	03-404-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., MAY 1923-FEB 1927.		03-404-13
PAINTED DIALS, POINTED BRUSH IN MOUTH. DID NOT PAINT ANY PART		03-404-13A
OF HER BODY BUT CLOTHES GLOWED IN DARK.		03-404-13B
ASSUMED WORK PERIOD 05-01-1923 TO 02-01-1927		03-404-13*
26.27 YEARS OF AGE WHEN FIRST EMPLOYED.		03-404-13Z
FAMILY HISTORY		03-404-15
MARRIED 1926	PARA 0 GRAVIDA 0	03-404-15A
MEDICAL HISTORY		03-404-20
TWO SURGICAL PROCEDURES INVOLVING UTERUS, 1941 AND 1945.		03-404-20A
HEMORRHAGE IN RIGHT EYE, JUNE 1957, WITH SUBSEQUENT CLOUDY		03-404-20B
VISION. CHRONIC SKIN TROUBLE, PRURITIS, PAST THREE YEARS.		03-404-20C
EDENTULOUS, WEARS DOUBLE DENTURES, EXTRACTICNS 1941 AND 1942.		03-404-20D
(09-18-57)		03-404-20E
STILL HAS CLOUDY VISION, CONSULTED DR. SEIDEL AT EYE CLINIC		03-404-21A
AT U OF CHICAGO (UNIT NO.). NO OTHER ILLNESSES EXCEPT		03-404-21B
INJURY TO BACK WHILE SHOVELING SNOW, DEC. 1961, DIAGNOSIS OF		03-404-21C
ARTHRITIS AND SLIPPED DISC. (10-03-62)		03-404-21D
INTERVAL HISTORY REVEALS CLOUDY VISION IN RIGHT EYE UNCHANGED.		03-404-22A
PATIENT HAS INTERMITTENT LOW BACKACHE. NO FRACTURES, SURGERY OR		03-404-22B
SERIOUS ILLNESS. (09-19-66)		03-404-22C
GAMMA-RAY MEASUREMENTS		03-404-25
09-18-57 RAB,RAC 0.310 UCI HGS-1 TILTING CHAIR CEM		03-404-25A
10-03-62 RAB,RAC 0.267 UCI HGS-1 TILTING CHAIR CEM		03-404-25B
10-03-62 RAB,RAC 0.235 UCI HGS-1 7-CRYSTAL-POS CEM		03-404-25C
09-19-66 RAB,RAC 0.232 UCI HGS-1 TILTING CHAIR CEM		03-404-25D
09-19-66 RAB,RAC 0.256 UCI HGS-1 7-CRYST-POS CEM		03-404-25E
COMPUTED TOTAL-BODY RADIUM		03-404-27
09-18-57 0.310 UCI 0.980 UCI TOTAL 0.31		03-404-27A
10-03-62 0.267 UCI 0.829 UCI TOTAL 0.31		03-404-27B
10-03-62 0.235 UCI 0.758 UCI TOTAL 0.31		03-404-27C
09-19-66 0.232 UCI 0.748 UCI TOTAL 0.31		03-404-27D
09-19-66 0.256 UCI 0.825 UCI TOTAL 0.31		03-404-27E

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

05-22-58 ANL X-RAY NO. R-37 LOC. ANL
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION SCORE 17
PPF MULTIPLE AREAS OF BONE RESORPTION SEEN IN SKULL, RIGHT
AND LEFT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA.
ASEPTIC NECROSIS OF HEAD OF RIGHT AND LEFT HUMERUS ALSO PRESENT.

03-404-30
03-404-30A
03-404-30B
03-404-30C
03-404-30D
03-404-30E
03-404-30F

COMPLETE SKELETAL SURVEY

10-03-62 ANL X-RAY NO. R-37B LOC. ANL
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 24
PPF NOW MARKED COARSENING OF TRABECULAR PATTERN OF MANY
LONG BONES, INCLUDING CLAVICLE AND SCAPULA. AREAS OF RESORPTION
ARE NOW NOTED IN RIGHT AND LEFT FEMURS.

03-404-31A
03-404-31B
03-404-31C
03-404-31D
03-404-31E
03-404-31F

SPECIAL VIEWS MASTOIDS AND SINUSES, MASTOID LAMINAGRAMS
04-15-64 U OF C CLINICS UNIT NO. LOC. U OF C
PPF CONSIDERABLE AMOUNT OF SMALL AREAS OF DESTRUCTION
WITHIN BONES OF CALVARIUM. THE MAXILLARY ANTRA DEMONSTRATE
MUCOSAL THICKENING IN BASE OF RIGHT MAXILLARY ANTRUM, WITHOUT
EVIDENCE OF BONE DESTRUCTION. MULTIPLE LAMINAGRAPH VIEWS
DEMONSTRATED THAT THE TRABECULAE AND SEPTA ARE PRESENT WITHOUT
POSITIVE EVIDENCE OF DESTRUCTION.

03-404-32A
03-404-32B
03-404-32D
03-404-32E
03-404-32F
03-404-32G
03-404-32H
03-404-32I

COMPLETE SKELETAL SURVEY

09-19-66 ANL X-RAY NO. R-37C LOC. ANL
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 22
PPF AS BEFORE WITH ADDITION OF SLIGHT PROGRESSION OF LESIONS IN
THE HEADS OF THE HUMERI AND AREAS OF BONE RESORPTION IN THE
SHAFTS OF THE HUMERI AND MANDIBLE.

03-404-33A
03-404-33B
03-404-33C
03-404-33D
03-404-33E
03-404-33F

CLINICAL LABORATORY FINDINGS

04-28-52 SERUM CALCIUM 4.88 ME/LITER
PHOSPHORUS 3.6 MG PERCENT, TOTAL PRTEINS 6.8 G PERCENT

03-404-40
03-404-40C
03-404-40D

05-22-58 HG 12.8 HTC RBC 3.67
WBC 4300 DIFF. P 73 ST 2 L 21 M 4 E B

03-404-41A
03-404-41B

10-03-62 HG 13.3 HTC RBC 3.61
WBC 3400 DIFF. P 68 ST 1 L 22 M 7 E B

03-404-42A
03-404-42B

09-19-66 HG 13.3 HTC RBC 3.40
WBC 4900 DIFF. P 73 ST L 20 M 4 E 3 B

03-404-43A
03-404-43B

X18 -610 GLAUCOMA, TYPE NOT SPECIFIED

03-404-67

DATA REVISED 05-08-68

03-404-99

PATIENT 03-405	BORN 09-19-04	03-405-01
		03-405-02
		03-405-03
		03-405-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-405-05A
SOURCE OF CASE	SEARCH BY CEM	03-405-10
LITERATURE CITATION		03-405-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-405-11A
EXPOSURE	DIAL PAINTER 01	03-405-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., EARLY 1924 TO JUNE 1929.		03-405-13
PAINTED DIALS FOR FIRST SIX MONTHS. POINTED BRUSH IN MOUTH.		03-405-13A
PAINTED FINGERNAILS, REMARKED THAT WHEN HER CLOTHES WERE WASHED		03-405-13B
AT HOME THERE WAS LUMINOUS SEDIMENT IN WASH TUB. AFTER FIRST SIX		03-405-13C
MONTHS INSPECTED DIALS AND WEIGHED MATERIALS.		03-405-13D
ASSUMED WORK PERIOD 03-01-1924 TO 06-01-1929		03-405-13*
19.44 YEARS OF AGE WHEN FIRST EMPLOYED.		03-405-13Z
FAMILY HISTORY		03-405-15
MARRIED 1929	PARA 2 GRAVIDA 2	03-405-15A
CHILDREN	MALE 1934 L W	03-405-16
	FEMALE 1941 L W	03-405-16A
MEDICAL HISTORY		03-405-20
DIABETES MELLITUS SINCE 1952, DIABETIC CATARACTS REMOVED 1953		03-405-20A
AND 1954. DENTAL HISTORY--COMPLETE EXTRACTION ABOUT 1947 BECAUSE		03-405-20B
OF PYORRHEA, NOW WEARS DOUBLE DENTURES. (09-18-57)		03-405-20C
UTERINE SURGERY 1959. NO FRACTURES. INQUIRY BY SYSTEMS NEGATIVE		03-405-21A
EXCEPT FOR RECENT DISCOMFORT LEFT EAR PAST 3 TO 4 MONTHS.		03-405-21B
(10-03-62)		03-405-21C
GAMMA-RAY MEASUREMENTS		03-405-25
09-18-57 RAB,RAC 0.205 UCI HGS 1 TILTING CHAIR CEM		03-405-25A
09-29-59 RAB,RAC 0.224 UCI HGS 1 TILTING CHAIR CEM		03-405-25B
10-03-62 RAB,RAC 0.211 UCI HGS 1 TILTING CHAIR CEM		03-405-25D
10-03-62 RAB,RAC 0.194 UCI HGS 1 7-CRYST-POS CEM		03-405-25E
BREATH MEASUREMENT		03-405-26
09-29-59 EM-222 0.363 UCI RADON BREATH HELMET HFL		03-405-26B
01-19-60 EM-222 0.470 UCI RADON BREATH BOTTLE HFL		03-405-26C
COMPUTED TOTAL-BODY RADIUM		03-405-27
09-18-57 0.205 UCI 0.660 UCI TOTAL 0.31		03-405-27A
09-29-59 0.224 UCI 0.580 UCI TOTAL 0.31		03-405-27B
10-03-62 0.211 UCI 0.655 UCI TOTAL 0.31		03-405-27D
10-03-62 0.194 UCI 0.625 UCI TOTAL 0.31		03-405-27E
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-405-28
09-29-59 0.363 UCI 0.526 UCI TOTAL 0.69		03-405-28B
01-19-60 0.470 UCI 0.681 UCI TOTAL 0.69		03-405-28C

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

05-22-58 ANL X-RAY NO. R-36 LOC. ANL SCORE 15.5
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION.
PPF AREAS OF BONE RESORPTION NOTED IN THE SKULL MANDIBLE, LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA. MASTOIDS ARE MODERATELY SCLEROTIC. CORTEX OF THE MID-SHAFT OF THE RIGHT AND LEFT FEMUR IS MARKEDLY THICKENED. COARSENING OF TRABECULATION NOTED IN DISTAL RIGHT AND LEFT TIBIA AND IN BONES OF THE FOOT.

03-405-30
03-405-30A
03-405-30B
03-405-30C
03-405-30D
03-405-30E
03-405-30F
03-405-30G
03-405-30H
03-405-30I

COMPLETE SKELETAL SURVEY

10-03-62 ANL X-RAY NO. R-36B LOC. ANL SCORE 22
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION.
PPF THERE IS NOW COARSENING OF TRABECULATION IN RIGHT HUMERUS. AREAS OF BONE RESORPTION ARE NOW ALSO SEEN IN RIBS AND RIGHT FEMUR. APPEARS TO BE RESORPTION OF BONE ALONG CREST OF RIGHT PETROUS PYRAMID.

03-405-31A
03-405-31B
03-405-31C
03-405-31D
03-405-31E
03-405-31F
03-405-31G

SPECIAL VIEWS--MASTOIDS, PETROUS PYRAMIDS

03-13-63 ANL X-RAY NO. R-36C LOC. ANL
EXCEPT FOR PRESENCE OF SOME AREAS OF SCLEROSIS IN MASTOIDS, THERE IS NO EVIDENCE OF BONY DISEASE.

03-405-32A
03-405-32B
03-405-32C
03-405-32D

SPECIAL VIEWS--SINUSES AND MASTOIDS AND LAMINAGRAMS

04-30-64 U OF C CLINICS UNIT NG. LOC. U OF C
DESTRUCTIVE LESION IN CALVARIUM. MUCOSAL THICKENING IN LEFT MAXILLARY ANTRUM, OTHERWISE NORMAL PARANASAL SINUSES. ASYMMETRY MASTOID AIR CELLS, DESTRUCTION OF SEPTA ON LEFT AS COMPARED WITH RIGHT.

03-405-33A
03-405-33B
03-405-33C
03-405-33D
03-405-33E
03-405-33F

CLINICAL LABORATORY FINDINGS

05-22-58 HG 13.7 HTC RBC 4.47
WBC 8350 DIFF. P 60 ST 3 L 31 M 3 E 2 B
10-03-62 HG 13.3 HTC RBC 4.01
WBC 6000 DIFF. P 61 ST 1 L 32 M 4 E 2 B

03-405-40
03-405-40A
03-405-40B
03-405-41A
03-405-41B

X20 -12 REMOVAL OF CRYSTALLINE LENS (BILATERAL)

X20 -785 DIABETIC CATARACT

870 -785 DIABETES MELLITUS

03-405-67
03-405-67A
03-405-67B

ADDITIONAL INFORMATION

06-30-59 GAMMA-RAY AND RADON BREATH MEASUREMENTS MADE AT M.I.T.

03-405-91
03-405-91A

DATA REVISED 11-14-67

03-405-99

PATIENT 03-406	BORN 06-04-14	03-406-01
		03-406-02
		03-406-03
FEMALE		03-406-05
SOURCE OF CASE	SEARCH BY CEM	03-406-10
EXPOSURE	DIAL PAINTER 01	03-406-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., MARCH 1935 TO JUNE 1944. PAINTED DIALS. NEVER POINTED BRUSH IN HER MOUTH NOR PAINTED HER OWN BODY, ALTHOUGH MATERIAL WAS IN HER HAIR AND ON CLOTHES. ASSUMED WORK PERIOD 03-01-1935 TO 06-01-1944. 20.75 YEARS OF AGE WHEN FIRST EMPLOYED.		03-406-13
		03-406-13A
		03-406-13B
		03-406-13*
		03-406-13Z
FAMILY HISTORY	NOT ELICITED	03-406-15
MEDICAL HISTORY		03-406-20
ESSENTIALLY NEGATIVE EXCEPT FOR HISTORY OF HYPERTENSION AND LOW BLOOD COUNT PAST YEAR. PATIENT HAS BEEN TAKING THYROID MEDICATION, TWO TABLETS DAILY. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--THREE TEETH EXTRACTED, NO UNUSUAL DENTAL DIFFICULTIES. (09-18-57)		03-406-20A
		03-406-20B
		03-406-20C
		03-406-20D
		03-406-20E
GAMMA-RAY MEASUREMENTS		03-406-25
09-18-57 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-406-25A
COMPUTED TOTAL-BODY RADIUM		03-406-27
09-18-57 0.005 UCI 0.016 UCI TOTAL 0.31		03-406-27A
X-RAY EXAMINATION		03-406-30
COMPLETE SKELETAL SURVEY		03-406-30A
05-08-58 ANL X-RAY NO. R-34 LOC. ANL		03-406-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-406-30C
TRAUMATIC COMPRESSION FRACTION OF T8, PROB. UNRELATED TO RADIUM.		03-406-30D
CLINICAL LABORATORY FINDINGS		03-406-40
05-08-58 HG 12.8 HTC RBC		03-406-40A
WBC 10,000 DIFF. P 78 ST 2 L 15 M 4 E 1 B		03-406-402
47X -X30 ESSENTIAL HYPERTENSION		03-406-67
DATA REVISED 07-24-67		03-406-99

PATIENT 03-407	BORN 10-28-05	03-407-01
DECEASED		03-407-02
		03-407-03
		03-407-04
		03-407-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-407-05A
	AMBH AUTOPSY	03-407-05B
DECEASED 02-01-61		03-407-06
DEATH CERT. NO.	AUTOPSY YES	03-407-07
INTERMENT	OTTAWA AVENUE CEMETERY, OTTAWA, ILLINOIS	03-407-08
CAUSES OF DEATH	EPIDERMOID CARCINOMA OF RIGHT MASTOID SECONDARY TO RADIUM INTOXICATION	03-407-09
		03-407-09A
SOURCE OF CASE	SEARCH BY CEM	03-407-10
LITERATURE CITATION		03-407-11
ROWLAND, ANL-6398 (1961) PP. 5-22.		03-407-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-407-11B
		03-407-11C
EXPOSURE	DIAL PAINTER 01	03-407-12
SOURCE RADIUM DIAL CO., LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1923 TO 1946 INTERMIT., ABOUT 20 YEARS CUMULATIVE EMPLOYMENT. PAINTED DIALS. POINTED BRUSH IN MOUTH DURING EARLY PORTION OF EMPLOYMENT.		03-407-13
		03-407-13A
		03-407-13B
		03-407-13C
ASSUMED WORK PERIOD 06-01-1923 TO 06-01-1946		03-407-13*
17.58 YEARS OF AGE WHEN FIRST EMPLOYED.		03-407-13Z
FAMILY HISTORY		03-407-15
MARRIED 1929, DIVORCED	PARA 2 GRAVIDA 2	03-407-15A
MARRIED 1941		03-407-15B
HUSBAND	1910 L W	03-407-15C
CHILDREN	MALE 1931 L W	03-407-16
	MALE 1946 L W	03-407-16A
MEDICAL HISTORY		03-407-20
ANEMIC FOR MANY YEARS, TREATED BY ORAL LIVER PREPARATIONS.		03-407-20A
SURGERY--PARTIAL HYSTERECTOMY, APPENDECTOMY, 1951. INQUIRY BY		03-407-20B
SYSTEMS--ESSENTIALLY NEGATIVE EXCEPT FOR BURSITIS RIGHT SHOULDER		03-407-20C
1952. HISTORY INFECTION OF RIGHT EAR 1 YEAR. ALL TEETH EXTRACTED,		03-407-20D
WEARS DOUBLE DENTURES. (09-18-57)		03-407-20E

PATIENT ADMITTED TO U OF CHICAGO CLINICS ON 06-10-59 COMPLAINING OF A HEARING LOSS IN THE RIGHT EAR OF 3 YEARS DURATION AND THE DISCHARGE OF A HEMORRHAGIC AND PURULENT DISCHARGE FROM THE RIGHT EAR OF 2 MONTHS DURATION. ON 06-29-59 THE RIGHT MASTOID WAS EXPLORED AND REVEALED A LARGE TUMOR MASS WHICH HAD PENETRATED POSTERIORLY TO THE MASTOID PROCESS, FILLED THE MASTOID AIR CELLS AND HAD INVADDED THE DURA. HISTOLOGICALLY, THE TUMOR WAS AN EPIDERMOID CARCINOMA WITH SHEETS OF CELLS RESEMBLING SQUAMOUS CARCINOMA. IT WAS NOT POSSIBLE TO REMOVE THE TUMOR AND IN 07-59 RADIATION THERAPY WITH 15 MEV ELECTRONS TO A DOSE OF 6500 R WAS DEVELOPED OVER A 6-WEEK PERIOD TO THE RIGHT MASTOID AREA. OVER THE ENSUING YEAR AND A HALF THE PATIENT DEVELOPED DEFECTS OF FUNCTION OF CRANIAL NERVES 7,8,9 AND 10, EVIDENTLY FROM INFILTRATION WITH TUMOR. SHE DIED ON 02-01-61.

GAMMA-RAY MEASUREMENTS					03-407-25
09-18-57	RAB,RAC	0.445 UCI	HGS 1 TILTING CHAIR	CEM	03-407-25A
BREATH MEASUREMENTS					03-407-26
10-13-58	EM-222	1.100 UCI	RADON BREATH HELMET	HFL	03-407-26B
COMPUTED TOTAL-BODY RADIUM					03-407-27
09-18-57	0.445 UCI		1.400 UCI	0.31	03-407-27A
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON					03-407-28
10-13-58		1.100 UCI	1.594 UCI TOTAL	0.69	03-407-28B
X-RAY EXAMINATION					03-407-30
COMPLETE SKELETAL SURVEY					03-407-30A
08-02-58	ANL	X-RAY NO. R-47	LOC. ANL		03-407-30B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 19					03-407-30C
PPF AREAS OF BONE RESORPTION NOTED IN SKULL, LEFT PUBIS, RIGHT					03-407-30D
AND LEFT RADIUS AND ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT					03-407-30E
TIBIA AND FIBULA, AND RIGHT AND LEFT FOOT. BONE SCLEROSIS SEEN					03-407-30F
IN RIGHT FEMUR AND TIBIA AND LEFT FEMUR. THICKENING OF CORTEX OF					03-407-30G
MID FEMUR NOTED ON BOTH SIDES.					03-407-30H
SPECIAL VIEWS--MASTOID					03-407-31A
06-11-59	U OF CHICAGO CLINICS UNIT NO.				03-407-31B
MULTIPLE DESTRUCTIVE LESIONS IN CALVARIUM WITH BILATERAL MASTOID					03-407-31C
DISEASE. GREATER ON THE RIGHT THAN ON THE LEFT WITH DESTRUCTION					03-407-31D
AND OBLITERATION OF THE NORMAL CELLULES.					03-407-31E
CLINICAL LABORATORY FINDINGS					03-407-40
08-02-58	HG 15.0	HTC	RBC 4.59		03-407-40A
WBC 12,400	DIFF. P 61	ST	L 30 M 6 E 3 B		03-407-40B
06-10-59	HG 14.3	HTC	RBC		03-407-41A
WBC 10,200	DIFF. P	ST	L M E B		03-407-41B
SERUM CALCIUM 9.8 MG PERCENT, SERUM PHOSPHORUS 4.0 MG PERCENT,					03-407-41C
ALKALINE PHOSPHATASE 2.6 UNITS PERCENT					03-407-41D
07-21-59	HG 13.7	HTC	RBC		03-407-42A
WBC 8,600	DIFF. P	ST	L M E B		03-407-42B

02-01-60	HG 14.4	HTC 41	RBC 4.17					03-407-43A
WBC 7,200	DIFF. P	ST	L	M	E	B		03-407-43B
01-31-61	HG	HTC 41	RBC					03-407-44A
WBC 21,000	DIFF P 91	ST	L 8	M 1	E 0	B 0		03-407-44B
01-25-61	HG 11.8	HTC 41.5	RBC 4.15					03-407-45A
WBC 10,350	DIFF. P 81	ST	L 14	M 3	E 0	B 0		03-407-45B

SPECIMENS AVAILABLE

FROM AUTOPSY	LOC. ACRH	RJH	03-407-50
HEAD AND NECK OF RIGHT FEMUR, PROX. 4 CM SHAFT	206	G	03-407-50A
PORTIONS OF BODIES THORACIC AND LUMBAR SPINE, 3 PCS	180	G	03-407-50B
CROSS SECTION MID-PORTION SHAFT OF TIBIA	29	G	03-407-50C
TRIANGULAR PC OF SKULL, 7X6X6 CM	20	G	03-407-50D
FRAGMENTS OF LEFT MASTOID	15	G	03-407-50E

AUTORADIOGRAPHIC ANALYSES

10-61	FEMUR		RER	03-407-53
MAXIMUM HOT SPOT	5.00	PCI RA-226/MG	BONE	03-407-53A
DIFFUSE LEVEL	0.16	PCI RA-226/MG	BONE	03-407-53B
CALCULATED UNIFORM LABEL	0.22	PCI RA-226/MG	BONE	03-407-53C
HOT SPOT TO DIFFUSE RATIO	31			03-407-53D
DIFFUSE TO UNIFORM LABEL	0.73			03-407-53E
	MASTOID			03-407-54
MAXIMUM HOT SPOT	5.90	PCI RA-226/MG	BONE	03-407-54A
DIFFUSE LEVEL	0.07	PCI RA-226/MG	BONE	03-407-54B
CALCULATED UNIFORM LABEL	0.22	PCI RA-226/MG	BONE	03-407-54C
HOT SPOT TO DIFFUSE RATIO	84			03-407-54D
DIFFUSE TO UNIFORM LABEL	0.32			03-407-54E

MALIGNANT TUMOR	CARCINOMA, RIGHT MASTOID 1959	03-407-60
X84 -14	RADICAL MASTOIDECTOMY (RIGHT)	03-407-66
2134X-814E	EPIDERMOID CARCINOMA OF THE MASTOID, NON-INFILTRATING	03-407-66A
661 -12	APPENDECTOMY	03-407-67
782 -13	HYSTERECTOMY, PARTIAL	03-407-67A

ADDITIONAL INFORMATION

DEATH CERTIFICATE LISTS STEPFATHER	RATHER THAN FATHER	03-407-91
		03-407-91A
		03-407-91B

DATA REVISED 03-11-68	03-407-99
-----------------------	-----------

PATIENT 03-408	BORN 11-08-08	03-408-01
DECEASED		03-408-02
		03-408-02A
		03-408-03
		03-408-04
		03-408-05
FEMALE		
OTHER PERTINENT NOS.	PRES.-ST. LUKE'S PATH.	03-408-05A
DECEASED 08-07-59		03-408-06
DEATH CERT.NO.	AUTOPSY NONE	03-408-07
INTERMENT.	ST. FRANCIS CEMETERY, OTTAWA, ILLINOIS	03-408-08
CAUSES OF DEATH	BRAIN TUMOR (GLIOBLASTOMA)	03-408-09
SOURCE OF CASE	SEARCH BY CEM	03-408-10
LITERATURE CITATION		03-408-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-408-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-408-11B
EXPOSURE	DIAL PAINTER 01	03-408-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SEPT. 1924 TO APRIL 1926,		03-408-13
AGAIN FOR 1 YEAR 1930 TO 1931. PAINTED DIALS. POINTED BRUSH IN		03-408-13A
MOUTH DURING 24-26 PERIOD BUT NOT DURING 30S. PAINTED FINGERNAILS		03-408-13B
WITH LUMINOUS MATERIAL. REMEMBERS THAT CLOTHES GLOWED IN DARK.		03-408-13C
ASSUMED WORK PERIOD 08-01-1924 TO 04-01-1926		03-408-13*
24.66 YEARS OF AGE WHEN FIRST EMPLOYED.		03-408-13Z
FAMILY HISTORY		03-408-15
MARRIED	PARA 2 GRAVIDA 2	03-408-15A
MEDICAL HISTORY		03-408-20
PATIENT HAD GALL BLADDER SURGERY 1948 AND NEPHROPEXY 1956.		03-408-20A
SORENESS IN LEFT TIBIAL TUBERCLE FOR MANY YEARS, WORSE IN PAST		03-408-20B
YEAR. INQUIRY BY SYSTEMS REVEALS OCCASIONAL HEADACHES, COLITIS,		03-408-20C
CHIROPRACTIC ADJUSTMENTS OF NECK. HAD THYROID MEDICATION FOR		03-408-20D
GOITER 10 YEARS AGO. DENTAL HISTORY--DOUBLE DENTURES. (09-25-57)		03-408-20E
(INFORMATION OBTAINED FROM PERSONAL PHYSICIAN, 01-26-59)		03-408-21A
REFERRED TO PRES.-ST. LUKE'S HOSP., CHICAGO, BECAUSE OF POSS-		03-408-21B
IBILITY OF INTRACRANIAL NEOPLASM. PARTIAL RIGHT FRONTAL LOBECTOMY		03-408-21C
FOR MALIGNANCY IN FRONTAL PARIETAL LOBE, LESION THOUGHT TO BE A		03-408-21D
GLIOBLASTOMA.		03-408-21E
FINAL PATHOLOGIC DIAGNOSIS FROM PRES.-ST. LUKE'S HOSP. REPORT,		03-408-22A
()--GLIOBLASTOMA MULTIFORME OF TEMPORAL LOBE. THE SPECI-		03-408-22B
MEN CONSISTS OF 80 GRAMS OF FIXED TISSUE LABELED FRONTAL LOBE		03-408-22C
WITH A DIAGNOSIS OF ASTROCYTOMA. THE SPECIMEN CONSISTS OF A SEG-		03-408-22D
MENT OF CEREBRUM. THE CORTICAL SURFACE APPEARS HIGHLY EDEMATOUS		03-408-22E
ASSOCIATED WITH ENGORGED VESSELS. HISTOLOGY--A. FOUR SECTIONS OF		03-408-22F
BRAIN ARE SUBMITTED. THEY SHOW LARGE MASSES OF TUMOR INVADING		03-408-22G
DIFFUSELY THROUGH THE BRAIN TISSUE FROM WHICH THEY ARE POORLY		03-408-22H
DEMARCATED. LARGE AREAS OF NECROSIS ARE FOUND IN THE TUMOR AND IN		03-408-22I
SOME AREAS IN THE SURROUNDING BRAIN TISSUE. THE TUMOR IS EXTREME-		03-408-22J
LY VASCULAR WITH THE ARTERIAL CHANNELS WITHIN AND AROUND		03-408-22K

THE TUMOR SHOWING A STRIKING DEGREE OF ENDOTHELIAL HYPERPLASIA.	03-408-22L
AT TIMES THESE ARTERIAL CHANNELS ALSO SHOW MUSCULAR THICKENING OF	03-408-22M
OF THEIR WALLS, FIBROUS THICKENING OF THEIR WALLS OR SCLEROSIS.	03-408-22N
IN THE SURROUNDING BRAIN TISSUE THERE IS SEEN A GREAT DEAL OF	03-408-22O
EDEMA WITH DISPERSION OF FIBERS AS WELL AS DESTRUCTION OF NEURONS	03-408-22P
AS EVIDENCED BY DEGENERATIVE CHANGE INCLUDING SATELLITOSIS. MANY	03-408-22Q
FOAMY ASTROCYTES ARE PRESENT AS ARE OTHER GLIAL CELLS ABOUT THE	03-408-22R
TUMOR. THE TUMOR CELLS THEMSELVES ARE EXTREMELY PLEOMORPHIC.	03-408-22S
THEY HAVE NUCLEI WHICH VARY GREATLY IN SIZE, SHAPE AND STAINING	03-408-22T
CHARACTERISTICS. THE NUCLEI ARE HYPERCHROMATIC, OFTEN BIZARRE	03-408-22U
IN SHAPE AND ARE OFTEN MULTINUCLEATE. MITOTIC FIGURES ARE COMMON	03-408-22V
AND MANY OF THESE ARE BIZARRE. THESE CELLS ARE, FOR THE MOST PART,	03-408-22W
SPINDLED IN SHAPE WITH SMALL PROTOPLASMIC PROCESSES SOMETIMES	03-408-22X
SEEN. IN OTHER AREAS THEY HAVE A MORE VOLUMINOUS CYTOPLASM AND	03-408-22Y
RESEMBLE THE GEMISTOCYTE. THESE CELLS HAVE A TENDENCY TO ORIENT	03-408-22Z
THEMSELVES ABOUT BLOOD VESSELS AND INDEED IN SOME AREAS THEY AP-	03-408-23A
PEAR TO BE BUDDING OFF FROM BLOOD VESSELS. A FEW SMALL FOCAL	03-408-23B
AREAS OF CALCIFICATION ARE PRESENT WITHIN THE TUMOR AND SOME OF	03-408-23C
THE ARTERIAL CHANNELS WITHIN AREAS OF NECROSIS SHOW FIBRIN	03-408-23D
THROMBI IN THEIR LUMINA.	03-408-23E
GAMMA-RAY MEASUREMENTS	03-408-25
09-25-57 RAB,RAC 0.050 UCI HGS 1 TILTING CHAIR CEM	03-408-25A
COMPUTED TOTAL-BODY RADIUM	03-408-27
09-25-57 0.050 UCI 0.160 UCI TOTAL 0.31	03-408-27A
X-RAY EXAMINATION	03-408-30
COMPLETE SKELETAL SURVEY	03-408-30A
11-19-58 ANL X-RAY NO. R-82 LOC. ANL	03-408-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0	03-408-30C
PPF NONE.	03-408-30D
CLINICAL LABORATORY FINDINGS	03-408-40
11-19-58 HG 16.0 HTC RBC 4.47	03-408-40A
WBC 8700 DIFF. P 70 ST 2 L 20 M 7 E 1 B	03-408-40B
OTHER ANALYSES CALCIUM 5.40 ME/LITER,	03-408-55
PHOSPHORUS 2.6 MG PERCENT, PROTEINS 6.9 G PERCENT	03-408-55A
MALIGNANT TUMOR GLIOBLASTOMA 1959	03-408-60
687 -12 CHOLECYSTECTOMY	03-408-67
710 -56 NEPHROPEXY	03-408-67A
810 -943 GOITER	03-408-67B
9331 -8474 GLIOBLASTOMA MULTIFORME OF BRAIN (FRONTAL LOBE)	03-408-67C
DATA REVISED 05-08-68	03-408-99

PATIENT 03-406	BORN	24	03-409-01 03-409-02 03-409-03
SOURCE OF CASE	SEARCH BY CEM		03-409-10
EXPOSURE	DIAL PAINTER 01		03-409-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., FOR APPROX. 12 MONTHS 1942. (ACCORDING TO A RELATIVE, PATIENT WORKED ALMOST 2 YEARS.) PAINTED DIALS ONLY, NEVER POINTED BRUSH IN MOUTH, DID NOT PAINT ANY PART OF HER BODY.			03-409-13 03-409-13A 03-409-13B 03-409-13C
FAMILY HISTORY			03-409-15
MARRIED	PARA 2 GRAVIDA 4 (PREG. 1 AND 4-- ABNORMAL DEVELOPMENT OF FETUS)		03-409-15A 03-409-15B
MEDICAL HISTORY			03-409-20
APPENDECTOMY 1940, CHOLECYSTECTOMY 1948, CAESARIAN SECTIONS WITH PREGNANCIES. PATIENT SEEN AT MAYO CLINIC NOV. 1954, DIAGNOSIS OF RHEUMATOID ARTHRITIS. INQUIRY BY SYSTEMS--NEGATIVE EXCEPT FOR OCCASIONAL ABDOMINAL CRAMPS ATTRIBUTED TO ADHESIONS BY HER PHYSICIAN. DENTAL HISTORY--TWO TEETH EXTRACTED FOR ORTHODONTIC REASONS. (09-30-57)			03-409-20A 03-409-20B 03-409-20C 03-409-20D 03-409-20E 03-409-20F
INFORMATION RECEIVED THAT THIS PATIENT WAS SEEN AT MAYO CLINIC DURING WEEK OF FEB. 2, 1960. (03-02-60)			03-409-21A 03-409-21B
GAMMA-RAY MEASUREMENTS			03-409-25
09-30-57 RAB,RAC	0.013 UCI	HGS 1 TILTING CHAIR CEM	03-409-25A
COMPUTED TOTAL-BODY RADIUM			03-409-27
09-30-57 0.013 UCI		0.043 UCI TOTAL 0.31	03-409-27A
X-RAY EXAMINATION			03-409-30
DENTAL FILMS			03-409-30A
11-17-59 DR. WENDEL			03-409-30B
NO CHANGES TYPICAL OF RADIUM DEPOSITION IN TEETH.			03-409-30C
CLINICAL LABORATORY FINDINGS	NOT DONE		03-409-40
240 -952	ARTHRITIS, RHEUMATOID, MULTIPLE		03-409-67
661 -12	APPENDECTOMY		03-409-67A
687 -12	CHOLECYSTECTOMY		03-409-67B
DATA REVISED 10-26-67			03-409-99

PATIENT 03-410		03-410-01
		03-410-02
		03-410-03
FEMALE		03-410-05
SOURCE OF CASE	SEARCH BY CEM	03-410-10
EXPOSURE	DIAL PAINTER 01	03-410-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., STARTED SPRING 1923, ABOUT 2 YEARS. PAINTED DIALS MOST OF TIME. POINTED BRUSH IN MOUTH BUT RINSED BRUSH IN JAR OF WATER FIRST. INSPECTED DIALS ABOUT 3 MONTHS OF WORK PERIOD. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 04-01-1923 TO 04-01-1925 23.32 YEARS OF AGE WHEN FIRST EMPLOYED.		03-410-13 03-410-13A 03-410-13B 03-410-13C 03-410-13* 03-410-13Z
FAMILY HISTORY		03-410-15
MARRIED	PARA 0 GRAVIDA 0	03-410-15A
MEDICAL HISTORY		03-410-20
NO SURGERY AND NO SERIOUS ILLNESSES. BACK TROUBLE SINCE 1925 AFTER LIFTING INVALID MOTHER. PERSISTENT PAIN IN LUMBAR SPINE RELIEVED BY OSTEOPATHIC TREATMENTS. INQUIRY BY SYSTEMS ESSENTIALLY NEGATIVE. DENTAL HISTORY--DOUBLE DENTURES WORN SINCE 1939. (10-01-57)		03-410-20A 03-410-20B 03-410-20C 03-410-20D 03-410-20E
GAMMA-RAY MEASUREMENTS		03-410-25
10-01-57 RAB,RAC 0.019 UCI HGS 1 TILTING CHAIR CEM		03-410-25A
COMPUTED TOTAL-BODY RADIUM		03-410-27
10-01-57 0.019 UCI 0.060 UCI TOTAL 0.31		03-410-27A
X-RAY EXAMINATION		03-410-30
COMPLETE SKELETAL SURVEY		03-410-30A
01-29-58 ANL X-RAY NO. R-27 LOC. ANL		03-410-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-410-30C
PPF NONE.		03-410-30D
CLINICAL LABORATORY FINDINGS		03-410-40
01-29-58 HG 14.3 HTC RBC 4.49		03-410-40A
WBC 9800 DIFF. P 68 ST 3 L 19 M 6 E 3 B 1		03-410-40B
DATA REVISED 07-24-67		03-410-99

PATIENT 03-411		03-411-01
		03-411-02
		03-411-03
FEMALE		03-411-05
SOURCE OF CASE	SEARCH BY CEM	03-411-10
EXPOSURE	DIAL PAINTER 01	03-411-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., SEVERAL MONTHS 1931.	03-411-13
	LUMINOUS PROCESSES, INC., OTTAWA, ILL. 1934 TO 1936 AND 1938 TO	03-411-13A
	1942. PAINTED DIALS WITH GLASS PENS, NEVER POINTED BRUSH IN MOUTH.	03-411-13B
	ASSUMED WORK PERIOD 07-01-1931 TO 07-01-1942	03-411-13*
	31.57 YEARS OF AGE WHEN FIRST EMPLOYED.	03-411-13Z
FAMILY HISTORY		03-411-15
MARRIED	PARA 3 GRAVIDA 3	03-411-15A
MEDICAL HISTORY		03-411-20
	SURGERY--CHOLECYSTECTOMY 1945, HYSTERECTOMY 1955. NO OTHER	03-411-20A
	SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. (10-01-57)	03-411-20B
GAMMA-RAY MEASUREMENTS		03-411-25
	10-01-57 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM	03-411-25A
COMPUTED TOTAL-BODY RADIUM		03-411-27
	10-01-57 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31	03-411-27A
X-RAY EXAMINATION		03-411-30
	COMPLETE SKELETAL SURVEY	03-411-30A
	08-04-58 ANL X-RAY NO. R-50 LOC. ANL	03-411-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0	03-411-30C
	PPF NONE.	03-411-30D
CLINICAL LABORATORY FINDINGS		03-411-40
	08-04-58 HG 13.9 HTC RBC 4.01	03-411-40A
	WBC 5700 DIFF. P 63 ST L 31 M 4 E 2 B	03-411-40B
687 -12	CHOLECYSTECTOMY	03-411-67
782 -10	HYSTERECTOMY	03-411-67A
DATA REVISED 10-26-67		03-411-99

PATIENT 03-412	BORN 03-21-94	03-412-01
		03-412-02
		03-412-03
		03-412-04
FEMALE		03-412-05
OTHER PERTINENT NOS.	AMBH	03-412-05A
SOURCE OF CASE	SEARCH BY CEM	03-412-10
LITERATURE CITATION		03-412-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-412-11A
EXPOSURE	DIAL PAINTER 01	03-412-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, 09-02-22 TO MAY 1925,		03-412-13
ABOUT 3 YEARS. PAINTED DIALS ONLY. POINTED BRUSH IN MOUTH UNTIL		03-412-13A
LAST 8 MONTHS WHEN GLASS PENS WERE INTRODUCED. NEVER PAINTED HER		03-412-13B
OWN PERSON.		03-412-13C
ASSUMED WORK PERIOD 09-02-1922 TO 04-01-1925		03-412-13*
28.44 YEARS OF AGE WHEN FIRST EMPLOYED.		03-412-13Z
FAMILY HISTORY		03-412-15
MARRIED 1911	PARA 2	GRAVIDA 2
HUSBAND		DECEASED 1920
MARRIED 1924	PARA 4	GRAVIDA 4
HUSBAND		L W
		03-412-15A
		03-412-15B
		03-412-15C
		03-412-15D
CHILDREN	FEMALE	L W
	FEMALE	L W
	FEMALE 1920	L W
	MALE 1922	L W
	MALE 1926	L W
	FEMALE 1929	L W
		03-412-16
		03-412-16A
		03-412-16B
		03-412-16C
		03-412-16D
		03-412-16E
MEDICAL HISTORY		03-412-20
NO SURGERY OR SERIOUS ILLNESSES. HAS HAD ARTHRITIS INTERMITTENTLY		03-412-20A
FOR PAST 6 YEARS MOSTLY IN KNEES, ALSO IN HANDS AND SHOULDERS,		03-412-20B
DIFFICULT FOR HER TO BEND KNEES ASCENDING STEPS AND CANNOT KNEEL		03-412-20C
ON FLOOR, KNEES ACHE AND BECOME SWOLLEN. TEETH--WEARS DUCBLE		03-412-20D
DENTURES. (10-01-57)		03-412-20E
PATIENT WAS HOSPITALIZED FOR 10 DAYS FOR PNEUMONIA, 1961. HOSPI-		03-412-21A
TALIZED FOR 5 DAYS FOR FRACTURED LEFT HEEL, 02-09-63. INQUIRY		03-412-21B
BY SYSTEMS--STILL HAS ARTHRITIC DISCOMFORT IN KNEES, OCCASION-		03-412-21C
ALLY IN HANDS AND SHOULDERS, OTHERWISE NEGATIVE. (06-20-63)		03-412-21D
GAMMA-RAY MEASUREMENTS		03-412-25
10-01-57 RAB,RAC 0.102 UCI HGS 1 TILTING CHAIR CEM		03-412-25A
06-20-63 RAB,RAC 0.076 UCI HGS 1 TILTING CHAIR CEM		03-412-25B
06-20-63 RAB,RAC 0.064 UCI HGS 1 7-CRYST-POS CEM		03-412-25C
04-15-65 RAB,RAC 0.066 UCI HGS 1 TILTING CHAIR CEM		03-412-25D

COMPUTED TOTAL-BODY RADIUM

10-01-57	0.102 UCI	0.330 UCI TOTAL	0.31	03-412-27
06-20-63	0.076 UCI	0.244 UCI TOTAL	0.31	03-412-27A
06-20-63	0.064 UCI	0.208 UCI TOTAL	0.31	03-412-27B
04-15-65	0.066 UCI	0.212 UCI TOTAL	0.31	03-412-27C
				03-412-27D

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

07-24-58	ANL	X-RAY NO. R-42	LOC. ANL	03-412-30
				03-412-30A
				03-412-30B
				03-412-30C
				03-412-30D
				03-412-30E
				03-412-30F

COMPLETE SKELETAL SURVEY

06-20-63	ANL	X-RAY NO. R-42B	LOC. ANL	03-412-31A
				03-412-31B
				03-412-31C
				03-412-31D
				03-412-31E
				03-412-31F
				03-412-31G
				03-412-31H
				03-412-31I

SPECIAL VIEWS--SINUSES, LAMINAGRAMS

04-15-65	U OF CHICAGO CLINICS	UNIT NO.	LOC. U OF C	03-412-32A
				03-412-32B
				03-412-32C
				03-412-32D

CLINICAL LABORATORY FINDINGS

07-24-58	HG 13.0	HTC	RBC 4.45	03-412-40
WBC 5200	DIFF. P 61	ST 1	L 34 M 2 E 2 B 0	03-412-40A
				03-412-40B
06-20-63	HG 14.7	HTC 47	RBC 4.40	03-412-41A
WBC 5200	DIFF. P 61	ST	L 34 M 2 E 3 B 0	03-412-41B

2391 -416 FRACTURE OF CALCANEUS

361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE

DATA REVISED 11-14-67

03-412-99

PATIENT 03-413

BORN 11-22-17

03-413-01
03-413-02
03-413-02
03-413-03
03-413-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

03-413-10

EXPOSURE

DIAL PAINTER 01

03-413-12

SOURCE LUMINOUS PROCESSES, INC. OTTAWA, ILL., SPRING 1938 TO JULY, 1941. PAINTED DIALS WITH BRUSHES AND GLASS PENS. DID NOT POINT BRUSH IN MOUTH.

03-413-13
03-413-13A
03-413-13B
03-413-13*

ASSUMED WORK PERIOD 04-01-1938 TO 07-01-1941

FAMILY HISTORY

MARRIED

PARA 2

GRAVIDA 2

03-413-15
03-413-15A

MEDICAL HISTORY

NO SURGERY OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--OCCASIONAL HEADACHES AND ALLERGIES. RECENT SORENESS IN DISTAL INTERPHALANGEAL JOINTS OF RIGHT INDEX AND MIDDLE FINGERS. DENTAL HISTORY--FOUR TEETH EXTRACTED. (10-02-57)

03-413-20
03-413-20A
03-413-20B
03-413-20C
03-413-20D

GAMMA-RAY MEASUREMENTS

10-02-57 RAB,RAC

0.001 UCI

HGS 1 TILTING CHAIR

CEM

03-413-25
03-413-25A

COMPUTED TOTAL-BODY RADIUM

10-02-57 0.001 UCI

0.004 UCI TOTAL

0.31

03-413-27
03-413-27A

X-RAY EXAMINATION

NOT DONE

03-413-30

CLINICAL LABORATORY FINDINGS

NOT DONE

03-413-40

DATA REVISED 10-26-67

03-413-99

PATIENT 03-414	BORN 02-17-21	03-414-01
		03-414-02
FEMALE		03-414-05
SOURCE OF CASE	SEARCH BY CEM	03-414-10
EXPOSURE	DIAL PAINTER 01	03-414-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., OCT. 1946 TO JUNE 1957. PAINTED CLOCK HANDS WITH BRUSH AND WORKED AT OPEN DESK. HANDLED POWDER UP TO 1956.		03-414-13
		03-414-13A
		03-414-13B
FAMILY HISTORY		03-414-15
NEVER MARRIED		03-414-15A
MEDICAL HISTORY		03-414-20
PARTIAL HYSTERECTOMY 1949. NO OTHER SERIOUS ILLNESSES. DENTAL HISTORY--SEVERAL TEETH EXTRACTED, SEVERAL SCHEDULED FOR EARLY EXTRACTION. (10-02-57)		03-414-20A
		03-414-20B
		03-414-20C
GAMMA-RAY MEASUREMENTS		03-414-25
10-02-57 RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM		03-414-25A
COMPUTED TOTAL-BODY RADIUM		03-414-27
10-02-57 0.003 UCI 0.010 UCI TOTAL 0.31		03-414-27A
X-RAY EXAMINATION	NOT DONE	03-414-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-414-40
782 -13 HYSTERECTOMY, PARTIAL		03-414-67
DATA REVISED 10-26-67		03-414-99

PATIENT 03-415	BORN 09-11-11	03-415-01
		03-415-02
		03-415-03
		03-415-04
		03-415-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-415-10
EXPOSURE	DIAL PAINTER 01	03-415-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., AND LUMINOUS PROCESSES INC.,		03-415-13
1930 TO 1945, TOTAL 15 YEARS. WORKED DIAL PAINTING MACHINE		03-415-13A
1 YEAR, PACKED DIALS FOR SHIPPING 1 YEAR, WEIGHED MATERIAL,		03-415-13B
WAS DARKROOM INSPECTOR AND SUPERVISOR. NEVER DID BRUSH PAINTING.		03-415-13C
PAINTED FINGERNAILS SEVERAL TIMES.		03-415-13D
ASSUMED WORK PERIOD 06-01-1930 TO 06-01-1945		03-415-13*
18.71 YEARS OF AGE WHEN FIRST EMPLOYED.		03-415-13Z
FAMILY HISTORY		03-415-15
MARRIED	PARA 0 GRAVIDA 1 (1 MISCARRIAGE)	03-415-15A
MEDICAL HISTORY		03-415-20
HYSTERECTOMY 1953. BREAST TUMOR EXCISED 1943. FRACTURED PELVIS		03-415-20A
IN AUTOMOBILE ACCIDENT ABOUT 1947. CHRONIC BACKACHE. WEARS FULL		03-415-20B
DENTURE BUT NO EXTRACTIONS FROM LOWER JAW. (10-02-57)		03-415-20C
GAMMA-RAY MEASUREMENTS		03-415-25
10-02-57 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-415-25A
COMPUTED TOTAL-BODY RADIUM		03-415-27
10-02-57 0.005 UCI 0.015 UCI TOTAL 0.31		03-415-27A
X-RAY EXAMINATION		03-415-30
COMPLETE SKELETAL SURVEY		03-415-30A
08-04-58 ANL X-RAY NO. R-49 LOC. ANL		03-415-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-415-30C
PPF NONE.		03-415-30D
CLINICAL LABORATORY FINDINGS		03-415-40
08-04-58 HG 13.6 HTC RBC 3.78		03-415-40A
WBC 7500 DIFF. P 74 ST 2 L 20 M 3 E 1 B		03-415-40B
22X -416 FRACTURE OF THE PELVIS		03-415-61
190 -8Y00 TUMOR OF BREAST, TYPE UNDETERMINED		03-415-67A
782 -10 HYSTERECTOMY		03-415-67B
DATA REVISED 10-26-67		03-415-99

PATIENT 03-416	BORN 08-21-07	03-416-01
		03-416-02
		03-416-03
FEMALE		03-416-05
OTHER PERTINENT NOS.	AMBH	03-416-05A
SOURCE OF CASE	SEARCH BY CEM	03-416-10
EXPOSURE	DIAL PAINTER 01	03-416-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1924-1925, TOTAL OF 12 TO 18 MONTHS. PAINTED DIALS AND POINTED BRUSH IN MOUTH. NEVER PAINTED PARTS OF HER BODY.		03-416-13
		03-416-13A
		03-416-13B
ASSUMED WORK PERIOD 07-01-1924 TO 10-01-1925		03-416-13*
16.85 YEARS OF AGE WHEN FIRST EMPLOYED.		03-416-13Z
FAMILY HISTORY		03-416-15
MARRIED 1929	PARA 1 GRAVIDA 1	03-416-15A
CHILDREN MALE 1930 L W		03-416-16
MEDICAL HISTORY		03-416-20
APPENDECTOMY AND OOPHORECTOMY 1930. HISTORY OF MIGRAINE HEAD-ACHES, LESS SEVERE IN RECENT YEARS. OCCASIONAL SHARP PAINS IN SHOULDERS ASSOCIATED WITH WORK AND CHANGES IN WEATHER. DENTAL HISTORY--TEETH NORMAL UP TO 2 YEARS AGO WHEN SORENESS AND ACHING DEVELOPED. FIVE TEETH EXTRACTED. (1C-02-57)		03-416-20A
		03-416-20B
		03-416-20C
		03-416-20D
		03-416-20E
CORONARY OCCLUSION WITH MYOCARDIAL INFARCTION DEC. 1957. PATIENT IS SYMPTOM-FREE AS LONG AS EXERTION IS AVOIDED. HISTORY OF ACHING IN LEFT EAR 2 YEARS AGO THAT SPONTANEOUSLY SUBSIDED WITHOUT TREATMENT. UNDER TREATMENT FOR HYPERTENSION SINCE HEART ATTACK IN 1957. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. SEVERAL TEETH EXTRACTED SINCE 1957. (09-28-62)		03-416-21A
		03-416-21B
		03-416-21C
		03-416-21D
		03-416-21E
		03-416-21F
INTERVAL HISTORY NEGATIVE, EXCEPT THAT BASAL CELL CA DEVELOPED ON NOSE, WHICH WAS TREATED BY SALVE AND THEN BY X-RAY. FEELS VERY WELL, NO ARTHRITIS OR JOINT PAINS, NO BACKACHE OR EAR PROBLEMS. (09-16-66)		03-416-22A
		03-416-22B
		03-416-22C
		03-416-22D
GAMMA-RAY MEASUREMENTS		03-416-25
10-02-57 RAB,RAC 0.443 UCI HGS 1 TILTING CHAIR CEM		03-416-25A
10-13-58 RAB,RAC 0.413 UCI HGS 1 TILTING CHAIR CEM		03-416-25B
09-28-62 RAB,RAC 0.404 UCI HGS 1 TILTING CHAIR CEM		03-416-25C
09-26-66 RAB,RAC 0.372 UCI HGS 1 TILTING CHAIR CEM		03-416-25D
COMPUTED TOTAL-BODY RADIUM		03-416-27
10-02-57 0.443 UCI 1.430 UCI TOTAL 0.31		03-416-27A
10-13-58 0.413 UCI 1.333 UCI TOTAL 0.31		03-416-27B
09-28-62 0.404 UCI 1.303 UCI TOTAL 0.31		03-416-27C
09-26-66 0.372 UCI 1.199 UCI TOTAL 0.31		03-416-27D

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

10-13-58 ANL X-RAY NO. R-63 LOC. ANL
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10.5
PPF AREAS OF BONE RESORPTION IN RIGHT AND LEFT HUMERUS, RIGHT
AND LEFT RADIUS, LEFT ULNA, RIGHT FEMUR. COARSENING OF TRABECULA-
TION NOTED IN RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA, AND
LEFT METATARSALS.

03-416-30
03-416-30A
03-416-30B
03-416-30C
03-416-30D
03-416-30E
03-416-30F
03-416-30G

COMPLETE SKELETAL SURVEY

09-28-62 ANL X-RAY NO. R-63B LOC. ANL
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 16
PPF AREAS OF BONE RESORPTION SEEN IN THE RIBS, RIGHT AND LEFT
RADIUS AND ULNA, RIGHT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA.
COARSENING OF TRABECULATION IN RIGHT AND LEFT HUMERUS, AND RIGHT
AND LEFT FEMUR, AND LEFT TIBIA. THICKENING OF THE MID-PORTIONS
OF CORTEX OF SHAFTS OF RIGHT AND LEFT RADIUS AND ULNA.

03-416-31A
03-416-31B
03-416-31C
03-416-31D
03-416-31E
03-416-31F
03-416-31G
03-416-31H

SPECIAL VIEWS--SINUSES AND MASTOIDS AND LAMINOGRAMS

05-14-64 U OF C CLINICS UNIT NO. LOC. U OF C
NORMAL PARANASAL AIR SINUSES. SMALL DESTRUCTIVE LESION IN RIGHT
PARIETAL REGION IN PATIENT WITH KNOWN RADIUM BURDEN. BLURRING
OF TRABECULA OF MASTOIDS BILATERALLY AND SOME DESTRUCTION OF
SEPTA.

03-416-32A
03-416-32B
03-416-32C
03-416-32D
03-416-32E
03-416-32F

COMPLETE SKELETAL SURVEY

09-26-66 ANL X-RAY NO. R-63C LOC. ANL
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18
PPF MULTIPLE AREAS OF BONE RESORPTION RIGHT AND LEFT HUMERUS,
RIGHT RADIUS AND LEFT RADIUS AND ULNA. MARKED CORTICAL PROLIFER-
ATION RIGHT AND LEFT RADIUS AND ULNA AND RIGHT AND LEFT HUMERUS.
MULTIPLE AREAS OF BONE RESORPTION RIGHT AND LEFT TIBIA AND FIBULA
WITH COARSENING OF THE TRABECULAR PATTERN AND PATCHY SCLEROSIS.

03-416-33A
03-416-33B
03-416-33C
03-416-33D
03-416-33E
03-416-33F
03-416-33G
03-416-33H

CLINICAL LABORATORY FINDINGS

10-13-58 HG 12.6 HTC RBC 4.60
WBC 8000 DIFF. P 67 ST L 20 M 10 E 3 B

09-28-62 HG 13.0 HTC RBC 4.48
WBC 7200 DIFF. P 72 ST L 18 M 9 E 1 B

09-26-66 HG 15.4 HTC 47 RBC
WBC 5300 DIFF. P 67 ST 1 L 23 M 7 E 1 B 1

03-416-40
03-416-40A
03-416-40B

03-416-41A
03-416-41B

03-416-42A
03-416-42B

MALIGNANT TUMOR BASAL CELL CANCER, NCSE

47X -X30 ESSENTIAL HYPERTENSION
133 -812 BASAL CELL CARCINOMA
430 -516.7 MYOCARDIAL INFARCTION
661 -12 APPENDECTOMY
788 -12 BILATERAL OOPHORECTOMY
930 -X41 MIGRAINE

03-416-60

03-416-67
03-416-67A
03-416-67B
03-416-67C
03-416-67D
03-416-67E

TOOTH MEASUREMENT

SAMPLE 5.01

TOOTH MOLAR

TOTAL WT. 2.1227

CALC.GMS.CA. 0.5943

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

171.5

329.1

52

553.7

0.415

03-416-73

03-416-73A

03-416-73B

03-416-73C

03-416-73D

SAMPLE 5.02

TOOTH MOLAR

TOTAL WT. 1.9734

CALC.GMS.CA. 0.5526

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

93.3

194.4

48

351.8

0.264

03-416-74A

03-416-74B

03-416-74C

03-416-74D

DATA REVISED 11-14-68

03-416-99

PATIENT 03-417	BORN 11-27-09	03-417-01
DECEASED		03-417-02
		03-417-02A
		03-417-03
FEMALE		03-417-05
OTHER PERTINENT NOS.	AMBH	03-417-05A
DECEASED 11-02-66		03-417-06
DEATH CERT.NO.	AUTOPSY NONE	03-417-07
INTERMENT	ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS	03-417-08
CAUSES OF DEATH	CORONARY THROMBOSIS,	03-417-09
	FAIRLY GENERALIZED CARCINOMA,	03-417-09A
	EXPOSURE TO RADIUM MANY YEARS AGO (DEATH CERT.)	03-417-09B
	SQUAMOUS CELL CARCINOMA OF THE RIGHT GINGIVA,	03-417-09C
	WIDELY METASTATIC (ACTUAL)	03-417-09D
SOURCE OF CASE	SEARCH BY CEM	03-417-10
LITERATURE CITATION		03-417-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-417-11A
WALD, ET AL, REP. SAM-TDR-63-1, USAF SCH.AEROSP.MED. (APRIL 1963).		03-417-11B
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-417-11C
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-417-11D
EXPOSURE	DIAL PAINTER 01	03-417-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., TOTAL OF 14 MONTHS ABOUT		03-417-13
1925 (PATIENT IS ON 1924 PHOTOGRAPH). PAINTED DIALS AND POINTED		03-417-13A
BRUSH IN HER MOUTH BUT NEVER PAINTED ANY PART OF HER BODY.		03-417-13B
ASSUMED WORK PERIOD 07-01-1924 TO 09-01-1925		03-417-13*
14.59 YEARS OF AGE WHEN FIRST EMPLOYED.		03-417-13Z
FAMILY HISTORY		03-417-15
MARRIED 1933	PARA 2 GRAVIDA 2	03-417-15A
CHILDREN	MALE 1934 L W	03-417-16
	MALE 1936 DEC. AGE 10, RHEUM. HEART DIS.	03-417-16A
MEDICAL HISTORY		03-417-20
NO SURGERY OR SERIOUS ILLNESSES. ABOUT 1944 OR 45 WAS SEEN AT		03-417-20A
MAYO CLINIC WHERE DIAGNOSIS OF ANEMIA WAS MADE. DENTAL HISTORY--		03-417-20B
THREE OR FOUR TEETH EXTRACTED. (10-02-57)		03-417-20C
IN 01-61 PATIENT NOTED A PEA-SIZE MASS ON THE OUTER ASPECT OF THE		03-417-21A
GINGIVA OF THE RIGHT UPPER JAW POSTERIORLY. IN 02-61 SHE SAW HER		03-417-21B
DENTIST, DR. VESPA OF , WHO REMOVED AN IM-		03-417-21C
PACTED WISDOM TOOTH FROM THE RIGHT UPPER JAW AND ALSO THE ADJA-		03-417-21D
CENT TOOTH. THE GUM HEALED NORMALLY AFTER THIS. IN 09-61 THE AREA		03-417-21E
OF EXTRACTION BLEED AFTER THE PATIENT BRUSHED HER TEETH. HER DEN-		03-417-21F
TIST SAID THAT SHE HAD A CYST WHICH HE THEN PACKED SEVERAL TIMES.		03-417-21G
ON 02-26-62 A THIRD TOOTH WAS EXTRACTED ADJACENT TO THE AREA OF		03-417-21H
THE PREVIOUS EXTRACTION. THE PATIENT WAS TOLD THAT THIS TIME THE		03-417-21I
BONE ADJACENT TO THIS AREA HAD BROKEN DOWN. SHE ENTERED THE U OF		03-417-21J

CHICAGO CLINICS ON 04-01-62 WHERE A BIOPSY OF THE RIGHT MAXILLA DEMONSTRATED A SQUAMOUS CELL CARCINOMA, APPARENTLY ARISING IN THE GINGIVA AND INVADING THE MAXILLARY PROCESS, THE ZYGOMA AND THE FLOOR OF THE ORBIT. THE REMAINING TEETH IN THE AREA TO BE IRRADIATED WERE EXTRACTED AND THE PATIENT RECEIVED 6925 R OF 20 MEV ELECTRON THERAPY OVER A 6 BY 7 CM PORT. THE PATIENT REENTERED THE HOSPITAL IN 09-62 BECAUSE OF THE APPEARANCE OF AN ENLARGED LYMPH NODE AT THE ANGLE OF THE RIGHT JAW. A RIGHT, HARD HEMI-PALATECTOMY AND RIGHT RADICAL NECK DISSECTION WERE CARRIED OUT. IN 04-66 THE PATIENT DEVELOPED A DRY, HACKING, NON-PRODUCTIVE COUGH, AND THE PATIENT WAS ADMITTED TO THE HOSPITAL IN 05-66 WHERE BRONCHOSCOPY DEMONSTRATED AN EXTRINSIC MASS INVADING THE RIGHT MIDDLE LOBE BRONCHUS. HISTOLOGICALLY, THIS MASS WAS A SQUAMOUS CELL CARCINOMA IDENTICAL WITH THE PRIMARY TUMOR AND THE TUMOR METASTATIC TO THE CERVICAL LYMPH NODE. A LARGE MEDIASTINAL MASS WAS ALSO PRESENT AND WAS TREATED WITH 4600 R TO THE MEDIASTINUM RIGHT UPPER PULMONARY LOBE AND SUPRACLAVICULAR REGION OVER A 4 TO 5 WEEK PERIOD USING 2 MEV X-RAYS. THE PATIENT DIED SUDDENLY AT HOME ON 11-02-66, POSSIBLY FROM HEMORRHAGE INTO THE MEDIASTINAL MASS, ALTHOUGH THE DEATH CERTIFICATE WAS SIGNED OUT AS CORONARY THROMBOSIS.

GAMMA-RAY MEASUREMENTS

10-02-57	RAB,RAC	0.276 UCI	HGS 1 TILTING CHAIR	CEM	03-417-25A
04-06-62	RAB,RAC	0.236 UCI	HGS 1 TILTING CHAIR	CEM	03-417-25B
01-29-64	RAB,RAC	0.188 UCI	HGS 1 TILTING CHAIR	CEM	03-417-25C
01-29-64	RAB,RAC	0.185 UCI	HGS 1 7-CRYST-POS (8X4)	CEM	03-417-25D
01-29-64	RAB,RAC	0.201 UCI	HGS 1 7-CRYST-POS (LOG)	CEM	03-417-25E

COMPUTED TOTAL-BODY RADIUM

10-02-57	0.276 UCI	0.890 UCI TOTAL	0.31	03-417-27A
04-06-62	0.236 UCI	0.760 UCI TOTAL	0.31	03-417-27B
01-29-64	0.188 UCI	0.606 UCI TOTAL	0.31	03-417-27C
01-29-64	0.185 UCI	0.597 UCI TOTAL	0.31	03-417-27D
01-29-64	0.201 UCI	0.649 UCI TOTAL	0.31	03-417-27E

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

06-04-58	ANL	X-RAY NO. R-38	LOC. ANL	03-417-30A
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.				03-417-30B
PPF AREAS OF BONE RESORPTION SEEN IN SKULL, RIGHT RADIUS AND ULNA, AND LEFT TIBIA.				03-417-30C
				03-417-30D
				03-417-30E

COMPLETE SKELETAL SURVEY

04-09-62	ANL	X-RAY NO. R-388	LOC. ANL	03-417-31A
MILD CHANGES TYPICAL OF RADIUM DEPOSITION.				03-417-31B
(ON BASIS OF CLINICAL EVIDENCE DIAGNOSIS SHOULD BE--ADVANCED				03-417-31C
CHANGES ASSOCIATED WITH RADIUM DEPOSITION, MALIGNANT)				03-417-31D
PPF AREAS OF BONE RESORPTION SEEN IN SKULL, RIGHT AND LEFT				03-417-31E
RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA. COARSENING OF				03-417-31F
TRABECULATION OF RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT				03-417-31G
TIBIA. (DESTRUCTIVE LESION OF RIGHT ANTRUM SEEN ON SPECIAL FILMS				03-417-31H
TAKEN AT U OF C CLINICS.)				03-417-31I
				03-417-31J

SPECIAL VIEWS--CHEST, SKULL, SINUSES			03-417-32A
04-13-64	U OF CHICAGO CLINICS UNIT NO.	LOC. U OF C	03-417-32B
BONY DESTRUCTION OF RIGHT MAXILLARY ANTRUM WITH INVOLVEMENT OF FLOOR, LATERAL AND MEDIAL WALL, SHOWING PROGRESSIVE CHANGE IN COMPARISON WITH PREVIOUS FILM. FINDINGS MAY BE RESULT OF POST SURGERY OR DUE TO PROGRESSION OF THE DISEASE. CHEST IS NORMAL.			03-417-32C
BONY EROSION OF BASE OF SKULL LATERAL TO SPHENOID SINUS ON RIGHT SIDE, NO APPARENT CHANGE IN COMPARISON WITH PREVIOUS EXAMINATION.			03-417-32D
			03-417-32E
			03-417-32F
			03-417-32G
			03-417-32H
SPECIAL VIEWS--LAMINAGRAM OF THE ORBITAL REGION			03-417-33A
04-16-64	U OF CHICAGO CLINIC UNIT NO.	LOC. U OF C	03-417-33B
POST-SURGICAL CHANGES CONSISTENT WITH RIGHT ANTRECTOMY. ABNORMAL APPEARANCE OF THE ZYGOMATIC PORTION OF LATERAL WALL OF RIGHT ORBIT. FINDINGS HAVE APPEARANCE OF CHRONIC OSTEOMYELITIS.			03-417-33C
			03-417-33D
			03-417-33E
SPECIAL VIEWS--LEFT ELBOW			03-417-34A
10-22-64	U OF CHICAGO CLINICS UNIT NO.	LOC. U OF C	03-417-34B
MULTIPLE OSTEOLYTIC LESIONS ARE SEEN ABOUT LEFT ELBOW.			03-417-34C
SPECIAL VIEWS--MASTOIDS, LAMINAGRAMS			03-417-35A
02-23-65	U OF CHICAGO CLINICS UNIT NO.	LOC. U OF C	03-417-35B
NORMAL MASTOIDS.			03-417-35C
CLINICAL LABORATORY FINDINGS			03-417-40
06-04-58	HG 11.8	HTC	RBC 3.96
WBC 8000	DIFF. P 58	ST	L 37 M 2 E 3 B
			03-417-40A
			03-417-40B
04-02-62	HG 13.3	HTC 39	RBC 3.91
WBC 6000	DIFF. P 53	ST	L 38 M 4 E 5 B 0
			03-417-41A
			03-417-41B
04-14-64	HG 13.2	HTC 35	RBC 3.67
WBC 7750	DIFF. P 67	ST	L 28 M 3 E 1 B 1
SERUM CALCIUM 9.5 MG PERCENT, SERUM PHOSPHORUS, 3.5 MG PERCENT			03-417-42A
ALKALINE PHOSPHATASE 3.7 UNITS PERCENT			03-417-42B
			03-417-42C
			03-417-42D
06-06-66	HG 11.7	HTC 38	RBC 3.8
WBC 6700			
PLATELETS 169,000			03-417-43A
			03-417-43B
			03-417-43C
SPECIMENS AVAILABLE			03-417-50
TOOTH		ANL	CEM
BONE		ACRH	RJH
			03-417-50A
			03-417-50B
MALIGNANT TUMOR	SQUAMOUS CELL CARCINOMA OF THE RIGHT GINGIVA INVADING THE RIGHT MAXILLA 1962		03-417-60
			03-417-60A
6142 -814F	EPIDERMOID CARCINOMA OF THE GINGIVA		03-417-66
DATA REVISED 03-11-68			03-417-99

PATIENT 03-418	BORN 12-05-96	03-418-01
		03-418-02
		03-418-03
		03-418-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-418-10
EXPOSURE	DIAL PAINTER 01	03-418-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., FROM DEC. 1926 TO SEPT. 1933,		03-418-13
AGAIN FOR ADDITIONAL 2 TO 3 YEARS STARTING SUMMER 1935. WEIGHED		03-418-13A
AND BLENDED MATERIALS FOR FIRST 7 YEARS, SHIPPED AND PACKED		03-418-13B
MATERIALS FOR NEXT 2 YEARS. DURING SECOND EMPLOYMENT, PAINTED		03-418-13C
HANDS WITH TOOTHPICK PART OF TIME. NEVER POINTED BRUSH IN MOUTH,		03-418-13D
BUT CLOTHES GLOWED AT NIGHT.		03-418-13E
ASSUMED WORK PERIOD 12-01-1926 TO 07-01-1938		03-418-13*
29.98 YEARS OF AGE WHEN FIRST EMPLOYED.		03-418-13Z
FAMILY HISTORY		03-418-15
MARRIED	PARA 0 GRAVIDA 0	03-418-15A
MEDICAL HISTORY		03-418-20
HYSTERECTOMY 1948. NO OTHER SERIOUS ILLNESSES. INQUIRY BY		03-418-20A
SYSTEMS--HISTORY OF BACKACHE WHICH OCCURRED MOSTLY WHILE LIFT-		03-418-20B
ING INVALID MOTHER. DENTAL HISTORY--COMPLETE EXTRACTION 1938,		03-418-20C
WEARS DOUBLE DENTURES. (10-04-57)		03-418-20D
GAMMA-RAY MEASUREMENTS		03-418-25
10-04-57 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-418-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		03-418-27
10-04-57 0.002 UCI 0.007 UCI TOTAL 0.31		03-418-27A
X-RAY EXAMINATION		03-418-30
COMPLETE SKELETAL SURVEY		03-418-30A
12-12-57 ANL X-RAY NO. R-25 LOC. ANL		03-418-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-418-30C
PPF FINAL DIAGNOSIS DEFERRED BECAUSE OF SEVERAL TECHNICALLY		03-418-30D
INADEQUATE FILMS.		03-418-30E
COMPLETE SKELETAL SURVEY		03-418-31A
10-28-58 ANL X-RAY NO. R-25B LOC. ANL		03-418-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-418-31C
PREVIOUSLY INADEQUATE FILMS NOW SUPERSEDED BY GOOD, NORMAL FILMS.		03-418-31D
CLINICAL LABORATORY FINDINGS		03-418-40
12-12-57 HG 13.3 HTC RBC 4.05		03-418-40A
WBC 7800 DIFF. P 63 ST L 28 M 5 E 3 B 1		03-418-40B
782 -10 HYSTERECTOMY		03-418-67

PATIENT 03-419	BORN 04-11-06	03-419-01
		03-419-02
		03-419-03
FEMALE		03-419-05
SOURCE OF CASE	SEARCH BY CEM	03-419-10
LITERATURE CITATION		03-419-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-419-11A
EXPOSURE	DIAL PAINTER 01	03-419-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APPROX. 4 YEARS 1924 TO DEC. 1928. PAINTED DIALS. POINTED BRUSH IN MOUTH. GLASS PENS WERE USED TOWARD END OF EMPLOYMENT. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 12-01-1924 TO 12-01-1928 18.63 YEARS OF AGE WHEN FIRST EMPLOYED.		03-419-13
		03-419-13A
		03-419-13B
		03-419-13*
		03-419-13Z
FAMILY HISTORY		03-419-15
MARRIED 1928	PARA 1 GRAVIDA 1	03-419-15A
CHILDREN MALE 1931 L W		03-419-16
MEDICAL HISTORY		03-419-20
APPENDECTOMY AND PARTIAL HYSTERECTOMY 1951. THREE SURGICAL PROCEDURES FOR BENIGN BREAST CYSTS. NO SERIOUS ILLNESSES. DENTAL HISTORY--SEVERAL TEETH EXTRACTED, SEVERAL MORE SCHEDULED FOR EXTRACTION. (10-04-57)		03-419-20A
		03-419-20B
		03-419-20C
		03-419-20D
INTERVAL HISTORY ESSENTIALLY NEGATIVE EXCEPT FOR MINOR GYNCOLOGICAL PROCEDURE 1957. NOW REMEMBERS TAIL BONE FRACTURE ABOUT 1947. INQUIRY BY SYSTEMS--REDUCED HEARING IN LEFT EAR, HYPERTENSION TREATED BY MEDICATION. DENTAL HISTORY--COMPLETE EXTRACTION MAY BE PERFORMED AFTER 01-01-63. (10-05-62)		03-419-21A
		03-419-21B
		03-419-21C
		03-419-21D
		03-419-21E
GAMMA-RAY MEASUREMENTS		03-419-25
10-04-57 RAB,RAC 0.230 UCI HGS 1 TILTING CHAIR CEM		03-419-25A
07-22-59 RAB,RAC 0.236 UCI HGS 1 TILTING CHAIR CEM		03-419-25B
10-05-62 RAB,RAC 0.211 UCI HGS 1 TILTING CHAIR CEM		03-419-25C
10-05-62 RAB,RAC 0.210 UCI HGS 1 7-CRYST-POS CEM		03-419-25D
COMPUTED TOTAL-BODY RADIUM		03-419-27
10-04-57 0.230 UCI 0.740 UCI TOTAL 0.31		03-419-27A
07-22-59 0.236 UCI 0.761 UCI TOTAL 0.31		03-419-27B
10-05-62 0.211 UCI 0.653 UCI TOTAL 0.31		03-419-27C
10-05-62 0.210 UCI 0.679 UCI TOTAL 0.31		03-419-27D
X-RAY EXAMINATION		03-419-30
COMPLETE SKELETAL SURVEY		03-419-30A
12-12-57 ANL X-RAY NO. R-24 LOC. ANL		03-419-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2		03-419-30C
PPF AREAS OF BONE RESORPTION IN MID-SHAFT OF RIGHT TIBIA. AREAS OF BONE RESORPTION SUSPECTED IN SKULL, BUT FILMS ARE NOT TECHNICALLY ADEQUATE.		03-419-30D
		03-419-30E
		03-419-30F

SPECIAL VIEWS--SKULL AND MASTOIDS

07-22-59 ANL X-RAY NO. R-24B LOC. ANL
SKULL AND MASTOIDS ARE NORMAL.
PPF NONE.

03-419-31A
03-419-31B
03-419-31C
03-419-31D

COMPLETE SKELETAL SURVEY

10-05-62 ANL X-RAY NO. R-24C LOC. ANL
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5
PPF AREAS OF BONE RESORPTION RIGHT HUMERUS, LEFT RADIUS, RIGHT
TIBIA AND POSSIBLY LEFT FIBULA. COARSENING OF TRABECULATION OF
LEFT ULNA. THICKENING OF CORTEX OF MID-SHAFT LEFT FEMUR.

03-419-32A
03-419-32B
03-419-32C
03-419-32D
03-419-32E
03-419-32F

CLINICAL LABORATORY FINDINGS

12-12-57 HG 13.2 HTC RBC 4.38
WBC 7100 DIFF. P 60 ST L 30 M 9 E 1 B

03-419-40
03-419-40A
03-419-40B

10-05-62 HG 13.6 HTC RBC 4.46
WBC 7000 DIFF. P 64 ST 1 L 26 M 8 E 1 B

03-419-41A
03-419-41B

47X -X30 ESSENTIAL HYPERTENSION
190 -11 LOCAL EXCISION OF BREAST LESION (CYST)
225 -416 FRACTURE OF THE COCCYX
661 -12 APPENDECTOMY
782 -13 HYSTERECTOMY, PARTIAL

03-419-67
03-419-67A
03-419-67B
03-419-67C
03-419-67D

DATA REVISED 10-27-67

03-419-99

PATIENT 03-420	BORN 04-03-06	03-420-01
DECEASED		03-420-02
		03-420-02A
		03-420-03
FEMALE		03-420-05
DECEASED 01-02-60		03-420-06
DEATH CERT.NO.	AUTOPSY NONE	03-420-07
INTERMENT	OAKWOOD MEMORIAL PARK, OTTAWA, ILLINOIS	03-420-08
CAUSES OF DEATH	GENERALIZED METASTATIC CARCINOMA, CARCINOMA OF COLON	03-420-09
		03-420-09A
SOURCE OF CASE	SEARCH BY CEM	03-420-10
LITERATURE CITATION		03-420-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-420-11A
RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-420-11B
EXPOSURE	DIAL PAINTER 01	03-420-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SEPT. 1922 TO OCT. 1926.		03-420-13
PAINTED DIALS FOR FIRST 3 WEEKS, INSPECTOR FOR BALANCE OF TIME.		03-420-13A
OCCASIONALLY PAINTED SPECIAL ORDERS. WAS IN CHARGE OF STREATOR		03-420-13B
PLANT FOR 3 MONTHS. POINTED BRUSH IN MOUTH ONLY OCCASIONALLY.		03-420-13C
NEVER PAINTED ANY PART OF HER BODY. WORKED SUBSEQUENTLY AS		03-420-13D
PRACTICAL NURSE IN HOME FOR AGED.		03-420-13E
ASSUMED WORK PERIOD 09-01-1922 TO 10-01-1926		03-420-13*
16.41 YEARS OF AGE WHEN FIRST EMPLOYED.		03-420-13Z
FAMILY HISTORY		03-420-15
MARRIED	PARA 4 GRAVIDA 4	03-420-15A
CHILDREN	L W (2)	03-420-16
	DIED AT BIRTH (1)	03-420-16A
	RETARDED, STATE INSTITUTION(1)	03-420-16B
MEDICAL HISTORY		03-420-20
APPENDECTOMY 1924, HYSTERECTOMY 1941. HOSPITALIZED FOR 2 WEEKS		03-420-20A
1956 FOR ARTHRITIS OF LEFT KNEE, LOWER SPINE AND LEFT SHOULDER.		03-420-20B
DENTAL HISTORY--TEETH EXTRACTED APRIL 1951, WEARS DOUBLE		03-420-20C
DENTURES. (10-09-57)		03-420-20D
GAMMA-RAY MEASUREMENTS		03-420-25
10-09-57 RAB,RAC 0.006 UCI HGS 1 TILTING CHAIR CEM		03-420-25A
COMPUTED TOTAL-BODY RADIUM		03-420-27
10-09-57 0.006 UCI 0.018 UCI TOTAL 0.31		03-420-27A
X-RAY EXAMINATION		03-420-30
COMPLETE SKELETAL SURVEY		03-420-30A
02-28-58 ANL X-RAY NO. R-32 LOC. ANL		03-420-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-420-30C
PPF NONE.		03-420-30D

CLINICAL LABORATORY FINDINGS

02-28-58 HG 11.8 HTC RBC 4.52
WBC 6200 DIFF. P 53 ST L 26 M 6 E 15 B

03-420-40
03-420-40A
03-420-40B

MALIGNANT TUMOR CARCINOMA OF COLON 1960

03-420-60

660 -8091.0 ADENOCARCINOMA OF COLON, WITH METASTASES
661 -12 APPENDECTOMY
782 -10 HYSTERECTOMY

03-420-67
03-420-67A
03-420-67B

DATA REVISED 11-07-67

03-420-99

PATIENT 03-421	BORN 09-04-08	03-421-01 03-421-02 03-421-03 03-421-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-421-10
EXPOSURE	DIAL PAINTER 01	03-421-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., ABOUT 2 YEARS, LATE 1924 TO EARLY 1927. WORKED IN SUPPLY ROOM AND WASHED BRUSHES AND DISHES THAT CONTAINED RADIUM. DID NOT PAINT DIALS AND NEVER PAINTED OWN PERSON.		03-421-13 03-421-13A 03-421-13B 03-421-13C
FAMILY HISTORY		03-421-15
MARRIED	PARA 2 GRAVIDA 3 (1 MISCARRIAGE)	03-421-15A
MEDICAL HISTORY		03-421-20
HYSTERECTOMY 1941. OTTAWA TB SANITORIUM 1949 FOR 22 MONTHS, TREATED WITH PNEUMOTHORAX AND PHRENIC CRUSH. ANNUAL TUBERCULOSIS RECHECK AT OTTAWA SANITORIUM. INQUIRY BY SYSTEMS--RECURRENT MIGRAINE HEADACHES SINCE 1952 AND NERVOUS COLON. HAS HAD ACHING AND BURNING IN RIGHT KNEE PAST YEAR. TEETH IN GOOD CONDITION EXCEPT FOR 3 WISDOM TEETH EXTRACTED. (10-09-57)		03-421-20A 03-421-20B 03-421-20C 03-421-20D 03-421-20E 03-421-20F
GAMMA-RAY MEASUREMENTS		03-421-25
10-09-57 RAB,RAC 0.004 UCI HGS 1 TILTING CHAIR CEM		03-421-25A
COMPUTED TOTAL-BODY RADIUM		03-421-27
10-09-57 0.004 UCI 0.012 UCI TOTAL 0.31		03-421-27A
X-RAY EXAMINATION	NOT DONE	03-421-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-421-40
360 -123 PULMONARY TUBERCULOUS		03-421-67
782 -10 HYSTERECTOMY		03-421-67A
930 -X41 MIGRAINE		03-421-67B
DATA REVISED 07-25-67		03-421-99

PATIENT 03-423	BORN 11-21-07	03-423-01
		03-423-02
FEMALE		03-423-03
		03-423-05
OTHER PERTINENT NOS.	AMBH	03-423-05A
	CASE 306	03-423-05B
SOURCE OF CASE	SEARCH BY CEM	03-423-10
LITERATURE CITATION		03-423-11
WALD, ET AL, REP. SAM-TDR-63-1, USAF SCH. AEROSP. MED. (APRIL 1963).		03-423-11A
MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P. 67, IAEA,		03-423-11B
VIENNA (1964).		03-423-11C
MILLER, ANL-6839 (1964) PP. 18-39.		03-423-11D
EXPOSURE	DIAL PAINTER 01	03-423-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., LUMINOUS PROCESSES, INC.,		03-423-13
OTTAWA, ILL., JULY 1923 TO NOV. 1935. PATIENT PAINTED NUMERALS		03-423-13A
ON CLOCK FACES. DOES NOT REMEMBER PAINTING BRUSH IN MOUTH. GLASS		03-423-13B
PENS WERE INTRODUCED SHORTLY AFTER START OF WORK. DID NOT PAINT		03-423-13C
ANY PART OF HER BODY.		03-423-13D
ASSUMED WORK PERIOD 07-01-1923 TO 11-01-1935		03-423-13*
15.60 YEARS OF AGE WHEN FIRST EMPLOYED.		3-423-13Z
FAMILY HISTORY		03-423-15
MARRIED	PARA 2 GRAVIDA 4 (2 SPON. AB.)	03-423-15A
CHILDREN	FEMALE 1937 L W, MARRIED, 2 CHILDREN	03-423-16
	FEMALE 1945 L, MONG., IN SCHOOL FOR	03-423-16A
	TRAINABLE CHILDREN	03-423-16B
MEDICAL HISTORY		03-423-20
NO SERIOUS ILLNESSES, NO SURGERY. INQUIRY BY SYSTEMS NEGATIVE		03-423-20A
EXCEPT FOR SINUSITIS. DENTAL HISTORY--SEVERAL MOLARS EXTRACTED.		03-423-20B
(10-09-57)		03-423-20C
CHIP IN LEFT SHOULDER AS RESULT OF AUTO ACCIDENT 1955.		03-423-21A
EARLY 1959, FELL IN BASEMENT AND SUSTAINED FRACTURED LEFT		03-423-21B
ANTERIOR RIB. SEVERAL MORE TEETH EXTRACTED. (11-09-59)		03-423-21C
DEVELOPED PAIN IN RIGHT LEG OF SUDDEN ONSET DURING PAST YEAR.		03-423-22A
X-RAYS SAID TO REVEAL ARTHRITIS. (05-28-62)		03-423-22B
BECAUSE OF THE FINDINGS OF MARKED NECROSIS OF THE LEFT AND RIGHT		03-423-23A
MASTOID AIR CELLS AND IN THE FLOOR OF THE LEFT FRONTAL SINUS, THE		03-423-23B
PATIENT ENTERED THE U OF CHICAGO HOSPITALS ON 04-26-65 FOR BIOP-		03-423-23C
SY OF THE LEFT FRONTAL SINUS. ON 04-30-65 AN INCISION WAS MADE IN		03-423-23D
THE MEDIAL ASPECT OF THE LEFT EYEBROW DOWN TO AND THROUGH THE		03-423-23E
PERIOSTEUM. USING A MASTOID DRILL THE BONE WAS DRILLED AWAY IN		03-423-23F
THE AREA NORMALLY OVERLYING THE FRONTAL SINUS. NO OUTER OR INNER		03-423-23G
CORTICAL BONE LAYER, AS SUCH, WAS IDENTIFIED. SOFT TISSUE WAS		03-423-23H
THEN EXPOSED IN A SMALL AREA, WHICH WAS FELT TO BE EITHER FRONTAL		03-423-23I

PATIENT	03-423	BORN	11-21-07	03-423-01
				03-423-02
				03-423-03
				03-423-05
FEMALE				
OTHER PERTINENT NOS.	AMBH			03-423-05A
	CASE 306			03-423-05B
SOURCE OF CASE	SEARCH BY CEM			03-423-10
LITERATURE CITATION				03-423-11
WALD, ET AL, REP. SAM-TDR-63-1, USAF SCH.AEROSP.MED. (APRIL 1963).				03-423-11A
MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P.67, IAEA,				03-423-11B
VIENNA (1964).				03-423-11C
MILLER, ANL-6839 (1964) PP. 18-39.				03-423-11D
EXPOSURE	DIAL PAINTER	01		03-423-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., LUMINOUS PROCESSES, INC.,			03-423-13
	OTTAWA, ILL., JULY 1923 TO NOV. 1935. PATIENT PAINTED NUMERALS			03-423-13A
	ON CLOCK FACES. DOES NOT REMEMBER PCINTING BRUSH IN MOUTH. GLASS			03-423-13B
	PENS WERE INTRODUCED SHORTLY AFTER START OF WORK. DID NOT PAINT			03-423-13C
	ANY PART OF HER BODY.			03-423-13D
	ASSUMED WORK PERIOD 07-01-1923 TO 11-01-1935			03-423-13*
	15.60 YEARS OF AGE WHEN FIRST EMPLOYED.			3-423-13Z
FAMILY HISTORY				03-423-15
MARRIED	PARA 2	GRAVIDA 4 (2 SPON. AB.)		03-423-15A
CHILDREN	FEMALE 1937	L W, MARRIED, 2 CHILDREN		03-423-16
	FEMALE 1945	L, MONG., IN SCHOOL FOR		03-423-16A
		TRAINABLE CHILDREN		03-423-16B
MEDICAL HISTORY				03-423-20
	NO SERIOUS ILLNESSES, NO SURGERY. INQUIRY BY SYSTEMS NEGATIVE			03-423-20A
	EXCEPT FOR SINUSITIS. DENTAL HISTORY--SEVERAL MOLARS EXTRACTED.			03-423-20B
	(10-09-57)			03-423-20C
	CHIP IN LEFT SHOULDER AS RESULT OF AUTO ACCIDENT 1955.			03-423-21A
	EARLY 1959, FELL IN BASEMENT AND SUSTAINED FRACTURED LEFT			03-423-21B
	ANTERIOR RIB. SEVERAL MORE TEETH EXTRACTED. (11-09-59)			03-423-21C
	DEVELOPED PAIN IN RIGHT LEG OF SUDDEN ONSET DURING PAST YEAR.			03-423-22A
	X-RAYS SAID TO REVEAL ARTHRITIS. (05-28-62)			03-423-22B
	BECAUSE OF THE FINDINGS OF MARKED NECROSIS OF THE LEFT AND RIGHT			03-423-23A
	MASTOID AIR CELLS AND IN THE FLOOR OF THE LEFT FRONTAL SINUS, THE			03-423-23B
	PATIENT ENTERED THE U OF CHICAGO HOSPITALS ON 04-26-65 FOR BIOP-			03-423-23C
	SY OF THE LEFT FRONTAL SINUS. ON 04-30-65 AN INCISION WAS MADE IN			03-423-23D
	THE MEDIAL ASPECT OF THE LEFT EYEBROW DOWN TO AND THROUGH THE			03-423-23E
	PERIOSTEUM. USING A MASTOID DRILL THE BONE WAS DRILLED AWAY IN			03-423-23F
	THE AREA NORMALLY OVERLYING THE FRONTAL SINUS. NO OUTER OR INNER			03-423-23G
	CORTICAL BONE LAYER, AS SUCH, WAS IDENTIFIED. SOFT TISSUE WAS			03-423-23H
	THEN EXPOSED IN A SMALL AREA, WHICH WAS FELT TO BE EITHER FRONTAL			03-423-23I

SINUS MUCOSA OR DURA OVERLYING THE FRONTAL LOBE OF THE BRAIN. A SMALL SPECIMEN OF THE TISSUE WAS TAKEN FOR MICROSCOPIC ANALYSIS AS WAS THE OVERLYING BONE. MICROSCOPIC EXAMINATION DEMONSTRATED CHRONIC INFLAMMATION OF MUCOUS MEMBRANE. THERE WAS NO EVIDENCE OF CARCINOMA OF THE EPITHELIUM OF THE SINUS. AT THE SAME SITTING, BIOPSIES WERE ALSO TAKEN FROM THE RIGHT AND LEFT MAXILLARY ANTRA. HISTOLOGIC EXAMINATION DEMONSTRATED ONLY FIBROSIS AND CHRONIC INFLAMMATION OF THE MUCOSA WITHOUT EVIDENCE OF MALIGNANCY. (10-68)

GAMMA-RAY MEASUREMENTS

10-09-57	RAB,RAC	0.237 UCI	HGS 1 TILTING CHAIR	CEM	03-423-25J
11-09-59	RAB,RAC	0.220 UCI	HGS 1 TILTING CHAIR	CEM	03-423-25K
09-28-62	RAB,RAC	0.178 UCI	HGS 1 TILTING CHAIR	CEM	03-423-25L
09-28-62	RAB,RAC	0.183 UCI	HGS 1 7-CRYST-POS	CEM	03-423-25M

BREATH MEASUREMENTS

11-09-59	EM-222	0.370 UCI	RADON BREATH HELMET	HFL	03-423-26
01-19-60	EM-222	0.450 UCI	RADON BREATH BOTTLE	HFL	03-423-26B

COMPUTED TOTAL-BODY RADIUM

10-09-57	0.237 UCI	0.765 UCI TOTAL	0.31	03-423-27
11-09-59	0.220 UCI	0.590 UCI TOTAL	0.31	03-423-27A
09-28-62	0.178 UCI	0.552 UCI TOTAL	0.31	03-423-27B
09-28-62	0.183 UCI	0.591 UCI TOTAL	0.31	03-423-27D

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON

11-09-59	0.370 UCI	0.536 UCI TOTAL	0.69	03-423-28
01-19-60	0.450 UCI	0.652 UCI TOTAL	0.69	03-423-28B

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

10-10-51	ANL	X-RAY NO. 0-6	LOC. ANL	03-423-30
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.				03-423-30A
PPF AREAS OF BONE RESORPTION SEEN IN SKULL, LEFT RADIUS, RIGHT AND LEFT FIBULA. COARSENING OF TRABECULATION OF LEFT TIBIA.				03-423-30B
SCORE 5				03-423-30C

COMPLETE SKELETAL SURVEY

02-27-58	ANL	X-RAY NO. R-30	LOC. ANL	03-423-32A
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION.				03-423-32B
PPF AREAS OF BONE RESORPTION IN SKULL, MANDIBLE, RIGHT AND LEFT HUMERUS, LEFT RADIUS AND ULNA, RIGHT FIBULA AND FIBULA. AREAS OF BONE SCLEROSIS SEEN IN RIGHT HUMERUS, LEFT RADIUS.				03-423-32C
SCORE 12.5				03-423-32D

COMPLETE SKELETAL SURVEY

09-09-59	ANL	X-RAY NO. R-30B	LOC. ANL	03-423-33A
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION.				03-423-33B
PPF BONE RESORPTION SEEN IN SKULL, RIGHT AND LEFT HUMERUS, LEFT SCAPULA, RIGHT AND LEFT RADIUS AND ULNA, RIGHT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, AND RIGHT METATARSALS. COARSENING OF TRABECULATION SEEN IN RIBS, RIGHT AND LEFT FEMUR, RIGHT TIBIA, AND TARSAL BONES OF BOTH FEET. AREAS OF BONE SCLEROSIS SEEN IN RIGHT HUMERUS, LEFT HUMERUS, AND LEFT FEMUR, MINIMAL BONY SCLEROSIS IN LEFT TIBIA AND FIBULA. THICKENING OF CORTEX OF RIGHT AND LEFT RADIUS AND ULNA. SPECTACULAR AREA OF BONE RESORPTION IN HEAD OF LEFT HUMERUS.				03-423-33C
SCORE 22				03-423-33D

COMPLETE SKELETAL SURVEY	03-423-34A
09-28-62 ANL X-RAY NO. R-30C LOC. ANL	03-423-34B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 27	03-423-34C
PPF INCREASE IN NUMBER AND SIZE OF AREAS OF BONE RESORPTION IN	03-423-34D
SKULL. AREAS OF BONE RESORPTION ALSO SEEN IN RIGHT ACETABULUM,	03-423-34E
RIBS, LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND	03-423-34F
LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, SCLEROSIS NOTED IN	03-423-34G
RIGHT AND LEFT HUMERUS, AND RIGHT FEMUR. MARKED ROUGHENING	03-423-34H
AND PARTIAL RESORPTION OF ARTICULAR SURFACE OF HEAD OF RIGHT	03-423-34I
FEMUR. MARKED COARSENING OF TRABECULATION OF RIGHT AND LEFT FEMUR	03-423-34J
AND RIGHT AND LEFT TIBIA AND FIBULA.	03-423-34K
 SPECIAL VIEWS--SINUSES, MASTOIDS, AND LAMINAGRAMS	03-423-35A
04-23-64 U OF CHICAGO CLINICS	03-423-35B
PPF MINIMAL RADIATION DESTRUCTION OF LEFT MASTOID. MARKED	03-423-35C
DESTRUCTION OF RIGHT MASTOID, POSSIBLE NEOPLASM.	03-423-35D
 SPECIAL VIEWS--SINUSES, MASTOIDS, AND LAMINAGRAMS	03-423-36A
04-26-65 TO 05-04-65 U OF CHICAGO CLINICS	03-423-36B
PPF UNCHANGED, IDENTICAL TO FILMS TAKEN ONE YEAR EARLIER.	03-423-36C
 CLINICAL LABORATORY FINDINGS	03-423-40
02-27-58 HG 14.0 HTC RBC 4.28	03-423-40A
WBC 8200 DIFF. P 59 ST L 35 M 5 E 1 B	03-423-40B
 09-28-62 HG 14.7 HTC RBC 4.04	03-423-41A
WBC 6600 DIFF. P 42 ST 2 L 46 M 8 E 2 B	03-423-41B
 04-30-65 HG 12.8 HTC 41 RBC	03-423-42A
WBC 7200 DIFF. P 44 ST L 53 M 2 E 1 B	03-423-42B
 OTHER ANALYSES FASTING BLOOD SUGAR 76 MG PERCENT,	03-423-55
SERUM CALCIUM 10.4 MG PERCENT, SERUM PHOSPHATASE 3.8 MG PERCENT	03-423-55A
BLOOD UREA NITROGEN 14 MG PERCENT, SERUM CHOLESTEROL 3.20 MG	03-423-55B
PERCENT, PROTEIN BOUND IODINE 6.8 UG	03-423-55C
 2134 -4722.1 ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE	03-423-66
 229 -416 FRACTURE OF RIBS	03-423-67
320 -100 SINUSITIS	03-423-67A
 DATA REVISED 10-08-68	03-423-99

PATIENT 03-424	BORN 01-13-05	03-424-01
		03-424-02
		03-424-03
		03-424-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-424-10
EXPOSURE	DIAL PAINTER 01	03-424-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., JUNE 1923 TO JAN. 1927.		03-424-13
PAINTED DIALS WITH BRUSHES FIRST YEAR, GLASS PENS THEREAFTER.		03-424-13A
ALWAYS POINTED BRUSHES IN MOUTH, BUT NEVER PAINTED ANY PART OF		03-424-13B
OWN PERSON.		03-424-13C
ASSUMED WORK PERIOD 06-01-1923 TO 01-01-1927		03-424-13*
18.37 YEARS OF AGE WHEN FIRST EMPLOYED.		03-424-13Z
FAMILY HISTORY		03-424-15
MARRIED	PARA 3 GRAVIDA 3	03-424-15A
MEDICAL HISTORY		03-424-20
EPISODE OF SPASTIC COLITIS 1 YEAR 1947. GYNECOLOGICAL SURGERY		03-424-20A
APRIL 1957. CHRONIC ARTHRITIS STARTED LOWER BACK 1949 THAT		03-424-20B
CURRENTLY INVOLVES HANDS, FEET, ANKLES, KNEES, HIPS, SHOULDERS,		03-424-20C
AND BACK OF NECK. DENTAL HISTORY--3 WISDOM TEETH EXTRACTED.		03-424-20D
(10-10-57)		03-424-20E
GAMMA-RAY MEASUREMENTS		03-424-25
10-10-57 RAB,RAC 0.110 UCI HGS 1 TILTING CHAIR CEM		03-424-25A
COMPUTED TOTAL-BODY RADIUM		03-424-27
10-10-57 0.110 UCI 0.364 UCI TOTAL 0.31		03-424-27A
X-RAY EXAMINATION		03-424-30
COMPLETE SKELETAL SURVEY		03-424-30A
10-14-58 ANL X-RAY NO. R-65 LOC. ANL		03-424-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 6		03-424-30C
PPF AREAS OF BONE RESORPTION NOTED IN LEFT RADIUS AND ULNA AND		03-424-30D
QUESTIONABLY IN LEFT TARSAL SCAPHOID. COARSENING OF TRABECULAR		03-424-30E
PATTERN NOTED IN RIGHT AND LEFT FEMURS.		03-424-30F
CLINICAL LABORATORY FINDINGS		03-424-40
10-14-58 HG 13.8 HTC RBC 4.57		03-424-40A
WBC 7200 DIFF. P 60 ST 1 L 30 M 7 E 2 B		03-424-40B
DATA REVISED 07-25-67		03-424-99

PATIENT 03-425	BORN 01-28-16	03-425-01
		03-425-02
		03-425-03
		03-425-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-425-10
EXPOSURE	DIAL PAINTER 01	03-425-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., APPROX. 5 YEARS FROM 1935 TO 1940. PAINTED CLOCK HANDS WITH BRUSHES. NEVER PCINTED BRUSH BETWEEN HER LIPS. NEVER PAINTED ANY PART OF HER BODY. ONE ACCIDENT OCCURRED WHERE LUMINOUS MATERIAL WAS SPRAYED ON HER FACE.		03-425-13
		03-425-13A
		03-425-13B
		03-425-13C
		03-425-13D
FAMILY HISTORY		03-425-15
MARRIED	PARA 3 GRAVIDA 3	03-425-15A
CHILDREN	1944	03-425-16
	1946	03-425-16A
	1948	03-425-16B
MEDICAL HISTORY		03-425-20
NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--CHRONIC		03-425-20A
LOW BACKACHE SINCE HER CHILDREN WERE BORN. DENTAL HISTORY--NO		03-425-20B
EXTRACTIONS AND ONLY ONE FILLING. (10-10-57)		03-425-20C
GAMMA-RAY MEASUREMENTS		03-425-25
10-19-57 RAB,RAC 0.004 UCI HGS 1 TILTING CHAIR CEM		03-425-25A
COMPUTED TOTAL-BODY RADIUM		03-425-27
10-19-57 0.004 UCI 0.014 UCI TOTAL 0.31		03-425-27A
X-RAY EXAMINATION	NOT DONE	03-425-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-425-40
DATA REVISED 07-25-67		03-425-99

PATIENT 03-426	BORN 07-20-06	03-426-01
		03-426-02
		03-426-03
		03-426-04
		03-426-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-426-05A
SOURCE OF CASE	SEARCH BY CEM	03-426-10
EXPOSURE	DIAL PAINTER 01	03-426-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 1924 TO 1929, TOTAL 5 YEARS.	03-426-13
	LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1943 TO 1947, 4 YEARS.	03-426-13A
	FIRST EMPLOYMENT--PAINTED HANDS AND POINTED BRUSH IN HER MOUTH	03-426-13B
	A LITTLE, NEVER PAINTED ANY PART OF HER BODY. SECOND EMPLOYMENT--	03-426-13C
	WEIGHED MATERIAL AND INSPECTED PARTS, NEVER POINTED BRUSH IN	03-426-13D
	HER MOUTH.	03-426-13E
	ASSUMED WORK PERIOD 07-01-1924 TO 07-01-1929	03-426-13*
	17.94 YEARS OF AGE WHEN FIRST EMPLOYED.	03-426-13Z
FAMILY HISTORY		03-426-15
MARRIED	PARA 4 GRAVIDA 4	3-426-15A
CHILDREN	L W (4)	03-426-16
MEDICAL HISTORY		03-426-20
	NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE.	03-426-20A
	DENTAL HISTORY--6 OR 7 TEETH EXTRACTED. (10-18-57)	03-426-20B
GAMMA-RAY MEASUREMENTS		03-426-25
10-18-57	RAB,RAC C.068 UCI HGS 1 TILTING CHAIR CEM	03-426-25A
COMPUTED TOTAL-BODY RADIUM		03-426-27
10-18-57	0.068 UCI 0.220 UCI TOTAL CEM	03-426-27A
X-RAY EXAMINATION		03-426-30
COMPLETE SKELETAL SURVEY		03-426-30A
07-24-58	ANL X-RAY NO. R-41 LOC. ANL	03-426-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0	03-426-30C
PPF	TINY BONE CYST IN RIGHT WRIST, PROBABLY UNRELATED TO RADIUM.	03-426-30D
SPECIAL VIEWS--SINUSES AND MASTOIDS AND LAMINOGRAMS		03-426-31A
03-18-65	U OF C CLINICS UNIT NO. LOC. U OF C	03-426-31B
	MUCOSAL THICKENING, LEFT MAXILLARY ANTRUM AND QUESTION OF	03-426-31C
	DESTRUCTION OF FLOOR. NORMAL MASTOIDS. LAMINOGRAPHY DOES NOT	03-426-31D
	DEMONSTRATE DESTRUCTION OF MASTOID AIR CELLS. ASYMMETRY PROBABLY	03-426-31E
	ON A CONGENITAL BASIS.	03-426-31F

CLINICAL LABORATORY FINDINGS

07-24-58 HG 13.5 HTC RBC 3.91
WBC 7700 DIFF. P 56 ST. L 39 M 4 E 1 B

03-426-40
03-426-40A
03-426-40B

TOOTH MEASUREMENT

SAMPLE 1 TOOTH INCISOR
TOTAL WT. 0.5822 CALC.GMS.CA. 0.1630
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY
12.5 26.46 47 162.3 0.74

03-426-73
03-426-73A
03-426-73B
03-426-73C
03-426-73D

DATA REVISED 10-14-67

03-426-99

PATIENT 03-427	BORN 03-27-06	03-427-01
FEMALE		03-427-02
		03-427-05
SOURCE OF CASE	SEARCH BY CEM	03-427-10
EXPOSURE	DIAL PAINTER 01	03-427-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., MAY 1925 TO MAY 1926.		03-427-13
RADIUM DIAL CO., OTTAWA, ILL., MAY 1926 TO MARCH 1941. PAINTED		03-427-13A
NUMERALS ON FACES AT BOTH COMPANIES. POINTED BRUSH IN MOUTH		03-427-13B
BRIEFLY FOR FIRST SEVERAL WEEKS, THEREAFTER USED HANDKERCHIEF		03-427-13C
TO POINT BRUSH. NEVER PAINTED ANY PART OF HER BODY.		03-427-13D
ASSUMED WORK PERIOD 05-01-1925 TO 03-01-1941		03-427-13*
19.09 YEARS OF AGE WHEN FIRST EMPLOYED.		03-427-13Z
FAMILY HISTORY		03-427-15
NEVER MARRIED		03-427-15A
MEDICAL HISTORY		03-427-20
RENAL COLIC 1935 TO 1951. THYROIDECTOMY 1955. ARTHRITIS RIGHT		03-427-20A
HIP 1956-1957. TEETH--9 EXTRACTED, SEVERAL NOW LOOSE. (10-23-57)		03-427-20B
INTERVAL HISTORY NEGATIVE EXCEPT FOR SOME ARTHRITIS OF MID-BACK		03-427-21A
1960-1961. (10-02-62)		03-427-21B
GAMMA-RAY MEASUREMENTS		03-427-25
10-23-57 RAB,RAC 0.013 UCI HGS 1 TILTING CHAIR CEM		03-427-25A
10-02-62 RAB,RAC 0.009 UCI HGS 1 TILTING CHAIR CEM		03-427-25B
COMPUTED TOTAL-BODY RADIUM		03-427-27
10-23-57 0.013 UCI 0.043 UCI TOTAL 0.31		03-427-27A
10-02-62 0.009 UCI 0.028 UCI TOTAL 0.31		03-427-27B
X-RAY EXAMINATION		03-427-30
COMPLETE SKELETAL SURVEY		03-427-30A
10-08-58 ANL X-RAY NO. R-53 LOC. ANL		03-427-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-427-30C
PPF THREE AREAS OF BONE RESORPTION IN RIGHT TEMPORAL BONE.		03-427-30D
CLINICAL LABORATORY FINDINGS		03-427-40
08-08-58 Hg 14.1 HTC RBC 4.40		03-427-40A
WBC 8000 DIFF. P 52 ST L 26 M 1 C 1 E 1 B 1		03-427-40B
810 -10 THYROIDECTOMY		03-427-67
DATA REVISED 10-30-67		03-427-99

PATIENT 03-428	BORN 05-26-08	03-428-01
		03-428-02
		03-428-03
		03-428-04
		03-428-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-428-05A
SOURCE OF CASE	SEARCH BY CEM	03-428-10
LITERATURE CITATION		03-428-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-428-11A
EXPOSURE	DIAL PAINTER 01	03-428-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 1925 TO 1926, 1 YEAR.		03-428-13
RADIUM DIAL CO., OTTAWA, ILL., 1926 TO 1928, 2 YEARS. TOTAL--		03-428-13A
3 YEARS. PAINTED DIALS. POINTED BRUSH IN MOUTH OCCASIONALLY IN		03-428-13B
STREATOR, NOT IN OTTAWA. NEVER PAINTED OWN PERSON.		03-428-13C
ASSUMED WORK PERIOD 05-01-1925 TO 07-01-1928		03-428-13*
16.92 YEARS OF AGE WHEN FIRST EMPLOYED.		03-428-13Z
FAMILY HISTORY		03-428-15
MARRIED 1929, DIV. 1948 PARA 1 GRAVIDA 2 (THER.AB., TOXEMIA)		03-428-15A
MARRIED 1948		03-428-15B
CHILDREN MALE 1930 L W		03-428-16
MEDICAL HISTORY		03-428-20
NO SERIOUS ILLNESSES. NO SURGERY. INQUIRY BY SYSTEMS NEGATIVE.		03-428-20A
TEETH BECOMING LOOSE, 1 TOOTH RECENTLY EXTRACTED, WISDOM TEETH		03-428-20B
EXTRACTED MANY YEARS AGO. (10-23-57)		03-428-20C
INTERVAL HISTORY NEGATIVE EXCEPT FOR LOOSENING OF TEETH.		03-428-21A
(12-12-62)		03-428-21B
GAMMA-RAY MEASUREMENTS		03-428-25
10-23-57 RAB,RAC 0.220 UCI HGS 1 TILTING CHAIR CEM		03-428-25A
12-12-62 RAB,RAC 0.184 UCI HGS 1 TILTING CHAIR CEM		03-428-25B
12-12-62 RAB,RAC 0.185 UCI HGS 1 7-CRYST-PGS CEM		03-428-25C
COMPUTED TOTAL-BODY RADIUM		03-428-27
10-23-57 0.220 UCI 0.710 UCI TOTAL 0.31		03-428-27A
12-12-62 0.184 UCI 0.593 UCI TOTAL 0.31		03-428-27B
12-12-62 0.185 UCI 0.596 UCI TOTAL 0.31		03-428-27C
X-RAY EXAMINATION		03-428-30
COMPLETE SKELETAL SURVEY		03-428-30A
08-08-58 ANL X-RAY NO. R-54 LOC. ANL		03-428-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 7		03-428-30C
PPF MASTOIDS SCLEROTIC BILATERALLY. COARSENING OF TRABECULAR		03-428-30D
PATTERN OF PELVIS, ACROMION AND CORACOID PROCESS OF LEFT SCAPULA,		03-428-30E
AND RIGHT AND LEFT FEMUR. AREAS OF BONE SCLEROSIS IN BOTH ISCHIA		03-428-30F
AND ISLANDS OF BONE CONDENSATION IN LEFT HUMERUS, RIGHT FEMUR,		03-428-30G
AND LEFT FEMUR.		03-428-30H

COMPLETE SKELETAL SURVEY

12-12-62	ANL	X-RAY NO. R-548	LOC. ANL	03-428-31A
MILD CHANGES TYPICAL OF RADIUM DEPOSITION.				03-428-31B
PPF COARSENING OF TRABECULATION PATTERN OF PELVIS, AND RIGHT				03-428-31C
AND LEFT FEMURS. PATCHY SCLEROSIS IN PELVIS, LEFT HUMERUS, RIGHT				03-428-31D
AND LEFT RADIUS, AND LEFT TIBIA. BONE RESORPTION IN RIGHT AND				03-428-31E
LEFT SCAPULAS.				03-428-31F
				03-428-31G

SPECIAL VIEWS--SINUSES AND MASTOIDS, LAMINAGRAMS

06-18-64	U OF CHICAGO CLINICS	UNIT NO.	LOC. U OF C	03-428-32A
CALVARIUM IS INTACT. PARANASAL SINUSES APPEAR CLEAR. CHANGES				03-428-32B
CONSIST OF DESTRUCTION OF PART OF SEPTA SO THAT MASTOID ANTRA				03-428-32C
APPEAR AS VERY LARGE AND PROMINENT CAVITIES AS WELL AS SCLEROSIS				03-428-32D
OF PERIPHERAL TRABECULATION. CHANGES ARE MORE PROMINENT ON RIGHT.				03-428-32E
				03-428-32F

CLINICAL LABORATORY FINDINGS

08-08-58	HG 13.0	HTC	RBC 3.94	03-428-40
WBC 7400	DIFF. P 60	ST 1	L 37 M 2 E B	03-428-40A
				03-428-40B
12-12-62	HG 14.3	HTC	RBC 3.91	03-428-41A
WBC 8600	DIFF. P 60	ST	L 33 M 6 E 1 B	03-428-41B

2134 -4722.1 ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE 03-428-66

DATA REVISED 10-30-67 03-428-99

PATIENT 03-429

BORN 08-10-08

03-429-01
03-429-02
03-429-03
03-429-05

FEMALE

OTHER PERTINENT NOS.

AMBH

03-429-05A

SOURCE OF CASE

SEARCH BY CEM

03-429-10

LITERATURE CITATION

MILLER, ANL-6839 (1964) PP. 18-39.

FINKEL, ET AL, ANL-7461 (1968) PP. 5-25.

03-429-11
03-429-11A
03-429-11B

EXPOSURE

DIAL PAINTER 01

03-429-12

SOURCE RADIUM DIAL CO., OTTAWA, ILL., AUGUST 1923 TO AUGUST 1927,
4 YEARS TOTAL. PAINTED FACES AND DIALS. POINTED BRUSH IN MOUTH,
NEVER PAINTED ANY PART OF HER BODY.

ASSUMED WORK PERIOD 08-01-1923 TO 08-01-1927

14.97 YEARS OF AGE WHEN FIRST EMPLOYED.

03-429-13
03-429-13A
03-429-13B
03-429-13*
03-429-13Z

FAMILY HISTORY

MARRIED 1927

PARA 6

GRAVIDA 6

03-429-15
03-429-15A

CHILDREN

MALE

1928

L W

03-429-16

MALE

1930

L W

03-429-16A

MALE

1932

L W

03-429-16B

MALE

1934

DECEASED AT 2 DAYS, PREMATURE

03-429-16C

MALE

1936

L W

03-429-16D

FEMALE

1938

L W

03-429-16E

MEDICAL HISTORY

NO SURGERY, NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE.
TEETH--WEARS DOUBLE DENTURES. (10-23-57)

03-429-20
03-429-20A
03-429-20B

INTERVAL HISTORY NEGATIVE. (10-02-62)

03-429-21A

PATIENT HAS HAD ADDITIONAL X-RAY VIEWS OF MASTOIDS. HAS HAD NO
EAR PAIN OR DISCOMFORT. (12-12-62)

03-429-22A
03-429-22B

INTERVAL HISTORY CONTINUES TO BE NEGATIVE EXCEPT FOR SPRAINED
DORSUM OF RIGHT FOOT WHILE PATIENT WAS AT WORK. (10-03-66)

03-429-23A
03-429-23B

IN AUGUST 1967 PATIENT NOTED A SWELLING IN THE MID PORTION OF THE
RIGHT HAND ON THE DORSAL SURFACE. SHE WAS SEEN BY HER PHYSICIAN,
DR. ROLAND MOORE, , WHO RADIOGRAPHED THE HAND
AND DEMONSTRATED A DESTRUCTIVE LESION IN THE THIRD METACARPAL OF
THE RIGHT HAND AND REFERRED THE PATIENT TO THE U OF CHICAGO
CLINICS. EXAMINATION OF THE HAND DEMONSTRATED A FIRM 3-CM DIAM-
ETER MASS ON THE DORSUM OF THE RIGHT HAND IN THE AREA OF THE SHAFT
OF THE THIRD METACARPAL. THERE WAS NO SURROUNDING ERYTHEMA OR
TENDERNESS. RADIOGRAPHY OF THE HAND DEMONSTRATED PRESENCE OF A
LARGE TUMOR OF THE DISTAL END OF THE THIRD METACARPAL WITH MARKED
EXPANSION OF THE BONE. THE APPEARANCE WAS THAT OF A MALIGNANT
TUMOR. ON 11-01-67 A RAY RESECTION OF THE THIRD FINGER AND THIR

03-429-24A
03-429-24B
03-429-24C
03-429-24D
03-429-24E
03-429-24F
03-429-24G
03-429-24H
03-429-24I
03-429-24J
03-429-24K
03-429-24L

METACARPAL WAS DONE WITH A TOURNIQUET IN PLACE UNTIL THE COMPLETION OF THE RESECTION OF THE TUMOR. THE PATIENT RECOVERED RAPIDLY FROM THE SURGICAL PROCEDURE AND HAS GOOD FUNCTIONAL MOBILITY OF THE RIGHT HAND AND NO EVIDENCE AT PRESENT OF LOCAL OR DISTANT METASTASIS. LAMINAGRAPHY OF THE MASTOIDS IN 1964 HAD DEMONSTRATED MARKED DESTRUCTION OF THE WALLS OF THE AIR CELLS IN THE RIGHT MASTOID RESEMBLING CHANGES SEEN IN OTHER PATIENTS KNOWN TO HAVE HAD A CARCINOMA OF THE MASTOID. THE PATIENT HAS REPEATEDLY BEEN URGED TO HAVE AN EXPLORATION OF THE RIGHT MASTOID BUT SHE HAS NOT ACCENDED TO THIS. (10-68)

GAMMA-RAY MEASUREMENTS

10-23-57	RAB,RAC	0.650 UCI	HGS 1 TILTING CHAIR	CEM	03-429-25
10-02-62	RAB,RAC	0.558 UCI	HGS 1 TILTING CHAIR	CEM	03-429-25A
12-12-62	RAB,RAC	0.570 UCI	HGS 1 TILTING CHAIR	CEM	03-429-25B
12-12-62	RAB,RAC	0.556 UCI	HGS 1 7-CRYST-POS	CEM	03-429-25C
10-03-66	RAB,RAC	0.537 UCI	HGS 1 TILTING CHAIR	CEM	03-429-25D
10-03-66	RAB,RAC	0.620 UCI	HGS 1 7-CRYST-POS	CEM	03-429-25E

COMPUTED TOTAL-BODY RADIUM

10-23-57	0.650 UCI	2.100 UCI TOTAL	0.31	03-429-27A
10-02-62	0.558 UCI	1.730 UCI TOTAL	0.31	03-429-27B
12-12-62	0.570 UCI	1.839 UCI TOTAL	0.31	03-429-27C
12-12-62	0.556 UCI	1.794 UCI TOTAL	0.31	03-429-27D
10-03-66	0.537 UCI	1.700 UCI TOTAL	0.31	03-429-27E
10-03-66	0.620 UCI	2.000 UCI TOTAL	0.31	03-429-27F

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY
 11-04-58 ANL X-RAY NO. R-76 LOC. ANL
 MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 14
 PPF AREAS OF BONE RESORPTION IN SKULL, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA, RIGHT AND LEFT METATARSALS. COARSENING OF TRABECULATION RIGHT AND LEFT FEMUR AND PATELLA, RIGHT AND LEFT TIBIA AND FIBULA. EARLY CORTICAL PERIOSTEAL HYPEROSTOSIS AT INNER ASPECT OF NECK OF RIGHT FEMUR.

SPECIAL VIEW--REGULAR CHEST
 05-22-61 U OF CHICAGO CLINICS UNIT NO. LOC. U OF C
 NORMAL CHEST

COMPLETE SKELETAL SURVEY
 10-02-62 ANL X-RAY NO. R-76B LOC. ANL
 MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18
 PPF AREAS OF BONE RESORPTION IN SKULL, RIGHT AND LEFT RADIUS AND ULNA, RIGHT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA. COARSENING OF TRABECULATION SEEN IN RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, AND RIGHT AND LEFT METATARSALS. QUESTION OF MASTOID PATHOLOGY BECAUSE OF SCLEROSIS AND MARKED ENLARGEMENT OF AIR CELLS.

SPECIAL VIEWS--AP AND LATERAL OF RIGHT AND LEFT MASTOIDS
 12-12-62 ANL X-RAY NO. R-76C LOC. ANL
 MASTOIDS DEMONSTRATE NO ABNORMALITIES.

SPECIAL VIEWS--SINUSES AND MASTOIDS, LAMINAGRAMS
 06-11-64 U OF CHICAGO CLINICS UNIT NO. LOC. U OF C
 MULTIPLE SMALL DESTRUCTIVE LESIONS IN CALVARIUM. DESTRUCTION OF
 SOME OF TRABECULAR PATTERN ADJACENT TO THE MASTOID ANTRA WITH
 CONSEQUENT FORMATION OF VERY LARGE CAVITY. SEPTA OF THE
 PERIPHERAL AIR CELLS ARE SLIGHTLY SCLEROTIC AND IRREGULAR.

03-429-34A
 03-429-34B
 03-429-34C
 03-429-34D
 03-429-34E
 03-429-34F

SPECIAL VIEWS--SINUSES AND MASTOIDS, LAMINAGRAMS
 05-18-65 U OF CHICAGO CLINICS UNIT NO. LOC. U OF C
 EXTENSIVE DESTRUCTION, MASTOID AIR CELLS BILATERALLY, GREATER
 ON LEFT THAN ON RIGHT. DESTRUCTIVE LESIONS WITHIN CALVARIUM
 SECONDARY TO RADIUM. PARANASAL AIR SINUSES ARE WITHIN NORMAL
 LIMITS.

03-429-35A
 03-429-35B
 03-429-35C
 03-429-35D
 03-429-35E
 03-429-35F

COMPLETE SKELETAL SURVEY
 10-03-66 ANL X-RAY NO. R-76D LOC. ANL
 MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 28
 PPF MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, RIGHT
 AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT
 TIBIA AND FIBULA, AND RIGHT TARSAL CUNEIFORM AND LEFT TARSAL SCA-
 PHOID BONES. COARSENING OF THE TRABECULAR PATTERN OF THE RIGHT
 AND LEFT TIBIA AND FIBULA. PATCHY BONY SCLEROSIS AT THE SITES OF
 THE PROXIMAL AND DISTAL EPIPHYSEAL LINES OF THE RIGHT AND LEFT
 TIBIA. BONY NECROSIS IN BOTH MASTOIDS.

03-429-36A
 03-429-36B
 03-429-36C
 03-429-36D
 03-429-36E
 03-429-36F
 03-429-36G
 03-429-36H
 03-429-36I
 03-429-36J

SPECIAL VIEWS--RIGHT FOOT AND HANDS
 11-06-67 U OF CHICAGO CLINICS UNIT NO. LOC. U OF C
 COMPRESSION AND ASEPTIC NECROSIS OF THE RIGHT TARSONAVICULAR,
 FREIBERG'S INFRACTION OF THE SECOND METATARSAL OF THE LEFT FOOT.

03-429-37A
 03-429-37B
 03-429-37C
 03-429-37D

CLINICAL LABORATORY FINDINGS										
11-04-58	HG 8.6	HTC	RBC 3.66							03-429-40
WBC 6100	DIFF. P 66	ST 3	L 24 M 6	E 1	B					03-429-40A
										03-429-40B
10-02-62	HG 10.7	HTC	RBC 3.96							03-429-41A
WBC 5200	DIFF. P 53	ST 1	L 35 M 10	E 1	B					03-429-41B
05-19-65	HG 12.8	HTC 39	RBC 4.01							03-429-42A
WBC 5500	DIFF. P 66	ST	L 26 M 6	E 1	B 1					03-429-42B
PLATELET COUNT 162,000		SEDIMENT RATE 34 MM								03-429-42C
10-03-66	HG 12.6	HTC 38	RBC 4.09							03-429-43A
WBC 5500	DIFF. P 50	ST 9	L 32 M 9	E	B					03-429-43B
10-25-67	HG 38	HTC	RBC							03-429-44A
WBC 5500										03-429-44B
11-27-67	HG	HTC	RBC							03-429-45A
WBC 6800	P 76	ST	L 15 M 7	E 2						03-429-45B

SPECIMENS AVAILABLE
 PORTIONS OF PHALANGES OF RIGHT THIRD FINGER E.LLOYD ANL
 03-429-50
 03-429-50A

OTHER ANALYSES	03-429-55
05-19-65 2-HR POST-PARANDIAL BLOOD SUGAR 100 MG PERCENT	03-429-55A
SERUM CALCIUM 10 MG PERCENT, ALKALINE PHOSPHATASE 3 UNITS PERCENT	03-429-55B
PLASMA PROTEINS 7.6 G PERCENT, BLOOD UREA NITROGEN 16 MG PERCENT	03-429-55C
10-29-67 BLOOD UREA NITROGEN 16 MG PERCENT,	03-429-56A
SERUM CALCIUM 9.9 MG PERCENT, SERUM PHOSPHATASE 2.7 MG PERCENT	03-429-56B
ALKALINE PHOSPHATASE NORMAL, URINALYSIS NEGATIVE	03-429-56C
MALIGNANT TUMOR OSTEOSARCOMA, RIGHT THIRD METACARPAL 1967	03-429-60
2134 -4722.1 ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE	03-429-66
2343 -876F OSTEOSARCOMA OF THIRD METACARPAL	03-429-66A
PRIMARY TUMOR SLIDE AT ANL	03-429-71
ADDITIONAL INFORMATION WITHIN 90 SECONDS OF RESECTION OF THE TUMOR	03-429-91
A PORTION OF THE SPECIMEN WAS FROZEN RAPIDLY IN DRY ICE FOR SUB-	03-429-91A
SEQUENT INJECTION BY DR. MIRIAM FINKEL INTO NEWBORN HAMSTERS AND	03-429-91B
FOR ELECTRON MICROSCOPY. ANOTHER PORTION OF THE SPECIMEN WAS	03-429-91C
GIVEN TO DR. ELIZABETH LLOYD OF THE RADIOLOGICAL PHYSICS DIVISION,	03-429-91D
ANL, FOR AUTORADIOGRAPHY AND TRACK COUNTS.	03-429-91E
DATA REVISED 10-08-68	03-429-99

PATIENT 03-430	BORN 08-06-22	03-430-01
		03-430-02
		03-430-03
FEMALE		03-430-05
SOURCE OF CASE	SEARCH BY CEM	03-430-10
EXPOSURE	DIAL PAINTER 01	03-430-12
SOURCE LUMINOUS PROCESSES, INC. OTTAWA, ILL., 8 YEARS FROM 1940		03-430-13
TO 1945, AGAIN FROM 1946 TO 1949. PAINTED WITH LUMINOUS MATERIAL		03-430-13A
WITH BRUSHES AND WITH GLASS PENCILS ABOUT HALF TIME, PAINTED		03-430-13B
WITH NON-LUMINOUS MATERIAL REMAINDER OF TIME. NEVER POINTED		03-430-13C
BRUSH IN MOUTH, ALTHOUGH LUMINOUS MATERIAL SPLASHED ON HER HANDS.		03-430-13D
FAMILY HISTORY		03-430-15
MARRIED	PARA 2 GRAVIDA 2	03-430-15A
MEDICAL HISTORY		03-430-20
NO SURGERY EXCEPT FOR TWO CAESARIAN SECTIONS BECAUSE OF DYSTOCIA.		03-430-20A
NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY		03-430-20B
--ABOUT 5 TEETH EXTRACTED. (10-25-57)		03-430-20C
GAMMA-RAY MEASUREMENTS		03-430-25
10-25-57 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-430-25A
COMPUTED TOTAL-BODY RADIUM		03-430-27
10-25-57 0.002 UCI 0.007 UCI TOTAL 0.31		03-430-27A
X-RAY EXAMINATION	NOT DONE	03-430-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-430-40
DATA REVISED 07-25-67		03-430-99

PATIENT 03-431	BORN 02-21-01	03-431-01
		03-431-02
FEMALE		03-431-03
		03-431-05
SOURCE OF CASE	SEARCH BY CEM	03-431-10
LITERATURE CITATION		03-431-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-431-11A
EXPOSURE	DIAL PAINTER 01	03-431-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, FROM 1922 TO DECEMBER 1925, A TOTAL OF ABOUT 3 YEARS. PAINTED NUMERALS ON DIALS. POINTED BRUSH IN MOUTH. GLASS PENS WERE USED AS PATIENT LEFT PLANT IN DECEMBER 1925.		03-431-13
ASSUMED WORK PERIOD 12-01-1922 TO 12-01-1925		03-431-13A
21.77 YEARS OF AGE WHEN FIRST EMPLOYED.		03-431-13B
		03-431-13C
		03-431-13*
		03-431-13Z
FAMILY HISTORY		03-431-15
MARRIED 1925	PARA 5 GRAVIDA 5	03-431-15A
CHILDREN		
FEMALE 1927	L W	03-431-16
FEMALE 1931	L W	03-431-16A
FEMALE 1935	L W	03-431-16B
FEMALE 1936	L W	03-431-16C
FEMALE 1942	L W	03-431-16D
MEDICAL HISTORY		03-431-20
NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR OCCASIONAL BACKACHE. DENTAL HISTORY--WEARS DOUBLE DENTURES. (10-25-57)		03-431-20A
		03-431-20B
		03-431-20C
GAMMA-RAY MEASUREMENTS		03-431-25
10-25-57 RAB,RAC 0.465 UCI	HGS 1 TILTING CHAIR CEM	03-431-25A
06-27-63 RAB,RAC 0.423 UCI	HGS 1 TILTING CHAIR CEM	03-431-25B
06-27-63 RAB,RAC 0.402 UCI	HGS 1 7-CRYSTAL-POS CEM	03-431-25C
COMPUTED TOTAL-BODY RADIUM		03-431-27
10-25-57 0.465 UCI	1.500 UCI TOTAL 0.31	03-431-27A
06-27-63 0.423 UCI	1.366 UCI TOTAL 0.31	03-431-27B
06-27-63 0.402 UCI	1.297 UCI TOTAL 0.31	03-431-27C
X-RAY EXAMINATION		03-431-30
PARTIAL SKELETAL SURVEY		03-431-30A
02-27-58 ANL X-RAY NO. R-31 LOC. ANL		03-431-30B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 11		03-431-30C
PPF AREAS OF BONE RESORPTION ARE PRESENT IN SKULL, RIGHT HUMERUS AND LEFT TIBIA AND FIBULA. COARSENING OF TRABECULAR PATTERN		03-431-30D
PRESENT IN LEFT SCAPULA, RIGHT AND LEFT FEMUR, RIGHT TIBIA AND FIBULA. ARTICULAR SURFACE OF PROXIMAL LEFT TIBIA IS ALSO DISTURBED. THICKENING OF CORTEX OF BOTH FEMURS IN MID-SHAFT REGION ALSO NOTED.		03-431-30E
		03-431-30F
		03-431-30G
		03-431-30H
		03-431-30I

COMPLETE SKELETAL SURVEY

06-27-63 ANL X-RAY NO. R-318 LOC. ANL
 ADVANCED CHANGES ON BASIS OF ASEPTIC NECROSIS OF TIBIA. SCORE 16
 PPF INCREASE IN NUMBER AND SEVERITY OF PREVIOUS LESIONS WITH
 ADDITION OF ASEPTIC NECROSIS OF ARTICULAR SURFACE OF LEFT TIBIA.

03-431-31A
 03-431-31B
 03-431-31C
 03-431-31D
 03-431-31E

CLINICAL LABORATORY FINDINGS

02-27-58 HG 13.5 HTC RBC 4.35
 WBC 8500 DIFF. P 60 ST 3 L 29 M 5 E 3 B

03-431-40
 03-431-40A
 03-431-40B

06-27-63 HG 13.1 HTC 42 RBC 3.96
 WBC 6300 DIFF. P 56 ST 6 L 35 M 2 E 1 B

03-431-41A
 03-431-41B

2371 -4722.1 ASEPTIC NECROSIS OF UPPER EXTREMITY OF TIBIA

03-431-66B

DATA REVISED 10-30-67

03-431-99

PATIENT 03-432	BORN 10-01-02	03-432-01
		03-432-02
		03-432-03
		03-432-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-432-10
EXPOSURE	DIAL PAINTER 01	03-432-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, FROM JANUARY 1924 TO		03-432-13
OCTOBER 1926. PAINTED HANDS OF CLOCKS. POINTED BRUSH IN HER		03-432-13A
MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-432-13B
ASSUMED WORK PERIOD 01-01-1924 TO 10-01-1926		03-432-13*
21.24 YEARS OF AGE WHEN FIRST EMPLOYED.		03-432-13Z
FAMILY HISTORY		03-432-15
MARRIED	PARA 1 GRAVIDA 1	03-432-15A
CHILDREN	1928	03-432-16
MEDICAL HISTORY		03-432-20
NO SURGERY OR SERIOUS ILLNESS. HISTORY OF BURSITIS IN LEFT		03-432-20A
SHOULDER. PATIENT IS ACTIVE PHYSICALLY. DENTAL HISTORY--WEARS		03-432-20B
DOUBLE DENTURES, HISTORY OF POOR TEETH. (10-28-57)		03-432-20C
GAMMA-RAY MEASUREMENTS		03-432-25
10-28-57 RAB,RAC 0.014 UCI HGS 1 TILTING CHAIR CEM		03-432-25A
COMPUTED TOTAL-BODY RADIUM		03-432-27
10-28-57 0.014 UCI 0.045 UCI TOTAL 0.31		03-432-27A
X-RAY EXAMINATION		03-432-30
COMPLETE SKELETAL SURVEY		03-432-30A
02-26-58 ANL X-RAY NO. R-29 LOC. ANL		03-432-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-432-30C
PPF INCREASED DENSITY ABOUT MASTOID AIR CELLS.		03-432-30D
CLINICAL LABORATORY FINDINGS		03-432-40
02-26-58 HG 12.4 HTC RBC 4.37		03-432-40A
WBC 4200 DIFF. P 50 ST 2 L 38 M 8 E 2 B		03-432-40B

PATIENT 03-433	BORN 01-22-04	03-433-01
		03-433-02
		03-433-03
		03-433-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-433-05A
SOURCE OF CASE	SEARCH BY CEM	03-433-10
LITERATURE CITATION		03-433-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-433-11A
EXPOSURE	DIAL PAINTER 01	03-433-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APRIL 1924 TO JULY 1926.		03-433-13
PAINTED FACES. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART		03-433-13A
OF HER BODY.		03-433-13B
ASSUMED WORK PERIOD 04-01-1924 TO 07-01-1926		03-433-13*
20.18 YEARS OF AGE WHEN FIRST EMPLOYED.		03-433-13Z
FAMILY HISTORY		03-433-15
MARRIED	PARA 1 GRAVIDA 3 (2 MISCARRIAGES)	03-433-15A
CHILDREN	FEMALE L W	03-433-16
MEDICAL HISTORY		03-433-20
APPENDECTOMY 1956. LIGATION OF VARICOSE VEINS 1953. THOUGHT TO		03-433-20A
HAVE TUBERCULOSIS OF SPINE DURING VISIT TO GERMANY 1931 BUT		03-433-20B
DIAGNOSIS NOT ESTABLISHED. NO OTHER SERIOUS ILLNESSES. INQUIRY		03-433-20C
BY SYSTEMS NEGATIVE. DENTAL HISTORY--TEETH COMPLETELY EXTRACTED.		03-433-20D
UPPERS 1948, LOWERS 1956, WEARS DOUBLE DENTURES. (10-28-57)		03-433-20E
GAMMA-RAY MEASUREMENTS		03-433-25
10-28-57 RAB,RAC 0.420 UCI HGS 1 TILTING CHAIR CEM		03-433-25A
10-06-64 RAB,RAC 0.325 UCI HGS 1 TILTING CHAIR CEM		03-433-25B
10-06-64 RAB,RAC 0.326 UCI HGS 1 7-CRYST-POS CEM		03-433-25C
COMPUTED TOTAL-BODY RADIUM		03-433-27
10-28-57 0.420 UCI 1.350 UCI TOTAL 0.31		03-433-27A
10-06-64 0.325 UCI 1.050 UCI TOTAL 0.31		03-433-27B
10-06-64 0.326 UCI 1.052 UCI TOTAL 0.31		03-433-27C
X-RAY EXAMINATION		03-433-30
COMPLETE SKELETAL SURVEY		03-433-30A
02-26-58 ANL X-RAY NO. R-28 LOC. ANL		03-433-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 15		03-433-30C
PPF COARSENING OF TRABECULATION IN RIGHT CLAVICLE AND RIGHT		03-433-30D
AND LEFT SCAPULA, LEFT TIBIA AND RIGHT AND LEFT FOOT. AREAS OF		03-433-30E
BONE RESORPTION IN SKULL, MANDIBLE, RIGHT AND LEFT RADIUS AND		03-433-30F
ULNA, RIGHT AND LEFT TIBIA AND FIBULA, AND RIGHT FOOT. MASTOIDS		03-433-30G
ARE DENSELY SCLEROTIC. AREAS OF BONE SCLEROSIS NOTED IN RIGHT		03-433-30H
AND LEFT HUMERUS, AND RIGHT FEMUR.		03-433-30I

COMPLETE SKELETAL SURVEY

10-06-64. ANL X-RAY NO. R-288 LOC. ANL
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 15
PPF NO CHANGE SINCE LAST EXAMINATION.

03-433-31A
03-433-31B
03-433-31C
03-433-31D

SPECIAL VIEWS SINUSES AND MASTOIDS, LAMINAGRAMS

10-22-64 U OF CHICAGO CLINICS UNIT NO. U OF C
TRABECULAR SCLEROSIS AND OPACIFICATION OF AIR CELLS OF RIGHT
MASTOID. LEFT MASTOID AND PARANASAL SINUSES NORMAL.

03-433-32A
03-433-32B
03-433-32C
03-433-32D

CLINICAL LABORATORY FINDINGS

02-26-58 HG 12.4 HTC RBC 4.13
WBC 7600 DIFF. P 53 ST L 38 M 7 E 2 B

03-433-40
03-433-40A
03-433-40B

661 -12 APPENDECTOMY

03-433-67

DATA REVISED 11-14-67

03-433-99

PATIENT 03-434	BORN 04-23-20	03-434-01
		03-434-02
		03-434-03
FEMALE		03-434-05
SOURCE OF CASE	SEARCH BY CEM	03-434-10
EXPOSURE	DIAL PAINTER 01	03-434-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., JAN. 1941 TO JUNE 1943. PAINTED DIALS FOR AT LEAST 6 MONTHS. NEVER POINTED BRUSHES IN MOUTH. WEIGHED MATERIALS REMAINDER OF EMPLOYMENT. NEVER PAINTED ANY PART OF HER BODY.		03-434-13
ASSUMED WORK PERIOD 01-01-1941 TO 06-01-1943		03-434-13A
20.68 YEARS OF AGE WHEN FIRST EMPLOYED.		03-434-13B
		03-434-13C
		03-434-13*
		03-434-13Z
FAMILY HISTORY		03-434-15
MARRIED	PARA 0 GRAVIDA 0	03-434-15A
MEDICAL HISTORY		03-434-20
SPINAL FUSION 1949 FOR INTERVERTEBRAL DISC DISEASE, HEMORRHOIDEC-		03-434-20A
TOMY 1956. HISTORY OF MIGRAINE HEADACHES. NO OTHER SERIOUS ILL-		03-434-20B
NESSSES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--SEVERAL		03-434-20C
TEETH EXTRACTED. (11-12-57)		03-434-20D
PATIENT OF ORTHOPEDIC SURGEONS, DRs. EDWARD COMPERE AND WILLIAM		03-434-20E
KERNAHAN,		03-434-20F
HOSPITALIZED MAY 1958 BECAUSE OF OSTEOARTHRITIS OF NECK TREATED		03-434-21A
BY TRACTION AND BILATERAL STELLATE BLOCKS. (11-18-58)		03-434-21B
GAMMA-RAY MEASUREMENTS		03-434-25
11-12-57 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-434-25A
04-13-60 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-434-25B
COMPUTED TOTAL-BODY RADIUM		03-434-27
11-12-57 0.005 UCI 0.015 UCI TOTAL 0.31		03-434-27A
04-13-60 0.005 UCI 0.015 UCI TOTAL 0.31		03-434-27B
X-RAY EXAMINATION		03-434-30
COMPLETE SKELETAL SURVEY		03-434-30A
01-29-58 ANL X-RAY NO. R-26 LOC. ANL		03-434-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-434-30C
PPF AREA OF ABNORMAL CALCIFICATION OF BONE IN PROXIMAL LEFT		03-434-30D
FEMUR.		03-434-30E
PARTIAL SKELETAL SURVEY		03-434-31A
11-18-58 ANL X-RAY NO. R-26 LOC. ANL		03-434-31B
ADDITIONAL FILM OF LEFT FEMUR CONFIRMS PRESENCE OF ABNORMAL		03-434-31C
CALCIFICATION, PROBABLY NOT RELATED TO RADIUM.		03-434-31D

CLINICAL LABORATORY FINDINGS

01-29-58 HG 15.3 HTC RBC 4.90
WBC 6600 DIFF. P 66 ST L 32 M 2 E B

03-434-40
03-434-40A
03-434-40B

67X -11 HEMORRHOIDECTOMY
220 -57 SPINAL FUSION
240 -912 OSTEOARTHRITIS
2511 -9X9 HERNIATION OF NUCLEUS PULPUSUS, UNKNOWN CAUSE
930 -X41 MIGRAINE

03-434-67
03-434-67A
03-434-67B
03-434-67C
03-434-67D

DATA REVISED 10-30-67

03-434-99

PATIENT 03-435	BORN 02-22-12	03-435-01
		03-435-02
		03-435-03
		03-435-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-435-10
EXPOSURE	DIAL PAINTER 01	03-435-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 2 TO 3 WEEKS, ALLEGEDLY 1935.		03-435-13
LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1935-1937 APPROX.		03-435-13A
PAINTED WATCH DIALS WITH GLASS PENS, DID NOT POINT BRUSHES		03-435-13B
IN MOUTH. PAINTED FINGERNAILS WITH LUMINOUS MATERIAL.		03-435-13C
ASSUMED WORK PERIOD 07-01-1935 TO 07-01-1937		03-435-13*
23.35 YEARS OF AGE WHEN FIRST EMPLOYED.		03-435-13Z
FAMILY HISTORY		03-435-15
MARRIED	PARA 2 GRAVIDA 3 (1 MISCARRIAGE)	03-435-15A
MEDICAL HISTORY		03-435-20
NO SURGERY. HAS CARDIAC CONDITION SAID NOT TO BE SERIOUS BY		03-435-20A
PERSONAL PHYSICIAN, DR. NEUFELD, . INQUIRY BY		03-435-20B
SYSTEMS NEGATIVE. UPPER DENTURES, SEVERAL TEETH TO BE EXTRACTED		03-435-20C
FROM LOWER JAW. (11-12-57)		03-435-20D
GAMMA-RAY MEASUREMENTS		03-435-25
11-12-57 RAB,RAC 0.002 UCI HGS-1 TILTING CHAIR CEM		03-435-25A
COMPUTED TOTAL-BODY RADIUM		03-435-27
11-12-57 0.002 UCI 0.007 UCI TOTAL 0.31		03-435-27A
X-RAY EXAMINATION		03-435-30
COMPLETE SKELETAL SURVEY		03-435-30A
10-23-58 ANL X-RAY NO. R-71 LOC. ANL		03-435-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-435-30C
PPF NONE RELATED TO SKELETON EXCEPT FOR TINY BONE ISLAND.		03-435-30D
IN HEAD OF LEFT HUMERUS.		03-435-30E
CLINICAL LABORATORY FINDINGS		03-435-40
10-23-58 HG 13.7 HTC RBC 3.96		03-435-40A
WBC 5800 DIFF. P 58 ST 2 L 35 M 2 E 2 B 1		03-435-40B
SPECIMENS AVAILABLE		03-435-50
TOOTH EXTRACTED 11-57	LOC. ANL CEM	03-435-50A
TOOTH MEASUREMENT		03-435-73
SAMPLE 3.01 TOOTH PREMOLAR		03-435-73A
TOTAL WT. 1.8694 CALC.GMS.CA. 0.5234		03-435-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-435-73C
2.49 4.74 0.68		03-435-73D

SAMPLE 3.02 TOOTH MOLAR
TOTAL WT. 1.7750 CALC.GMS.CA. 0.497
UNSEALED EQUILIBRIUM PCT RET UCI RA/GM CA RATIO-TOOTH/BODY
1.8 3.6 0.52

03-435-74A
03-435-74B
03-435-74C
03-435-74D

DATA REVISED 07-25-67

03-435-99

PATIENT 03-436	BORN 09-10-10	03-436-01
		03-436-02
		03-436-03
FEMALE		03-436-05
SOURCE OF CASE	SEARCH BY CEM	03-436-10
EXPOSURE	DIAL PAINTER 01	03-436-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 18 MONTHS, AUG. 1926 TO END		03-436-13
OF 1927. AGAIN, 8 YEARS BETWEEN 1930 AND 1938. PAINTED FACES		03-436-13A
ONLY. POINTED BRUSH IN MOUTH DURING FIRST 18 MONTHS OF EMPLOY-		03-436-13B
MENT. NEVER PAINTED ANY PART OF HER BODY.		03-436-13C
ASSUMED WORK PERIOD 08-01-1926 TO 07-01-1938		03-436-13*
15.88 YEARS OF AGE WHEN FIRST EMPLOYED.		03-436-13Z
FAMILY HISTORY		03-436-15
MARRIED	PARA 2 GRAVIDA 1	03-436-15A
MEDICAL HISTORY		03-436-20
BENIGN TUMOR EXCISED FROM LEFT BREAST 1950. NO OTHER SERIOUS		03-436-20A
ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--TEETH		03-436-20B
IN POOR REPAIR, EXTRACTIONS SCHEDULED FOR JANUARY 1958.		03-436-20C
GAMMA-RAY MEASUREMENTS		03-436-25
11-12-57 RAB,RAC LESS THAN 0.078 UCI HGS 1 TILTING CHAIR CEM		03-436-25A
COMPUTED TOTAL-BODY RADIUM		03-436-27
11-12-57 LESS THAN 0.078 UCI LESS THAN 0.025 UCI TOTAL 0.31		03-436-27A
X-RAY EXAMINATION		03-436-30
COMPLETE SKELETAL SURVEY		03-436-30A
10-23-58 ANL X-RAY NO. R-70 LOC. ANL		03-436-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-436-30C
PPF TINY BONE ISLAND IN HEAD OF LEFT HUMERUS, PROBABLY UNRELATED		03-436-30D
TO RADIUM.		03-436-30E
CLINICAL LABORATORY FINDINGS		03-436-40
10-23-58 HG 14.7 HTC RBC 4.89		03-436-40A
WBC 7800. DIFF. P 54 ST L 42 M 3 E B 1		03-436-40B
190 -11 LOCAL EXCISION OF BREAST LESION (CYST)		03-436-67
DATA REVISED 07-25-67		03-436-99

PATIENT 03-437	BORN 12-23-06	03-437-01
		03-437-02
		03-437-03
		03-437-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-437-10
EXPOSURE	DIAL PAINTER 01	03-437-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 2 TO 3 MONTHS, THEN OTTAWA, ILL., ABOUT 1 YEAR. APPROX. DATES OF EMPLOYMENT ARE 1926 TO 1927. PAINTED NUMERALS, POINTED BRUSH IN HER MOUTH, BUT NEVER PAINTED ANY PART OF HER BODY.		03-437-13
ASSUMED WORK PERIOD 03-01-1926 TO 03-01-1927		03-437-13A
19.18 YEARS OF AGE WHEN FIRST EMPLOYED.		03-437-13B
		03-437-13C
		03-437-13*
		03-437-13Z
FAMILY HISTORY		03-437-15
MARRIED	PARA 3 GRAVIDA 3	03-437-15A
MEDICAL HISTORY		03-437-20
NO SURGERY EXCEPT FOR MINOR GYNECOLOGICAL PROCEDURES.		03-437-20A
HOSPITALIZED 1941 FOR ACUTE SINUSITIS AND PAIN IN BACK OF NECK.		03-437-20B
ALSO HAS VARICOSE VEINS. INQUIRY BY SYSTEMS--NEGATIVE. DENTAL HISTORY--3 TEETH EXTRACTED. (11-14-57)		03-437-20C
		03-437-20D
GAMMA-RAY MEASUREMENTS		03-437-25
11-14-57 RAB,RAC C.017 UCI HGS 1 TILTING CHAIR CEM		03-437-25A
COMPUTED TOTAL-BODY RADIUM		03-437-27
11-14-57 0.017 UCI 0.055 UCI TOTAL 0.31		03-437-27A
X-RAY EXAMINATION		03-437-30
COMPLETE SKELETAL X-RAY		03-437-30A
11-04-58 ANL X-RAY NO. R-77 LOC. ANL		03-437-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-437-30C
PPF. SMALL CYST IN RIGHT THIRD METACARPAL, PROBABLY UNRELATED TO RADIUM.		03-437-30D
		03-437-30E
CLINICAL LABORATORY FINDINGS		03-437-40
11-04-58 HG 14.8 HTC RBC 4.27		03-437-40A
WBC 5000 DIFF. P 61 ST L 36 M 2 E 1 B		03-437-40B
320 -100 SINUSITIS		03-437-67
DATA REVISED 02-09-68		03-437-99

PATIENT 03-438	BORN 01-04-08	03-438-01
		03-438-02
		03-438-03
FEMALE		03-438-05
SOURCE OF CASE	SEARCH BY CEM	03-438-10
EXPOSURE	DIAL PAINTER 01	03-438-12
SOURCE	RADIUM DIAL CO., STREATOR, ILL., APPROX. 2 MONTHS 1925.	03-438-13
	PAINTED NUMERALS AND POINTED BRUSH BETWEEN LIPS. CANNOT REMEMBER	03-438-13A
	PAINTING ANY PART OF HER BODY.	03-438-13B
FAMILY HISTORY		03-438-15
MARRIED	PARA 0 GRAVIDA 0	03-438-15A
MEDICAL HISTORY		03-438-20
	SURGERY--THYROIDECTOMY 1927. HYSTERECTOMY 1942, APPROXIMATELY.	03-438-20A
	INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--SEVERAL TEETH HAVE	03-438-20B
	BEEN EXTRACTED. (11-14-57)	03-438-20C
GAMMA-RAY MEASUREMENTS		03-438-25
	11-14-57 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM	03-438-25A
COMPUTED TOTAL-BODY RADIUM		03-438-27
	11-14-57 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31	03-438-27A
X-RAY EXAMINATION	NOT DONE	03-438-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-438-40
782 -10	HYSTERECTOMY	03-438-67
810 -10	THYROIDECTOMY	03-438-67A
DATA REVISED 07-25-67		03-438-99

PATIENT 03-439	BORN 04-18-06	03-439-01
		03-439-02
		03-439-03
FEMALE		03-439-05
SOURCE OF CASE	SEARCH BY CEM	03-439-10
EXPOSURE	DIAL PAINTER 01	03-439-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., APPROX. 1 YEAR 1925.		03-439-13
RADIUM DIAL CO., OTTAWA, ILL., 1 MONTH ADDITIONAL. PAINTED		03-439-13A
NUMERALS. POINTED BRUSH IN MOUTH, THIS PRACTICE STOPPED 1 MONTH		03-439-13B
PRIOR TO TERMINATION OF EMPLOYMENT. DOES NOT REMEMBER PAINTING		03-439-13C
HER OWN PERSON.		03-439-13D
FAMILY HISTORY		03-439-15
MARRIED	PARA 0 GRAVIDA C	03-439-15A
MEDICAL HISTORY		03-439-20
BREAST BIOPSY FOR BENIGN LESION 1942, HYSTERECTOMY 1951. HAS HAD		03-439-20A
ARTHRITIS FOR MANY YEARS, WORSE SINCE 1951--MULTIPLE JOINT PAINS		03-439-20B
AND ACHING DISCOMFORT ALONG BACK. FREQUENT OCCIPITAL HEADACHES.		03-439-20C
EASY FATIGABILITY SINCE TEENS. DENTAL HISTORY--WEARS PARTIAL		03-439-20D
DENTURES. (11-14-57)		03-439-20E
GAMMA-RAY MEASUREMENTS		03-439-25
11-14-57 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-439-25A
COMPUTED TOTAL-BODY RADIUM		03-439-27
11-14-57 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-439-27A
X-RAY EXAMINATION	NOT DONE	03-439-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-439-40
190 -16 BIOPSY OF BREAST (BENIGN LESION)		03-439-67
782 -10 HYSTERECTOMY		03-439-67A
DATA REVISED 07-25-67		03-439-99

PATIENT 03-440	BORN 06-29-08	03-440-01
		03-440-02
FEMALE		03-440-03
		03-440-05
SOURCE OF CASE	SEARCH BY CEM	03-440-10
EXPOSURE	DIAL PAINTER 01	03-440-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 2 TO 3 WEEKS, PROB. 1925.		03-440-13
PAINTED NUMERALS ON DIALS. DOES NOT REMEMBER WHETHER SHE PUT		03-440-13A
BRUSH IN MOUTH, ALTHOUGH SHE PROBABLY DID. NEVER PAINTED ANY		03-440-13B
PART OF HER BODY.		03-440-13C
FAMILY HISTORY		03-440-15
MARRIED	PARA 4 GRAVIDA 4 (3RD PREG. TOXEM.)	03-440-15A
MEDICAL HISTORY		03-440-20
NEGATIVE MEDICAL HISTORY EXCEPT FOR TOXEMIA WITH THIRD		03-440-20A
PREGNANCY. SEVERAL TEETH EXTRACTED. (11-14-57)		03-440-20B
GAMMA-RAY MEASUREMENTS		03-440-25
11-14-57 RAB,RAC LESS THAN 0.0003 UCI HGS1 TILTING CHAIR CEM		03-440-25A
COMPUTED TOTAL-BODY RADIUM		03-440-27
11-14-57 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-440-27A
X-RAY EXAMINATION	NOT DONE	03-440-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-440-40
010 -388 TOXEMIA OF PREGNANCY		03-440-67
DATA REVISED 07-25-67		03-440-99

PATIENT 03-441	BCRN 10-26-05	03-441-01
		03-441-02
		03-441-03
FEMALE		03-441-05
SOURCE OF CASE	SEARCH BY CEM	03-441-10
EXPOSURE	DIAL PAINTER 01	03-441-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 1 YEAR 1925. RADIUM DIAL CO., OTTAWA, ILL., 1926 TO 1935, ABOUT 9 YEARS. PAINTED NUMERALS AND HANDS. POINTED BRUSH IN MOUTH OCCASIONALLY UNTIL PRACTICE WAS DISCONTINUED. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 05-01-1925 TO 07-01-1935 19.50 YEARS OF AGE WHEN FIRST EMPLOYED.		03-441-13 03-441-13A 03-441-13B 03-441-13C 03-441-13* 03-441-13Z
FAMILY HISTORY		03-441-15
MARRIED	PARA 1 GRAVIDA 1	03-441-15A
MEDICAL HISTORY		03-441-20
THYROIDECTOMY FOR GOITER 1939. SEVERAL YEARS BEFORE MARRIAGE, PATIENT HAD COCCYODYNIA, USED CANES FOR WALKING, BUT NO TROUBLE PAST 20 YEARS. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY-- SEVERAL TEETH EXTRACTED. (11-14-57)		03-441-20A 03-441-20B 03-441-20C 03-441-20D
GAMMA-RAY MEASUREMENTS		03-441-25
11-14-57 RAB,RAC C.017 UCI HGS 1 TILTING CHAIR CEM		03-441-25A
COMPUTED TOTAL-BODY RADIUM		03-441-27
11-14-57 0.017 UCI 0.056 UCI TOTAL 0.31		03-441-27A
X-RAY EXAMINATION		03-441-30
COMPLETE SKELETAL SURVEY		03-441-30A
08-13-58 ANL X-RAY NO. R-55 LOC. ANL		03-441-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-441-30C
PPF AREAS OF BONE RESORPTION MEASURING 1 CM IN LENGTH IN HEAD OF LEFT HUMERUS, PROBABLY BENIGN BONE CYST.		03-441-30D 03-441-30E
CLINICAL LABORATORY FINDINGS		03-441-40
08-13-58 HGS 16.4 HTC RBC 4.66		03-441-40A
WBC 10,200 DIFF. P 63 ST 3 L 29 M 3 E 2 B		03-441-40B
225 -208 COCCYODYNIA		03-441-67
810 -10 THYROIDECTOMY		03-441-67A
DATA REVISED 07-25-67		03-441-99

PATIENT 03-442	BORN 08-10-04	03-442-01
		03-442-02
		03-442-03
FEMALE		03-442-05
SOURCE OF CASE	SEARCH BY CEM	03-442-10
EXPOSURE	DIAL PAINTER 01	03-442-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 3 MONTHS 1924. PAINTED WATCH		03-442-13
DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER OWN		03-442-13A
PERSON.		03-442-13B
ASSUMED WORK PERIOD 07-01-1924 TO 10-01-1924		03-442-13*
19.88 YEARS OF AGE WHEN FIRST EMPLOYED.		03-442-13Z
FAMILY HISTORY		03-442-15
MARRIED	PARA 3 GRAVIDA 3	03-442-15A
MEDICAL HISTORY		03-442-20
NO SERIOUS ILLNESSES. NO SURGERY. INQUIRY BY SYSTEMS NEGATIVE.		03-442-20A
DENTAL HISTORY NEGATIVE EXCEPT FOR SEVERAL EXTRACTIONS.(11-19-57)		03-442-20B
GAMMA-RAY MEASUREMENTS		03-442-25
11-19-57 RAB,RAC C.004 UCI HGS 1 TILTING CHAIR CEM		03-442-25A
COMPUTED TOTAL-BODY RADIUM		03-442-27
11-19-57 0.004 UCI 0.013 UCI TOTAL 0.31		03-442-27A
X-RAY EXAMINATION		03-442-30
COMPLETE SKELETAL SURVEY		03-442-30A
11-19-57 ANL X-RAY NO. R-22 LOC. ANL		03-442-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-442-30C
PPF NEGATIVE EXCEPT FOR SINGLE ISCLATED BCNE CYST AT DISTAL		03-442-30D
END OF RIGHT ULNA.		03-442-30E
CLINICAL LABORATORY FINDINGS		03-442-40
11-19-57 HG 13.5 HTC RBC 4.79		03-442-40A
WBC 7500 DIFF. P 70 ST L 22 M 4 E 4 B		03-442-40B
DATA REVISED 07-26-67		03-442-99

PATIENT 03-433	BORN 12-18-14	03-443-01
		03-443-02
		03-443-03
		03-443-04
		03-443-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-443-10
EXPOSURE	DIAL PAINTER 01	03-443-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., SEPT. 1935 TO		03-443-13
OCT. 1941, 6 YEARS. PAINTED DIALS WITH BRUSHES AND GLASS PENS.		03-443-13A
NEVER POINTED BRUSH IN MOUTH, OR PAINTED ANY PART OF HER BODY.		03-443-13B
ASSUMED WORK PERIOD 09-01-1935 TO 10-01-1941		03-443-13*
20.70 YEARS OF AGE WHEN FIRST EMPLOYED.		03-443-13Z
FAMILY HISTORY		03-443-15
MARRIED	PARA 2 GRAVIDA 2	03-443-15A
CHILDREN	L W (1)	03-443-16
	DIED AFTER 7 HOURS (1)	03-443-16A
MEDICAL HISTORY		03-443-20
NO SURGERY EXCEPT CAESARIAN SECTION FOR BOTH PREGNANCIES. TOXEMIA		03-443-20A
WITH FIRST PREGNANCY. MODERATELY SEVERE SCARLET FEVER AS CHILD.		03-443-20B
NO OTHER MAJOR ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR		03-443-20C
SEVERE HEADACHES DIAGNOSED AS DUE TO TENSION, MAYO CLINIC, 1940.		03-443-20D
DENTAL HISTORY--SEVERAL TEETH EXTRACTED IN CHILDHOOD. (01-23-58)		03-443-20E
GAMMA-RAY MEASUREMENTS		03-443-25
01-23-58 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-443-25A
COMPUTED TOTAL-BODY RADIUM		03-443-27
01-23-58 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-443-27A
X-RAY EXAMINATION		03-443-30
COMPLETE SKELETAL SURVEY		03-443-30A
10-21-58 ANL X-RAY NO. R-60 LOC. ANL		03-443-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-443-30C
PPF NONE.		03-443-30D
CLINICAL LABORATORY FINDINGS		03-443-40
10-21-58 HG 11.9 HTC RBC 3.86		03-443-40A
WBC 5200 DIFF. P 58 ST 1 L 34 M 4 E 3 8		03-443-40B
010 -102 SCARLET FEVER		03-443-67
010 -388 TOXEMIA OF PREGNANCY		03-443-67A
DATA REVISED 07-26-67		03-443-99

PATIENT 03-444	BORN 11-14-07	03-444-01
		03-444-02
FEMALE		03-444-03
		03-444-05
SOURCE OF CASE	SEARCH BY CEM	03-444-10
EXPOSURE	DIAL PAINTER 01	03-444-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., NOV. 1925 TO AUG. 1926, AGAIN		03-444-13
FROM NOV. 1926 TO MARCH 1927. PAINTED NUMERALS ON FACES AND		03-444-13A
POINTED BRUSH IN HER MOUTH, ALTHOUGH GLASS PENCILS WERE USED		03-444-13B
LATER AND HAIR BRUSHES ONLY FOR CLEANING UP. NEVER PAINTED ANY		03-444-13C
PART OF HER BODY.		03-444-13D
ASSUMED WORK PERIOD 11-01-1925 TO 03-01-1927		03-444-13*
17.96 YEARS OF AGE WHEN FIRST EMPLOYED.		03-444-13Z
FAMILY HISTORY		03-444-15
MARRIED	PARA 5 GRAVIDA 5	03-444-15A
CHILDREN	L W (3)	03-444-16
	DIED CHILDHOOD (2)	03-444-16A
MEDICAL HISTORY		03-444-20
TONSILLECTOMY CHILDHOOD, HYSTERECTOMY 1955. NO SERIOUS ILLNESSES.		03-444-20A
INQUIRY BY SYSTEMS--SLIGHT DEAFNESS, OTHERWISE NEGATIVE. (01-23-58)		03-444-20B
PLASTIC SURGERY OF RIGHT EARDRUM, FEB. 1961, WITH CONSIDERABLE		03-444-21A
IMPROVEMENT OF HEARING. SIMILAR SURGERY SCHEDULED FOR LEFT EAR		03-444-21B
1963. SUSTAINED FRACTURE OF LEFT PATELLA AND CHIPPED KNEE		03-444-21C
CARTILAGE. ALSO HAD BACKACHES SINCE HYSTERECTOMY IN 1955.		03-444-20D
NO OTHER SERIOUS ILLNESSES. (09-26-62)		03-444-21E
GAMMA-RAY MEASUREMENTS		03-444-25
01-23-58 RAB,RAC 0.008 UCI HGS 1 TILTING CHAIR CEM		03-444-25A
09-26-62 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-444-25B
COMPUTED TOTAL-BODY RADIUM		03-444-27
01-23-58 0.008 UCI 0.025 UCI TOTAL 0.31		03-444-27A
09-26-62 0.005 UCI 0.016 UCI TOTAL 0.31		03-444-27B
X-RAY EXAMINATION		03-444-30
COMPLETE SKELETAL SURVEY		03-444-30A
08-28-58 ANL X-RAY NO. R-62 LOC. ANL		03-444-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-444-30C
PPF SCATTERED SMALL BONE ISLANDS NOTED IN THE DISTAL LEFT FEMUR,		03-444-30D
PROXIMAL LEFT TIBIA, AND IN TARSAL AND METATARSAL BONES OF RIGHT		03-444-30E
FOOT, PROBABLY UNRELATED TO RADIUM.		03-444-30F

CLINICAL LABORATORY FINDINGS

08-28-58	HG 14.1	HTC	RBC 4.30				
WBC 7400	DIFF. P 68	ST	L 26	M 3	E 3	B	
09-26-62	HG 13.8	HTC	RBC 4.49				
WBC 9000	DIFF. P 60	ST	L 32	M 5	E 2	B 1	

03-444-40
 03-444-40A
 03-444-40B
 03-444-41A
 03-444-41B

X77	-50	TYMPANOPLASTY
236	-416	FRACTURE OF PATELLA
253	-4167	FRACTURE, CHIP OF KNEE CARTILAGE
634	-12	TONSILLECTOMY
782	-12	HYSTERECTOMY

03-444-67
 03-444-67A
 03-444-67B
 03-444-67C
 03-444-67D

DATA REVISED 07-26-67

03-444-99

PATIENT 03-445	BORN 03-19-05	03-445-01
		03-445-02
		03-445-03
		03-445-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-445-05A
SOURCE OF CASE	SEARCH BY CEM	03-445-10
LITERATURE CITATION		03-445-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-445-11A
EXPOSURE	DIAL PAINTER. 01	03-445-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., NOV. 1922 TO NOV. 1927.		03-445-13
PAINTED WATCH FACES, ASTRONOMER MAPS, AND AIRPLANE INSTRUMENTS.		03-445-13A
MAY HAVE OCCASIONALLY POINTED BRUSH IN MOUTH BUT MOSTLY POINTED		03-445-13B
BRUSH BETWEEN HER FINGERS.		03-445-13C
ASSUMED WORK PERIOD 11-01-1922 TO 11-01-1927		03-445-13*
17.61 YEARS OF AGE WHEN FIRST EMPLOYED.		03-445-13Z
FAMILY HISTORY		03-445-15
MARRIED 1927	PARA 4 GRAVIDA 4	03-445-15A
CHILDREN	MALE L W	03-445-16
	MALE L W	03-445-16A
	FEMALE L W	03-445-16B
	FEMALE L W	03-445-16C
MEDICAL HISTORY		03-445-20
APPENDECTOMY 1939. NO OTHER SURGERY OR SERIOUS ILLNESSES. INQUIRY		03-445-20A
BY SYSTEMS OCCASIONAL LOW BACKACHE. DENTAL HISTORY--MANY TEETH		03-445-20B
EXTRACTED. (01-23-58)		03-445-20C
HYSTERECTOMY AND REPAIR OF CYSTOCOELE AND RECTOCOELE, AUG. 1958.		03-445-21A
THREE EPISODES OF SEVERE ABDOMINAL PAIN AUG. AND SEPT. 1959,		03-445-21B
DIAGNOSED AS KIDNEY STONES. SURGICAL EXPLORATION TWICE FAILED TO		03-445-21C
REVEAL STONES. (11-11-59)		03-445-21D
HOSPITALIZED FOR ANOTHER KIDNEY STONE, FEB. 1962. LEFT THYROIDEC-		03-445-22A
TOMY FOR NODULE, FEB. 1962. HAS HAD REDUCED HEARING BILATERALLY		03-445-22B
FOR PAST 10-15 YEARS, HISTORY OF EAR ABSCESSSES IN CHILDHOOD,		03-445-22C
FAMILIAL HISTORY OF REDUCED HEARING. INQUIRY BY SYSTEMS--EYE,		03-445-22D
EAR, NOSE, AND THROAT NEGATIVE EXCEPT FOR OCCASIONAL TINNITUS.		03-445-22E
DIVERTICULITIS KNOWN SINCE 1959. OCCASIONAL LOW BACKACHES.		03-445-22F
(02-20-64)		03-445-22G
SUSTAINED FRACTURE OF LEFT ELBOW WHEN SHE TRIPPED ON STAIRS,		03-445-23A
12-02-65. SURGERY--REDUCTION AND REMOVAL OF HEAD OF RADIUS		03-445-23B
ONE WEEK LATER. HISTORY OF EARACHES AND ABSCESSSES IN CHILDHOOD,		03-445-23C
NO RECENT SYMPTOMS. NO KIDNEY STONES SINCE LAST VISIT 02-64.		03-445-23D
INTERVAL HISTORY OTHERWISE NEGATIVE. (10-26-66)		03-445-23E

GAMMA-RAY MEASUREMENTS

01-23-58	RAB,RAC	0.500 UCI	HGS 1 TILTING CHAIR	CEM	03-445-25
11-11-59	RAB,RAC	0.483 UCI	HGS 1 TILTING CHAIR	CEM	03-445-25A
02-20-64	RAB,RAC	0.441 UCI	HGS 1 TILTING CHAIR	CEM	03-445-25B
02-20-64	RAB,RAC	0.540 UCI	HGS 1 7-CRYST-POS	CEM	03-445-25C
10-26-66	RAB,RAC	0.424 UCI	HGS 1 TILTING CHAIR	CEM	03-445-25D
					03-445-25E

COMPUTED TOTAL-BODY RADIUM

01-23-58	0.500 UCI	1.620 UCI TOTAL	0.31	03-445-27
11-11-59	0.483 UCI	1.590 UCI TOTAL	0.31	03-445-27A
02-20-64	0.441 UCI	1.423 UCI TOTAL	0.31	03-445-27B
02-20-64	0.540 UCI	1.743 UCI TOTAL	0.31	03-445-27C
10-26-66	0.424 UCI	1.367 UCI TOTAL	0.31	03-445-27D
				03-445-27E

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY 03-445-30

11-11-59 ANL X-RAY NO. R-180 LOC. ANL 03-445-30A

MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5.5 03-445-30B

PPF MARKED COARSENING OF TRABECULATION OF PELVIS. MULTIPLE 03-445-30C

AREAS OF BONE SCLEROSIS IN HEADS OF BOTH FEMURS AS WELL AS IN 03-445-30D

HEADS OF LEFT AND RIGHT HUMERUS. PROBABLE AREAS OF BONE RESORP- 03-445-30E

TION IN RIGHT RADIUS. 03-445-30F

03-445-30G

COMPLETE SKELETAL SURVEY 03-445-31A

02-20-64 ANL X-RAY NO. R-180B LOC. ANL 03-445-31B

MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 11 03-445-31C

PPF COARSENING OF TRABECULAR PATTERN THROUGHOUT PELVIS AND IN 03-445-31D

PROXIMAL HALF OF RIGHT AND LEFT FEMURS. MULTIPLE AREAS OF BONE 03-445-31E

SCLEROSIS IN HEAD OF RIGHT HUMERUS, LEFT HUMERUS AND HEADS OF 03-445-31F

BOTH FEMORA. MULTIPLE UP TO 15 MM SIZE AREAS OF BONE RESORPTION 03-445-31G

THROUGHOUT THE SHAFT OF RIGHT HUMERUS. THIS REPRESENTS A SLIGHT 03-445-31H

PROGRESSION IN NUMBER OF AND SEVERITY OF LESIONS SINCE THE LAST 03-445-31I

EXAMINATION. 03-445-31J

SPECIAL VIEWS--SINUSES, MASTOIDS, AND LAMINAGRAMS 03-445-32A

03-11-64 U OF CHICAGO CLINICS UNIT NO. LOC. U OF C 03-445-32B

ABNORMAL MASTOID AIR CELLS BILATERALLY. CELLULES ARE INDISTINCT. 03-445-32C

CANNOT POSTIVELY IDENTIFY NEOPLASTIC DESTRUCTION AT THIS TIME, 03-445-32D

PATIENT TO BE RE-EXAMINED. 03-445-32E

COMPLETE SKELETAL SURVEY 03-445-33A

10-26-66 ANL X-RAY NO. R-180C LOC. ANL 03-445-33B

MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 17 03-445-33C

PPF LARGE AREA OF BONE RESORPTION IN RIGHT MASTOID--POSSIBLE 03-445-33D

CARCINOMA OF MASTOID. OTHER FINDINGS AS OF PREVIOUS EXAMINATION 03-445-33E

WITH ADDITION OF MANY UP TO 25 MM AREAS OF BONE RESORPTION IN THE 03-445-33F

SHAFT OF RIGHT RADIUS. ALSO A TRAUMATIC FRACTURE OF LEFT RADIUS 03-445-33G

AND ULNA WITH LOSS OF HEAD OF RIGHT RADIUS. MULTIPLE 5 MM SIZE 03-445-33H

AREAS OF BON RESORPTION IN CORTEX CF SHAFT OF LEFT RADIUS AND 03-445-33I

ULNA. MULTIPLE 1 CM SIZE LINEAR AREAS OF BONE RESORPTION IN SHAFT 03-445-33J

OF LEFT FIBULA. MODERATE PROGRESSION OF NUMBER OF AND SEVERITY CF 03-445-33K

BONE LESIONS SINCE LAST EXAMINATION. 03-445-33L

SPECIAL VIEWS--SINUSES, MASTOIDS, AND LAMINAGRAMS

11-08-66 U OF CHICAGO CLINICS UNIT NO.

LOC. U OF C

OPACIFICATION OF THE MASTOID AIR CELLS BILATERALLY WITH CHANGES

MORE EXTENSIVE ON THE RIGHT. ON THE RIGHT A LARGE AREA APPEARS

DEVOID OF BONY TRABECULAE AND THE CHANGES MAY BE INDICATIVE OF A

CARCINOMA IN THE MASTOID PROCESS. ON THE LEFT, THE BONY TRABE-

CULAE APPEAR TO BE INTACT. MIDDLE EARS AND PETROUS PYRAMIDS OTHER-

WISE DEMONSTRATE NO ABNORMALITY. NO ABNORMALITIES ARE NOTED IN

THE PARANASAL SINUSES.

03-445-34A

03-445-34B

03-445-34C

03-445-34D

03-445-34E

03-445-34F

03-445-34G

03-445-34H

03-445-34I

CLINICAL LABORATORY FINDINGS

11-11-59 HG 13.4 HTC RBC 4.39

WBC 7500 DIFF. P 51 ST 1 L 40 M 6 E 2 B 0

03-445-40

03-445-40A

03-445-40B

02-20-64 HG 12.7 HTC 39 RBC 4.29

WBC 4600 DIFF. P 49 ST L 45 M 4 E 2 B 0

03-445-41A

03-445-41B

10-26-66 HG 13.4 HTC 41 RBC 4.06

WBC 5700 DIFF. P 36 ST L 56 M 6 E 2 B 0

03-445-42A

03-445-42B

2134 -4722.1 ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE

03-445-66

661 -12 APPENDECTOMY

03-445-67

722 -615 CALCULUS IN THE PELVIS OF THE KIDNEY

03-445-67A

782 -10 HYSTERECTOMY

03-445-67B

810 -13 THYROIDECTOMY, PARTIAL

03-445-67C

7812 -50 REPAIR OF CYSTOCOELE

03-445-67D

7813 -50 REPAIR OF RECTOCOELE

03-445-67E

23033-416 FRACTURE OF THE ELBOW

03-445-67F

23113-11 EXCISION OF HEAD OF RADIUS

03-445-67G

23113-416 FRACTURE OF HEAD OF RADIUS

03-445-67H

DATA REVISED 11-14-67

03-445-99

PATIENT - 03-446	BORN 07-11-03	03-446-01
		03-446-02
		03-446-02A
		03-446-03
		03-446-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-446-10
EXPOSURE	DIAL PAINTER 01	03-446-12
SOURCE: RADIUM DIAL CO., OTTAWA, ILL., JULY 1922 TO DEC. 1927,		03-446-13
5-1/2 YEARS TOTAL. PAINTED CLOCKS AND AIRPLANE INSTRUMENTS.		03-446-13A
USED BRUSHES FIRST SEVERAL YEARS, GLASS PENS THEREAFTER. POINTED		03-446-13B
BRUSHES IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-446-13C
ASSUMED WORK PERIOD 07-01-1922 TO 12-01-1927		03-446-13*
18.97 YEARS OF AGE WHEN FIRST EMPLOYED.		03-446-13Z
FAMILY HISTORY		03-446-15
MARRIED	PARA 3 GRAVIDA 3	03-446-15A
CHILDREN	MALE 1928 L W	03-446-16
	MALE 1931 L W	03-446-16A
	MALE 1933 L W	03-446-16B
MEDICAL HISTORY		03-446-20
THYROID SURGERY TWICE 1942. HYSTERECTOMY 1948. HEMORRHOIDECTOMY		03-446-20A
1949. CHOLECYSTECTOMY AND APPENDECTOMY, REMOVAL OF KIDNEY STONE,		03-446-20B
AND REPAIR TO UMBILICAL HERNIA 1952. MINOR RECTAL SURGERY 1956.		03-446-20C
INQUIRY BY SYSTEMS--MARKED VARICOSE VEINS AND ARTHRITIS IN HANDS,		03-446-20D
FINGERS, SPINE, AND KNEES. DENTAL HISTORY--ALL TEETH EXTRACTED,		03-446-20E
WEARS DOUBLE DENTURES. (01-23-58)		03-446-20F
NO SURGERY SINCE 1958. HOSPITALIZED SEVERAL TIMES FOR PALPITA-		03-446-21A
TION. STILL HAS VARICOSE VEINS AND ARTHRITIS, RECENT SEVERE PAIN		03-446-21B
IN LEFT ANKLE. POOR HEARING BILATERALLY SINCE ABOUT 1963 BUT		03-446-21C
HAS NO PAIN. (11-02-66)		03-446-21D
GAMMA-RAY MEASUREMENTS		03-446-25
01-23-58 RAB,RAC C.040 UCI HGS 1 TILTING CHAIR CEM		03-446-25A
11-02-66 RAB,RAC C.024 UCI HGS 1 TILTING CHAIR CEM		03-446-25B
11-02-66 RAB,RAC C.027 UCI HGS 1 7-CRYST-POS CEM		03-446-25C
COMPUTED TOTAL-BODY RADIUM		03-446-27
01-23-58 0.040 UCI 0.130 UCI TOTAL 0.31		03-446-27A
11-02-66 0.024 UCI 0.077 UCI TOTAL 0.31		03-446-27B
11-02-66 0.027 UCI 0.088 UCI TOTAL 0.31		03-446-27C

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

08-28-58	ANL	X-RAY NO. R-61	LOC. ANL	SCORE 0	03-446-30
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.					03-446-30A
PPF ISOLATED SMALL BONE ISLAND IN HEAD OF RIGHT FEMUR, PROBABLY UNRELATED TO RADIUM.					03-446-30B
					03-446-30C
					03-446-30D
					03-446-30E

COMPLETE SKELETAL SURVEY

11-02-66	ANL	X-RAY NO. R-61B	LOC. ANL	SCORE 1	03-446-31A
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.					03-446-31B
PPF NO CHANGE SINCE LAST EXAMINATION.					03-446-31C
					03-446-31D

CLINICAL LABORATORY FINDINGS

08-28-58	13.8	HTC	RBC 5.50						03-446-40
WBC 6600	DIFF. P 56	ST 1	L 36	M 4	E 3	B			03-446-40A
									03-446-40B

11-02-66	HG 14.7	HTC	RBC 4.44						03-446-41A
WBC 8600	DIFF. P 62	ST 1	L 25	M 9	E 3	B			03-446-41B

044	-50	UMBILICAL HERNIORRHAPHY	03-446-67
48X	-641	VARICOSE VEINS	03-446-67A
67X	-11	HEMORRHOIDECTOMY	03-446-67B
661	-12	APPENDECTOMY	03-446-67C
687	-12	CHOLECYSTECTOMY	03-446-67D
722	-615	CALCULUS IN THE PELVIS OF THE KIDNEY	03-446-67E
782	-10	HYSTERECTOMY	03-446-67F
810	-10	THYROIDECTOMY	03-446-67G

DATA REVISED 11-14-68

03-446-99

PATIENT 03-447	BORN 10-29-06	03-447-01
		03-447-02
		03-447-03
FEMALE		03-447-05
SOURCE OF CASE	SEARCH BY CEM	03-447-10
EXPOSURE	DIAL PAINTER 01	03-447-12
SOURCE RADIUM DIAL CO., 1 MONTH, OCTOBER 1922 (PROBABLY 1924).		03-447-13
HOWEVER, PATIENT IS PRESENT ON 1924 PHOTOGRAPH, WHICH WAS TAKEN		03-447-13A
IN AUGUST, 1924. PAINTED NUMERALS, POINTED BRUSH IN HER MOUTH,		03-447-13B
NEVER PAINTED ANY PART OF HER BODY. CLOTHES GLOWED IN CLOSET AT		03-447-13C
NIGHT.		03-447-13D
ASSUMED WORK PERIOD 08-01-1924 TO 09-01-1924		03-447-13*
17.75 YEARS OF AGE WHEN FIRST EMPLOYED.		03-447-13Z
FAMILY HISTORY		03-447-15
MARRIED 1936	PARA 0 GRAVIDA 0	03-447-15A
MEDICAL HISTORY		03-447-20
NO SURGERY. NO ILLNESSES EXCEPT PNEUMONIA 1945. INQUIRY BY		03-447-20A
SYSTEMS ESSENTIALLY NEGATIVE ALTHOUGH BELIEVES SHE IS STARTING		03-447-20B
TO GET ARTHRITIS OF FINGERS. DENTAL HISTORY--ALL TEETH EXTRACTED.		03-447-20C
(02-28-58)		03-447-20D
GAMMA-RAY MEASUREMENTS		03-447-25
02-28-58 RAB,RAC 0.0007 UCI HGS 1 TILTING CHAIR CEM		03-447-25A
COMPUTED TOTAL-BODY RADIUM		03-447-27
02-28-58 0.0007 UCI 0.002 UCI TOTAL 0.31		03-447-27A
X-RAY EXAMINATION		03-447-30
COMPLETE SKELETAL SURVEY		03-447-30A
02-28-58 ANL X-RAY NO. R-33 LOC. ANL		03-447-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-447-30C
PPF NONE.		03-447-30D
CLINICAL LABORATORY FINDINGS		03-447-40
02-28-58 Hg 14.3 HTC RBC 4.70		03-447-40A
WBC 5600 DIFF. P 50 ST L 43 M 5 E 1 B 1		03-447-40B
DATA REVISED 07-27-67		03-447-99

PATIENT 03-448	BORN 01-31-03	03-448-01
		03-448-02
		03-448-03
FEMALE		03-448-05
SOURCE OF CASE	SEARCH BY CEM	03-448-10
EXPOSURE	DIAL PAINTER 01	03-448-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APRIL TO AUGUST 1924, ABOUT 4.5 MONTHS. PAINTED NUMERALS ON CLOCKS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-448-13
		03-448-13A
		03-448-13B
FAMILY HISTORY		03-448-15
MARRIED 1929	PARA 3 GRAVIDA 3	03-448-15A
MEDICAL HISTORY		03-448-20
CHOLECYSTECTOMY 1945. HOSPITALIZED FOR OBSERVATION OF MENORRHAGIA		03-448-20A
1950. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE		03-448-20B
EXCEPT FOR POSSIBLE ARTHRITIS OF RIGHT KNEE 4 MONTHS 1956. DENTAL		03-448-20C
HISTORY--ALL TEETH EXTRACTED. (02-28-58)		03-448-20D
GAMMA-RAY MEASUREMENTS		03-448-25
02-28-58 RAB,RAC 0.008 UCI HGS 1 TILTING CHAIR CEM		03-448-25A
COMPUTED TOTAL-BODY RADIUM		03-448-27
02-28-58 0.008 UCI 0.025 UCI TOTAL 0.31		03-448-27A
X-RAY EXAMINATION	NOT DONE	03-448-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-448-40
687 -12 CHOLECYSTECTOMY		03-448-67
DATA REVISED 07-27-67		03-448-99

PATIENT	03-449	BORN	03-11-05	03-449-01
				03-449-02
				03-449-03
				03-449-05
FEMALE				
OTHER PERTINENT NOS.	AMBH			03-449-05A
SOURCE OF CASE	SEARCH BY CEM			03-449-10
EXPOSURE	DIAL PAINTER 01			03-449-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., SEPT. 1922 TO 1930, TOTAL 9 YEARS. SUBSEQUENTLY, KIRK DIAL CO., CHICAGO, ILL., APRIL 1931 TO 1950, TOTAL 19 YEARS. IN OTTAWA, PAINTED DIALS BUT DOES NOT RECALL POINTING BRUSH IN MOUTH, USED FINGERS TO MAKE A POINT. NEVER PAINTED ANY PART OF HER BODY BUT HER HAIR AND CLOTHES GLOWED AT NIGHT, BOTH COMPANIES. IN CHICAGO, NEVER POINTED BRUSH IN MOUTH, PAINTED DIALS UNTIL 1940, AFTER THAT DID OFFICE WORK. (06-04-58)			03-449-13
				03-449-13A
				03-449-13B
				03-449-13C
				03-449-13D
				03-449-13E
				03-449-13F
				03-449-13G
	ASSUMED WORK PERIOD 09-01-1922 TO 07-01-1950			03-449-13*
	17.47 YEARS OF AGE WHEN FIRST EMPLOYED.			03-449-13Z
PATIENT MAY HAVE POINTED BRUSH IN MOUTH OCCASIONALLY, BUT HABITUALLY POINTED BRUSH IN CREASE OF FIFTH FINGER WHEN AT OTTAWA. (04-27-65)				03-449-14A
				03-449-14B
				03-449-14C
FAMILY HISTORY				03-449-15
MARRIED 1935	PARA 0	GRAVIDA 1		03-449-15A
MEDICAL HISTORY				03-449-20
SURGERY FOR RUPTURED APPENDIX 1936, PARTIAL HYSTERECTOMY 1945.				03-449-20A
NO OTHER SERIOUS ILLNESSES, EXCEPT FOR BURSTITIS OF RIGHT SHOULDER 1955 AND MILD ARTHRITIS OF WRIST AND FINGERS. INQUIRY BY SYSTEMS				03-449-20B
NEGATIVE. DENTAL HISTORY--ALL TEETH EXTRACTED 1940 TO 1941.				03-449-20C
(06-04-58)				03-449-20D
				03-449-20E
HISTORY OF DUODENAL ULCER AT AGE 17. (04-27-65)				03-449-21A
GAMMA-RAY MEASUREMENTS				03-449-25
06-04-58	RAB,RAC	0.500 UCI	HGS 1 TILTING CHAIR CEM	03-449-25A
08-03-64	RAB,RAC	0.352 UCI	HGS 1 TILTING CHAIR CEM	03-449-25C
BREATH MEASUREMENTS				03-449-26
09-02-58	EM-222	1.070 UCI	RADON BREATH HELMET HFL	03-449-26B
COMPUTED TOTAL-BODY RADIUM				03-449-27
06-04-58	0.500 UCI	1.610 UCI TOTAL	0.31	03-449-27A
08-03-64	0.352 UCI	1.135 UCI TOTAL	0.31	03-449-27C
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON				03-449-28
09-02-58	1.070 UCI	1.551 UCI TOTAL	0.69	03-449-28B

X-RAY EXAMINATION		03-449-30
COMPLETE SKELETAL SURVEY		03-449-30A
09-02-58	ANL X-RAY NO. R-66 LOC. ANL	03-449-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10		03-449-30C
PPF AREAS OF BONE RESORPTION IN SKULL AND LEFT ASTRAGALUS.		03-449-30D
COARSENING OF TRABECULATION IN PELVIS, RIGHT AND LEFT TIBIA,		03-449-30E
AND BONES OF LEFT FOOT. AREAS OF BONE SCLEROSIS SEEN IN HEAD OF		03-449-30F
EACH FEMUR AND AT OLD EPIPHYSEAL LINE IN RIGHT AND LEFT TIBIA		03-449-30G
AND DISTAL LEFT FEMUR. COARSENING OF TRABECULATION SEEN IN RIGHT		03-449-30H
AND LEFT TIBIA AND IN ALL BONES OF LEFT FOOT. SLIGHT THICKENING		03-449-30I
OF CORTEX OF MID-SHAFT OF RIGHT AND LEFT FEMUR.		03-449-30J
COMPLETE SKELETAL SURVEY		03-449-31A
08-03-64	ANL X-RAY NO. R-66B LOC. ANL	03-449-31B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 30		03-449-31C
PPF BONE RESORPTION VAULT OF SKULL. MARKED DESTRUCTIVE CHANGES		03-449-31D
IN TRABECULAR STRUCTURE OF MASTOIDS. CHANGES IN BOTH FEMORA,		03-449-31E
TIBIAE AND FIBULAE AS BEFORE. MARKED ASEPTIC NECROSIS OF BOTH		03-449-31F
TARSAL SCAPHOIDS.		03-449-31G
SPECIAL VIEWS--SINUSES AND MASTOIDS, LAMINAGRAMS		03-449-32A
08-06-64	U OF CHICAGO CLINICS UNIT NO. LOC. U OF C	03-449-32B
FIBROTIC ADHESIONS IN RIGHT MIDDLE EAR CAVITY, PRESUMABLY RESULT-		03-449-32C
ING FROM INFLAMMATORY PROCESS. EXTENSIVE DESTRUCTION OF MASTOID		03-449-32D
TRABECULAE, BILATERALLY, GREATER ON RIGHT. PARANASAL SINUSES		03-449-32E
CLEAR.		03-449-32F
CLINICAL LABORATORY FINDINGS		03-449-40
09-02-58	HG 13.4 HTC RBC 4.75	03-449-40A
WBC 8900	DIFF. P 70 ST 1 L 26 M 2 E B 1	03-449-40B
08-03-64	HG 14.4 HTC 46 RBC	03-449-41A
WBC 9800	DIFF. P 66 ST L 26 M 8 E B	03-449-41B
2134 -4722.1 ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE		03-449-66
651 -951	DUODENAL ULCER	03-449-67
661 -12	APPENDECTOMY	03-449-67A
661 -100.3	APPENDICITIS WITH PERFORATION	03-449-67B
782 -13	HYSTERECTOMY, PARTIAL	03-449-67C
DATA REVISED 11-27-67		03-449-99

PATIENT 03-450	BORN 11-28-10	03-450-01
		03-450-02
		03-450-03
		03-450-04
FEMALE		03-450-05
SOURCE OF CASE	SEARCH BY CEM	03-450-10
EXPOSURE	DIAL PAINTER 01	03-450-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 4 MONTHS SUMMER 1924.		03-450-13
RADIUM DIAL CO., OTTAWA, ILL., JAN. 1934 TO NOV. 1937. PAINTED		03-450-13A
DIALS. POINTED BRUSH IN MOUTH DURING 1924 EMPLOYMENT. NEVER		03-450-13B
PAINTED ANY PART OF OWN PERSON.		03-450-13C
ASSUMED WORK PERIOD 06-01-1924 TO 10-01-1924		03-450-13*
13.50 YEARS OF AGE WHEN FIRST EMPLOYED.		03-450-13Z
FAMILY HISTORY		03-450-15
MARRIED	PARA 2 GRAVIDA 3 (1 TUBAL PREG.)	03-450-15A
MEDICAL HISTORY		03-450-20
HYSTERECTOMY 1954, RIGHT KIDNEY REMOVED 1955. NO OTHER SERIOUS		03-450-20A
ILLNESSES. INQUIRY BY SYSTEMS ESSENTIALLY NEGATIVE EXCEPT FOR		03-450-20B
DYSPNEA ON EXERTION PAST 20 YEARS. DENTAL HISTORY--SEVERAL TEETH		03-450-20C
EXTRACTED, AT TIME PATIENT WORKED AT RADIUM DIAL CO. 1924,		03-450-20D
DENTIST SAID EXTRACTED TOOTH GLOWED IN DARK. (06-04-58)		03-450-20E
GAMMA-RAY MEASUREMENTS		03-450-25
06-04-58 RAB,RAC C.006 UCI HGS 1 TILTING CHAIR CEM		03-450-25A
COMPUTED TOTAL-BODY RADIUM		03-450-27
06-04-58 0.006 UCI 0.020 UCI TOTAL 0.31		03-450-27A
X-RAY EXAMINATION		03-450-30
PARTIAL SKELETAL SURVEY		03-450-30A
11-25-58 ANL X-RAY NO. R-85 LOC. ANL		03-450-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-450-30C
PPF NONE EXCEPT FOR ISOLATED BONE CYSTS IN RIGHT AND LEFT WRISTS.		03-450-30D
SPECIAL VIEWS, FULL MOUTH X-RAY		03-450-31A
06-23-60 ANL LOC. DR. GENTER		03-450-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		03-450-31C
PPF NONE.		03-450-31D
CLINICAL LABORATORY FINDINGS		03-450-40
11-25-58 HG 13.8 HTC RBC 4.59		03-450-40A
WBC 5000 DIFF. P 61 ST L 35 M 1 E 2 B 1		03-450-40B
710 -12 REMOVAL OF KIDNEY		03-450-67
782 -10 HYSTERECTOMY		03-450-67A

TOOTH MEASUREMENT

SAMPLE 6.00

TOOTH MOLAR

TOTAL WT. 2.0049

CALC.GMS.CA. 0.5614

UNSEALED EQUILIBRIUM
9.67

PCT RET

UUCI RA/GM CA
17.2

RATIO-TOOTH/BODY
0.86

03-450-73

03-450-73A

03-450-73B

03-450-73C

03-450-73D

DATA REVISED 07-27-67

03-450-99

PATIENT 03-451	BORN 09-30-22	03-451-01
		03-451-02
		03-451-03
FEMALE		03-451-05
SOURCE OF CASE	SEARCH BY CEM	03-451-10
EXPOSURE	DIAL PAINTER 01	03-451-12
SOURCE ELGIN NATIONAL WATCH CO., ELGIN, ILL., SEPT 1940 - OCT 1950		03-451-13
11 YEARS. PAINTED NUMERALS AND DIALS ON SMALL AND LARGE WATCHES.		03-451-13A
DID NOT POINT BRUSHES IN MOUTH OR PAINT ANY PART OF BODY. WORK		03-451-13B
PERFORMED UNDER STRICT SUPERVISION.		03-451-13C
FAMILY HISTORY		03-451-15
MARRIED	PARA 2 GRAVIDA 2	03-451-15A
CHILDREN	MALE 1951 L W	03-451-16
	MALE 1952 L W	03-451-16A
MEDICAL HISTORY		03-451-20
NO SERIOUS ILLNESS. NO HOSPITALIZATIONS EXCEPT FOR PREGNANCIES.		03-451-20A
INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR OCCASIONAL SINUS HEADACHE.		03-451-20B
TEETH ARE PRESENT EXCEPT FOR SEVERAL THAT HAVE BEEN EXTRACTED.		03-451-20C
(06-04-58)		03-451-20D
GAMMA-RAY MEASUREMENTS		03-451-25
06-04-58 RAB,RAC C.002 UCI HGS 1 TILTING CHAIR CEM		03-451-25A
COMPUTED TOTAL-BODY RADIUM		03-451-27
06-04-58 0.002 UCI 0.005 UCI TOTAL 0.31		03-451-27A
X-RAY EXAMINATION	NOT DONE	03-451-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-451-40
DATA REVISED 07-27-67		03-451-99

PATIENT 03-452	BORN 05-09-08	03-452-01
		03-452-02
FEMALE		03-452-03
		03-452-05
SOURCE OF CASE	SEARCH BY CEM	03-452-10
EXPOSURE	DIAL PAINTER 01	03-452-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., FROM 1925 TO 1930, AGAIN FROM 1935 TO 1939. DURING FIRST PERIOD OF EMPLOYMENT PAINTED ABOUT 90 PERCENT OF TIME, WEIGHED MATERIAL 5 PERCENT, INSPECTED 5 PERCENT, DURING SECOND PERIOD PAINTED 100 PERCENT OF TIME. DURING FIRST PERIOD, PUT BRUSH IN MOUTH ONLY FEW TIMES, RESISTED INSTRUCTIONS TO DO SO, USED SPONGE INSTEAD. NEVER PAINTED OWN PERSON. PATIENT BELIEVES MESOTHORIUM RATHER THAN RADIUM WAS USED. ASSUMED WORK PERIOD 07-01-1925 TO 07-01-1939 17.14 YEARS OF AGE WHEN FIRST EMPLOYED.		03-452-13 03-452-13A 03-452-13B 03-452-13C 03-452-13D 03-452-13E 03-452-13F 03-452-13* 03-452-13Z
FAMILY HISTORY		03-452-15
MARRIED	PARA 0 GRAVIDA 0	03-452-15A
MEDICAL HISTORY		03-452-20
HOSPITALIZED 1954 FOR URETERAL STONE. HOSPITALIZED JAN. 1958 FOR EVALUATION OF FEVER OF UNDETERMINED ORIGIN FOLLOWING DENTAL EXTRACTIONS. NO DIAGNOSIS MADE. NO SURGERY. INQUIRY BY SYSTEMS--RECURRENT HEADACHES AND HISTORY PEPTIC ULCER. DENTAL HISTORY--SEVERAL TEETH EXTRACTED. (06-04-58)		03-452-20A 03-452-20B 03-452-20C 03-452-20D 03-452-20E
HOSPITALIZED 1958 FOR CYSTOSCOPY AND KIDNEY X-RAYS. NO SURGERY, FRACTURES OR SERIOUS ILLNESS EXCEPT FOR RECURRENT ULCER DISTRESS. INQUIRY BY SYSTEMS--OCCASIONAL SEVERE HEADACHES, ONE EPISODE OF BLINDNESS LASTING ABOUT 3 WEEKS WHICH CLEARED UP SPONTANEOUSLY. DENTAL HISTORY--SEVERAL ADDITIONAL TEETH EXTRACTED. (11-07-66)		03-452-21A 03-452-21B 03-452-21C 03-452-21D 03-452-21E
GAMMA-RAY MEASUREMENTS		03-452-25
06-04-58	RAB,RAC 0.013 UCI HGS 1 TILTING CHAIR CEM	03-452-25A
11-07-66	RAB,RAC 0.007 UCI HGS 1 TILTING CHAIR CEM	03-452-25B
COMPUTED TOTAL-BODY RADIUM		03-452-27
06-04-58	0.013 UCI 0.042 UCI TOTAL 0.31	03-452-27A
11-07-66	0.007 UCI 0.022 UCI TOTAL 0.31	03-452-27B

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

11-25-58 ANL X-RAY NO. R-84 LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
 PPF NONE.

03-452-30
 03-452-30A
 03-452-30B
 03-452-30C
 03-452-30D

PARTIAL SKELETAL SURVEY

11-07-66 ANL X-RAY NO. R-84B LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
 PPF SLIGHT THICKENING OF CORTEX OF MID-PORTION OF SHAFT OF
 LEFT TIBIA.

03-452-31A
 03-452-31B
 03-452-31C
 03-452-31D
 03-452-31E

CLINICAL LABORATORY FINDINGS

11-25-58 HG 15.9 HTC RBC 4.40
 WBC 6800 DIFF. P 57 ST L 37 M 4 E 1 B 1

03-452-40
 03-452-40A
 03-452-40B

11-07-66 HG 14.2 HTC 44 RBC 4.39
 WBC 5600 DIFF. P 51 ST L 40 M 5 E 4 B

03-452-41A
 03-452-41B

651 -951 DUODENAL ULCER
 723 -615 CALCULUS IN THE URETER

03-452-67
 03-452-67A

DATA REVISED 07-27-67

03-452-99

PATIENT 03-453	BORN 02-02-12	03-453-01
		03-453-02
		03-453-03
		03-453-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-453-10
EXPOSURE	DIAL PAINTER 01	03-453-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., JULY TO AUG. 1925, 7 TO 8		03-453-13
WEEKS WHEN PATIENT WAS 13 YEARS OLD. PAINTED DIALS, PROBABLY		03-453-13A
POINTED BRUSH IN MOUTH.		03-453-13B
FAMILY HISTORY		03-453-15
MARRIED	PARA 1 GRAVIDA 3 (2 MISCARRIAGES)	03-453-15A
MEDICAL HISTORY		03-453-20
TONSILLECTOMY AT AGE 12. CAESARIAN SECTION WITH ONE PREGNANCY.		03-453-20A
NO OTHER SURGERY OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS		03-453-20B
NEGATIVE. DENTAL HISTORY--WEARS PARTIAL UPPER AND LOWER		03-453-20C
DENTURES. (06-12-58)		03-453-20D
GAMMA-RAY MEASUREMENTS		03-453-25
06-12-58 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-453-25A
COMPUTED TOTAL-BODY RADIUM		03-453-27
06-12-58 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-453-27B
X-RAY EXAMINATION	NOT DONE	03-453-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-453-40
DATA REVISED 07-27-67		03-453-99

PATIENT 03-454	BORN 03-04-14	03-454-01
		03-454-02
		03-454-03
FEMALE		03-454-05
SOURCE OF CASE	SEARCH BY CEM	03-454-10
EXPOSURE	DIAL PAINTER 01	03-454-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 2 WEEKS 1934. LUMINOUS PROCESSES, INC. OTTAWA, ILL., 1934 TO 1945, EXCEPT FOR 1 YEAR 1943. WORKED IN WEIGHING ROOM WITH POWDERS, NEVER PAINTED ANY DIALS. CLOTHES GLOWED AT NIGHT.		03-454-13
		03-454-13A
		03-454-13B
		03-454-13C
FAMILY HISTORY		03-454-15
MARRIED	PARA 1 GRAVIDA 1	03-454-15A
MEDICAL HISTORY		03-454-20
ANEMIA SINCE 1944 TREATED WITH LIVER THERAPY. NO SERIOUS SURGERY OR OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--2 TEETH EXTRACTED. (06-26-58)		03-454-20A
		03-454-20B
		03-454-20C
GAMMA-RAY MEASUREMENTS		03-454-25
06-26-58 RAB,RAC 0.015 UCI HGS 1 TILTING CHAIR CEM		03-454-25A
COMPUTED TOTAL-BODY RADIUM		03-454-27
06-26-58 0.015 UCI 0.048 UCI TOTAL 0.31		03-454-27A
X-RAY EXAMINATION	NOT DONE	03-454-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-454-40
DATA REVISED 07-31-67		03-454-99

PATIENT 03-455	BORN 01-27-06	03-455-01
FEMALE		03-455-03
		03-455-05
OTHER PERTINENT NOS.	AMBH	03-455-05A
	CASE 309	03-455-05B
SOURCE OF CASE	SEARCH BY CEM	03-455-10
LITERATURE CITATION		03-455-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 309.		03-455-11A
ROWLAND, ANL-6398 (1961) P. 5-22. CASE 03-455.		03-455-11B
HAFTERLIK AND FINKEL, MED.CLIN.N.AMER. 49,285 (JAN. 1965).		03-455-11C
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-455-11D
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-455-11E
EXPOSURE	DIAL PAINTER 01	03-455-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, 1922 TO 1923, TOTAL ABOUT		03-455-13
13 MONTHS. POINTED BRUSH IN MOUTH. PAINTED NUMERALS ON HANDS.		03-455-13A
PAINTED LUMINOUS MATERIAL ON HER FINGERNAILS AND ON BUTTONS OF		03-455-13B
DRESS. MAY HAVE TERMINATED WORK IN APRIL 1923.		03-455-13C
ASSUMED WORK PERIOD 07-01-1922 TO 08-01-1923		03-455-13*
16.42 YEARS OF AGE WHEN FIRST EMPLOYED.		03-455-13Z
FAMILY HISTORY		03-455-15
MARRIED	PARA 3 GRAVIDA 3	03-455-15A
CHILDREN		03-455-16
MALE 1929 L W		03-455-16A
FEMALE 1930 L W		03-455-16B
MALE 1932 L W		03-455-168
MEDICAL HISTORY		03-455-20
SURGERY--COMPLETE AMPUTATION OF LEFT ARM DUE TO FIBROSARCOMA OF		03-455-20A
LEFT RADIUS (1934, COOK COUNTY HOSP., CHICAGO). HAS HAD ARTHRITIS		03-455-20B
FOR PAST 8 YEARS, INVOLVING ANKLES, KNEES, AND FINGERS. NO OTHER		03-455-20C
SURGERY OR SERIOUS ILLNESSES. DENTAL HISTORY--ALL TEETH HAVE BEEN		03-455-20D
EXTRACTED. (08-21-58)		03-455-20E
GAMMA-RAY MEASUREMENTS		03-455-25
07-16-58 RAB,RAC 0.250 UCI HGS 1 TILTING CHAIR CEM		03-455-25B
BREATH MEASUREMENTS		03-455-26
08-21-58 EM-222 0.370 UCI RADON BREATH HELMET HFL		03-455-26C
COMPUTED TOTAL-BODY RADIUM		03-455-27
1952 0.52 UCI TOTAL LOONEY A		03-455-27A
07-16-58 0.250 UCI 0.810 UCI TOTAL 0.31		03-455-27B
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-455-28
08-21-58 0.370 UCI 0.536 UCI TOTAL 0.69		03-455-28C

X-RAY EXAMINATION		03-455-30
PARTIAL SKELETAL SURVEY		03-455-30A
02-27-52	ANL X-RAY NO. R-09 LOC. ANL	03-455-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 11		03-455-30C
ADVANCED CHANGES BY HISTORY OF MALIGNANT BONE TUMOR.		03-455-30D
ABSENCE OF LEFT UPPER EXTREMITY, HISTORY OF FIBROSARCOMA OF THE		03-455-30E
HEAD OF THE LEFT RADIUS. MULTIPLE AREAS OF BONE RESORPTION IN		03-455-30F
RIGHT RADIUS AND ULNA, BOTH TIBIAE AND FIBULAE, AND NECROSIS OF		03-455-30G
LEFT TARSAL SCAPHOID.		03-455-30H
COMPLETE SKELETAL SURVEY		03-455-31A
08-21-58	ANL X-RAY NO. R-G9B LOC. ANL	03-455-31B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION SCORE 15		03-455-31C
ADVANCED CHANGES BY HISTORY OF MALIGNANT BONE TUMOR.		03-455-31D
PPF ABSENCE OF LEFT UPPER EXTREMITY, HISTORY OF MALIGNANT BONE		03-455-31E
DISEASE OF LEFT RADIUS. AREAS OF BONE RESORPTION NOTED IN THE		03-455-31F
SKULL, RIGHT RADIUS AND ULNA, LEFT FEMUR, RIGHT AND LEFT TIBIA		03-455-31G
AND FIBULA. AREAS OF BONE SCLEROSIS NOTED IN THE RIGHT AND LEFT		03-455-31H
FEMUR, AND RIGHT AND LEFT TIBIA. COARSENING OF TRABECULATION		03-455-31I
NOTED IN THE BONES OF BOTH FEET.		03-455-31J
CLINICAL LABORATORY FINDINGS		03-455-40
02-27-52	SERUM CALCIUM 10.34 MG PERCENT,	03-455-40C
SERUM PHOSPHORUS 2.6 MG PERCENT, ACID PHOSPHATASE 0.7 KA UNITS,		03-455-40D
ALKALINE PHOSPHATASE 0.2 KA UNITS		03-455-40E
08-21-58	HG 13.0 HTC RBC 4.08	03-455-41A
WBC 4000	DIFF. P 51 ST L 43 M 5 E 1 B	03-455-41B
SPECIMENS AVAILABLE		03-455-50
BONE AND PRIMARY TUMOR FROM DISARTICULATED LEFT UPPER		03-455-50A
EXTREMITY ACRH RJH		03-455-50B
MICRORADIOGRAPHIC ANALYSIS		03-455-52
10-61	RER	03-455-52A
CONSIDERABLE LEACHING OF RADIUM HAS RESULTED FROM STORAGE IN		03-455-52B
FORMALIN. NO HOT SPOTS ARE VISIBLE WHILE DIFFUSE DISTRIBUTION IS		03-455-52C
SO UNIFORM AS TO APPEAR ARTIFICIAL.		03-455-52D
MALIGNANT TUMOR FIBROSARCOMA, LEFT RADIUS 1935		03-455-60
2311 -870F	FIBROSARCOMA UPPER EXTREMITY OF RADIUS (LEFT)	03-455-66
242 -21	DISARTICULATION OF LEFT SHOULDER	03-455-66A
DATA REVISED 05-15-68		03-455-99

PATIENT	03-456	BORN	12-31-21	03-456-01
	DECEASED			03-456-02
				03-456-02A
				03-456-03
	FEMALE			03-456-05
DECEASED	09-13-65			03-456-06
DEATH CERT. NO.		AUTOPSY	NONE	03-456-07
INTERMENT	ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS			03-456-08
CAUSES OF DEATH	GENERALIZED METASTATIC CARCINOMA OF RIGHT BREAST			03-456-09
SOURCE OF CASE	SEARCH BY CEM			03-456-10
LITERATURE CITATION				03-456-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-456-11A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-456-11B
EXPOSURE	DIAL PAINTER 01			03-456-12
SOURCE	LUMINOUS PROCESSES, INC., 1943 TO 1951. PAINTED DIALS. CID			03-456-13
	NOT POINT BRUSH IN MOUTH.			03-456-13A
	ASSUMED WORK PERIOD 07-01-1943 TO 07-01-1951			03-456-13*
	21.49 YEARS OF AGE WHEN FIRST EMPLOYED.			03-456-13Z
FAMILY HISTORY				03-456-15
MARRIED	PARA 4	GRAVIDA	NOT KNOWN	03-456-15A
CHILDREN	FEMALE	1952	L W	03-456-16
	SON	1951	L W	03-456-16A
	SON	1956	L W	03-456-16B
	FEMALE	1958	L W	03-456-16C
MEDICAL HISTORY				03-456-20
	RADICAL MASTECTOMY ON RIGHT SIDE 1957, AND RIGHT-SIDED SCIATICA			03-456-20A
	FOR PAST 2 WEEKS. NO OTHER MEDICAL HISTORY AVAILABLE. (09-22-58)			03-456-20B
GAMMA-RAY MEASUREMENTS				03-456-25
07-22-58	RAB,RAC	C.010 UCI	HGS 1 TILTING CHAIR CEM	03-456-25A
COMPUTED TOTAL-BODY RADIUM				03-456-27
07-22-58	0.010 UCI	0.033 UCI TOTAL	0.31	03-456-27A
X-RAY EXAMINATION				03-456-30
	COMPLETE SKELETAL SURVEY			03-456-30A
07-22-58	ANL	X-RAY NO. R-39	LOC. ANL	03-456-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 0		03-456-30C
	PPF NONE.			03-456-30D

CLINICAL LABORATORY FINDINGS

07-22-58 HG 12.3 HTC RBC 4.40
WBC 4900 DIFF. P 69 ST 3 L 23 M 5 E B

03-456-40
03-456-40A
03-456-40B

MALIGNANT TUMOR CARCINOMA OF BREAST 1965

03-456-60

190 -14 RADICAL MASTECTOMY
190 -8091 ADENOCARCINOMA OF THE BREAST

03-456-67
03-456-67A

DATA REVISED 11-07-67

03-456-99

PATIENT 03-457	BORN 08-12-15	03-457-01
		03-457-02
		03-457-03
		03-457-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-457-10
EXPOSURE	DIAL PAINTER 01	03-457-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1933 TO 1943.		03-457-13
PAINTED DIALS. DID NOT POINT BRUSH IN MOUTH. DID NOT PAINT ANY		03-457-13A
PART OF HER BODY.		03-457-13B
ASSUMED WORK PERIOD 07-01-1933 TO 07-01-1943		03-457-13*
17.88 YEARS OF AGE WHEN FIRST EMPLOYED.		03-457-13Z
FAMILY HISTORY		03-457-15
MARRIED	PARA 3 GRAVIDA	03-457-15A
CHILDREN	1944 L W	03-457-16
	1947 L W	03-457-16A
	1949 L W	03-457-16B
MEDICAL HISTORY		03-457-20
COMPLETELY NEGATIVE. (07-22-58)		03-457-20A
GAMMA-RAY MEASUREMENTS		03-457-25
07-22-58 RAB,RAC C.001 UCI HGS 1 TILTING CHAIR CEM		03-457-25A
COMPUTED TOTAL-BODY RADIUM		03-457-27
07-22-58 0.001 UCI 0.004 UCI TOTAL 0.31		03-457-27A
X-RAY EXAMINATION		03-457-30
DENTAL FILM		03-457-30A
06-02-56 DR. GENTER		03-457-30B
TWO LOWER MOLARS SHOW NO CHANGES TYPICAL OF RADIUM DEPOSITION.		03-457-30C
COMPLETE SKELETAL SURVEY		03-457-31A
07-22-58 ANL X-RAY NO. R-40 LOC. ANL		03-457-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-457-31C
PPF TINY SINGLE AREA OF BONE RESORPTION ON RIGHT SIDE OF SKULL		03-457-31D
IN PARIETAL AREA. ALSO SMALL BONE CYST IN LEFT TRIQUETRUM,		03-457-31E
PROBABLY UNRELATED TO RADIUM.		03-457-31F
DENTAL FILM		03-457-32A
09-30-59 DR. GENTER		03-457-32B
SEVERAL FILMS OF CANINE AND PREMOLAR TEETH FROM RIGHT AND LEFT		03-457-32C
SIDE SHOW NO CHANGES TYPICAL OF RADIUM DEPOSITION IN TEETH.		03-457-32D
CLINICAL LABORATORY FINDINGS		03-457-40
07-22-58 PG HTC RBC 4.31		03-457-40A
WBC 7400 DIFF. P 56 ST 3 L 35 M 4 E 2 B		03-457-40B
DATA REVISED 08-02-67		03-457-99

PATIENT 03-458	BORN 01-09-25	03-458-01
		03-458-02
FEMALE		03-458-03
		03-458-05
OTHER PERTINENT NOS.	AMBH	03-458-05A
SOURCE OF CASE	SEARCH BY CEM	03-458-10
EXPOSURE	DIAL PAINTER 01	03-458-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., MARCH 1946 TO PRESENT (JULY 1958). USED BRUSHES AND PENS FOR 2 MONTHS, DID NOT POINT BRUSHES IN MOUTH. SILK SCREENING METHOD USED SUBSEQUENTLY. MACHINE EQUIPMENT USED PRINCIPALLY SINCE 1953. ASSUMED WORK PERIOD 03-01-1946 TO 07-29-1958. 21.13 YEARS OF AGE WHEN FIRST EMPLOYED.		03-458-13
		03-458-13A
		03-458-13B
		03-458-13C
		03-458-13*
		03-458-13Z
FAMILY HISTORY		03-458-15
MARRIED	PARA 0 GRAVIDA 0	03-458-15A
MEDICAL HISTORY		03-458-20
TREATED FOR NERVOUS CONDITION 1953 AT U OF C CLINICS.		03-458-20A
NO OTHER SERIOUS ILLNESSES OR SURGERY. INQUIRY BY SYSTEMS--		03-458-20B
NEGATIVE EXCEPT FOR OCCASIONAL FRONTAL SINUS HEADACHE.		03-458-20C
TEETH INTACT EXCEPT FOR 1 WISDOM TOOTH EXTRACTED. (07-30-58)		03-458-20D
GAMMA-RAY MEASUREMENTS		03-458-25
07-30-58 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-458-25B
BREATH MEASUREMENTS		03-458-26
03-31-53 RA-222 0.003 UCI RADON BREATH RJH		03-458-26A
COMPUTED TOTAL-BODY RADIUM		03-458-27
07-30-58 0.005 UCI 0.017 UCI TOTAL 0.31		03-458-27B
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-458-28
03-31-53 0.003 UCI 0.004 UCI TOTAL 0.69		03-458-28A
X-RAY EXAMINATION		03-458-30
COMPLETE SKELETAL SURVEY		03-458-30A
07-30-58 ANL X-RAY NO. R-43 LOC. ANL		03-458-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-458-30C
PPF NONE.		03-458-30D
CLINICAL LABORATORY FINDINGS		03-458-40
07-30-58 PG 14.5 HTC RBC 4.48		03-458-40A
WBC 6800 DIFF. P 63 ST L 34 M 1 E 2 B		03-458-40B
DATA REVISED 08-02-67		03-458-99

PATIENT 03-459	BORN 09-04-06	03-459-01 03-459-02 03-459-03 03-459-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-459-05A
SOURCE OF CASE	SEARCH BY CEM	03-459-10
LITERATURE CITATION		03-459-11
WALD, ET AL, REP. SAM-TDR-63-1, USAF SCH.AEROSP.MED. (APRIL 1963).		03-459-11A
MILLER, ANL-6839 (1964) PP. 18-39.		03-459-11B
EXPOSURE	DIAL PAINTER 01	03-459-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 10 MONTHS FROM AUGUST 1924		03-459-13
TO JUNE 1925. PAINTED NUMERALS ON DIALS AND USED BRUSHES FOR		03-459-13A
3 MONTHS, GLASS PENS THEREAFTER. CANNOT REMEMBER POINTING BRUSH		03-459-13B
IN HER MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-459-13C
ASSUMED WORK PERIOD 08-01-1924 TO 06-01-1925		03-459-13*
17.90 YEARS OF AGE WHEN FIRST EMPLOYED.		03-459-13Z
FAMILY HISTORY		03-459-15
MARRIED 1925	PARA 3 GRAVIDA 3	03-459-15A
CHILDREN		
FEMALE 1928	L W (MIXED CELL TUMOR PAROTID GLAND)	03-459-16
		03-459-16A
MALE 1930	L W	03-459-16B
MALE 1940	DECEASED 05-06-63 (RT. HEMI-PARETIC, ATTRIBUTED TO INJURY TO LEFT SIDE BRAIN)	03-459-16C
		03-459-16D
MEDICAL HISTORY		03-459-20
NO SERIOUS ILLNESSES OR SURGERY EXCEPT FOR THOSE IN CONNECTION		03-459-20A
WITH HER RIGHT LOWER LEG. PATIENT FELL AND INJURED RIGHT ANTERIOR		03-459-20B
TIBIA MAY 1938, THIS INJURY LED TO OSTEOMYELITIS. THREE SURGICAL		03-459-20C
PROCEDURES IN 8 MONTHS FOR THIS DISEASE. CONSULTANTS AT MAYO		03-459-20D
CLINIC RECOMMENDED AMPUTATION, WHICH WAS PERFORMED IN PEORIA		03-459-20E
1944. REVISION OF STUMP MADE AT U OF CHICAGO CLINICS 1946. UNIT		03-459-20F
NO. . COPY OF THIS RECORD IS PART OF THIS FILE. INQUIRY		03-459-20G
BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--SEVERAL TEETH		03-459-20H
EXTRACTED. (07-30-58)		03-459-20I
FRACTURE LEFT FIBULA 08-61 IN A FALL. RECURRENT INFECTIONS OF		03-459-21A
SKIN OF AMPUTATION STUMP. (03-03-65)		03-459-21B
GAMMA-RAY MEASUREMENTS		03-459-25
07-30-58 RAB,RAC 0.360 UCI HGS 1 TILTING CHAIR CEM		03-459-25A
02-12-64 RAB,RAC 0.290 UCI HGS 1 TILTING CHAIR CEM		03-459-25B
02-12-64 RAB,RAC 0.294 UCI HGS 1 7-CRYST-POS CEM		03-459-25C
03-03-65 RAB,RAC 0.254 UCI HGS 1 TILTING CHAIR CEM		03-459-25D
COMPUTED TOTAL-BODY RADIUM		03-459-27
07-30-58 0.360 UCI 1.160 UCI TOTAL 0.31		03-459-27A
02-12-64 0.290 UCI 0.935 UCI TOTAL 0.31		03-459-27B
02-12-64 0.294 UCI 0.949 UCI TOTAL 0.31		03-459-27C
03-03-65 0.254 UCI 0.818 UCI TOTAL 0.31		03-459-27D

X-RAY EXAMINATION	03-459-30
DENTAL FILMS	03-459-30A
01-30-57 DR. LENZ, OTTAWA, ILL.	03-459-30B
DENTAL FILMS OF LOWER JAW SHOW NO EVIDENCE OF RADIUM CHANGES IN TEETH.	03-459-30C
	03-459-30D
DENTAL FILMS	03-459-31A
03-57 DR. LENZ, OTTAWA, ILL.	03-459-31B
DENTAL FILMS OF SECOND LOWER INCISOR SHOW CHANGES TYPICAL OF RADIUM DEPOSITION IN TEETH--WIDENING OF ROOT CANAL.	03-459-31C
	03-459-31D
COMPLETE SKELETAL SURVEY	03-459-32A
07-30-58 ANL X-RAY NO. R-44 LOC. ANL	03-459-32B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18	03-459-32C
PPF AREAS OF BONE RESORPTION NOTED IN SKULL, RIGHT AND LEFT HUMERUS, RIGHT RADIUS AND ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA. ASEPTIC NECROSIS NOTED IN HEAD OF LEFT HUMERUS.	03-459-32D
	03-459-32E
	03-459-32F
COMPLETE SKELETAL SURVEY	03-459-33A
02-12-64 ANL X-RAY NO. R-44B LOC. ANL	03-459-33B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 19	03-459-33C
PPF NO CHANGE FROM EXAMINATION 07-30-58.	03-459-33D
SPECIAL VIEWS--SINUSES AND MASTOIDS AND LAMINAGRAMS	03-459-34A
07-16-64 U OF C CLINICS UNIT NO. LOC. U OF C	03-459-34B
SOME DECREASED NUMBER OF SEPTA IN LEFT MASTOID OF QUESTIONABLE SIGNIFICANCE. THERE IS MUCOSAL THICKENING OF LEFT MAXILLARY ANTRUM.	03-459-34C
	03-459-34D
	03-459-34E
SPECIAL VIEWS--AP AND LATERAL VIEW OF DISTAL HALF OF RIGHT FEMUR, KNEE, AND AMPUTATION STUMP, 10 CM TIBIA AND 6 CM FIBULA	03-459-35A
03-03-65 ANL X-RAY NO. R-44C LOC. ANL	03-459-35A
MULTIPLE UP TO 1 CM AREAS OF BONE RESORPTION SCATTERED THROUGH CORTEX OF SHAFT. TIBIAL STUMP DEMONSTRATES PATCHY DECALCIFICATION.	03-459-35C
CANNOT DIRECTLY ATTRIBUTE CHANGES SEEN IN AMPUTATION TO OSTEOPOROSIS FROM DISUSE ATROPHY.	03-459-35D
	03-459-35E
	03-459-35F
CLINICAL LABORATORY FINDINGS	03-459-40
07-30-58 HG 13.6 HTC RBC 4.34	03-459-40A
WBC 7800 DIFF. P 66 ST L 28 M 4 E 2 B	03-459-40B
02-12-64 HG 14.1 HTC 46 RBC 4.71	03-459-41A
WBC 6100 DIFF. P 62 ST L 34 M 4 E B	03-459-41B
OTHER ANALYSES	03-459-55
BACT. CULTURE OF EXUDATE FROM AMPUTATION STUMP--BETA HEMOLYTIC STREP (NOT GROUP A) AND STAPH AUREUS.	03-459-55A
	03-459-55B
2301 -4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE HUMERUS (LEFT)	03-459-66
23722-20 AMPUTATION THROUGH MIDDLE THIRD TIBIA (RIGHT)	03-459-66A
23722-416 FRACTURE OF MIDDLE THIRD OF TIBIA (RIGHT)	03-459-66B
23823-416 FRACTURE OF DISTAL THIRD OF THE FIBULA	03-459-66C
DATA REVISED 02-09-68	03-459-99

PATIENT 03-460	BORN 10-28-05	03-460-01
		03-460-02
		03-460-03
		03-460-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-460-05A
SOURCE OF CASE	SEARCH BY CEM	03-460-10
EXPOSURE	DIAL PAINTER 01	03-460-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APPROX. 4 TO 5 MONTHS, 1923.		03-460-13
PAINTED CLOCK FACES. POINTED BRUSH IN MOUTH BUT TRIED NOT TO		03-460-13A
SWALLOW RADIUM. STOPPED WORK WHEN GLASS PENS WERE INTRODUCED.		03-460-13B
NEVER PAINTED OWN PERSON BUT CLOTHES GLOWED IN DARK.		03-460-13C
ASSUMED WORK PERIOD 07-01-1923 TO 11-15-1923		03-460-13*
17.67 YEARS OF AGE WHEN FIRST EMPLOYED.		03-460-13Z
FAMILY HISTORY		03-460-15
MARRIED	PARA 2 GRAVIDA 2	03-460-15A
CHILDREN	MALE L W	03-460-16
	MALE L W	03-460-16A
MEDICAL HISTORY		03-460-20
SINUS SURGERY OTTAWA 1935. PATIENT OF DR. WALTER PALMER,		03-460-20A
GASTRO-INTESTINAL CLINIC, U OF CHICAGO CLINICS. UNIT NO.		03-460-20B
. (07-31-58)		03-460-20C
GAMMA-RAY MEASUREMENTS		03-460-25
07-31-58 RAB,RAC C.004 UCI HGS 1 TILTING CHAIR CEM		03-460-25A
COMPUTED TOTAL-BODY RADIUM		03-460-27
07-31-58 0.004 UCI 0.012 UCI TOTAL 0.31		03-460-27A
X-RAY EXAMINATION		03-460-30
COMPLETE SKELETAL SURVEY		03-460-30A
07-31-58 ANL X-RAY NO. R-46 LOC. ANL		03-460-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1		03-460-30C
PPF SKELETON IS NORMAL EXCEPT FOR SEVERAL TINY AREAS OF BONE		03-460-30D
RESORPTION SCATTERED THROUGHOUT THE SKULL.		03-460-30E
CLINICAL LABORATORY FINDINGS		03-460-40
07-31-58 Hg 14.5 HTC RBC 4.76		03-460-40A
WBC 6400 DIFF. P 58 ST L 36 M 4 E 1 B		03-460-40B
TOOTH MEASUREMENT		03-460-73
SAMPLE TOOTH CANINE		03-460-73A
TOTAL WT. 0.7277 CAL.C.GMS.CA. 0.2038		03-460-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-460-73C
3.3 16.3 1.36		03-460-73D
DATA REVISED 08-02-67		03-460-99

PATIENT 03-461	BORN 03-06-96	03-461-01
		03-461-02
		03-461-03
FEMALE		03-461-05
OTHER PERTINENT NOS.	AMBH	03-461-05A
SOURCE OF CASE	SEARCH BY CEM	03-461-10
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 6 WEEKS SOMETIME BETWEEN 1921		03-461-13
AND 1923. PAINTED NUMERALS, POINTED BRUSH IN MOUTH, NEVER PAINTED		03-461-13A
ANY PART OF HER BODY.		03-461-13B
ASSUMED WORK PERIOD 07-01-1922 TO 08-15-1922		03-461-13*
26.31 YEARS OF AGE WHEN FIRST EMPLOYED.		03-461-13Z
FAMILY HISTORY		03-461-15
MARRIED 1951	PARA 0 GRAVIDA 0	03-461-15A
MEDICAL HISTORY		03-461-20
TONSILLECTOMY WITH SUBSEQUENT REVISION AT U OF CHICAGO CLINICS.		03-461-20A
ALSO HAD BENIGN CYST REMOVED FROM BACK SEVERAL TIMES IN 1930S.		03-461-20B
SINUS SURGERY AT AGE 16. NO OTHER SERIOUS ILLNESSES. INQUIRY		03-461-20C
BY SYSTEMS NEGATIVE. DENTAL HISTORY--5 TEETH EXTRACTED. (07-31-58)		03-461-20D
GAMMA-RAY MEASUREMENTS		03-461-25
07-31-58 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-461-25A
COMPUTED TOTAL-BODY RADIUM		03-461-27
07-31-58 0.002 UCI 0.006 UCI TOTAL 0.31		03-461-27A
X-RAY EXAMINATION		03-461-30
COMPLETE SKELETAL SURVEY		03-461-30A
07-31-58 ANL X-RAY NO. R-45 LOC. ANL		03-461-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-461-30C
PPF NONE.		03-461-30D
CLINICAL LABORATORY FINDINGS		03-461-40
1. 107-31-58 Hg 14. HTC RBC 4.35		03-461-40A
WBC 8300 DIFF. P 62 ST L 34 M 3 E 1 B		03-461-40B
634 -12 TONSILLECTOMY		03-461-67
DATA REVISED 11-01-67		03-461-99

PATIENT 03-462	BORN 12-31-06	03-462-01
		03-462-02
		03-462-03
FEMALE		03-462-05
SOURCE OF CASE	SEARCH BY CEM	03-462-10
LITERATURE CITATION		03-462-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-462-11A
EXPOSURE	DIAL PAINTER 01	03-462-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SEPT. 1922 TO 1934. LUMINOUS PROCESSES, INC., OTTAWA, 1934 TO PRESENT (1962). PAINTED DIALS UNTIL 1951, HAS BEEN ASSISTANT SUPERVISOR SINCE THEN. POINTED BRUSH IN MOUTH AT RADIUM DIAL CO., BUT NEVER PAINTED ANY PART OF HER BODY.		03-462-13
		03-462-13A
		03-462-13B
		03-462-13C
		03-462-13D
ASSUMED WORK PERIOD 09-01-1922 TO 10-05-1962		03-462-13*
15.66 YEARS OF AGE WHEN FIRST EMPLOYED.		03-462-13Z
FAMILY HISTORY		03-462-15
MARRIED 1943	PARA 0 GRAVIDA C	03-462-15A
HUSBAND DECEASED		03-462-15B
MEDICAL HISTORY		03-462-20
NO SERIOUS ILLNESSES OR SURGERY. HAS BEEN IN GOOD HEALTH. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--THREE TEETH EXTRACTED. (08-02-58)		03-462-20A
		03-462-20B
		03-462-20C
SURGERY FOR RECTAL FISSURE 1960. INTERVAL HEALTH OTHERWISE GOOD.		03-462-21A
DENTAL HISTORY--TOTAL OF 6 TEETH NOW EXTRACTED. (10-06-62)		03-462-21B
GAMMA-RAY MEASUREMENTS		03-462-25
08-02-58 RAB,RAC C.150 UCI HGS 1 TILTING CHAIR CEM		03-462-25A
02-28-59 RAB,RAC C.147 UCI HGS 1 TILTING CHAIR CEM		03-462-25B
10-06-62 RAB,RAC C.119 UCI HGS 1 TILTING CHAIR CEM		03-462-25C
10-06-62 RAB,RAC C.102 UCI HGS 1 7-CRYST-POS CEM		03-462-25D
COMPUTED TOTAL-BODY RADIUM		03-462-27
08-02-58 0.150 UCI 0.480 UCI TOTAL 0.31		03-462-27A
02-28-59 0.147 UCI 0.474 UCI TOTAL 0.31		03-462-27B
10-06-62 0.119 UCI 0.367 UCI TOTAL 0.31		03-462-27C
10-06-62 0.102 UCI 0.329 UCI TOTAL 0.31		03-462-27D
X-RAY EXAMINATION		03-462-30
COMPLETE SKELETAL SURVEY		03-462-30A
08-02-58 ANL X-RAY NO. R-48 LOC. ANL		03-462-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5		03-462-30C
PPF AREAS OF BONE RESORPTION IN THE SKULL, LEFT RADIUS AND ULNA, AND RIGHT AND LEFT FIBULA.		03-462-30D
		03-462-30E

COMPLETE SKELETAL SURVEY

10-06-62 ANL X-RAY NO. R-488 LOC. ANL
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 14
PPF AREAS OF BONE RESORPTION IN SKULL, PELVIS, RIGHT RADIUS,
LEFT RADIUS, ULNA, RIGHT AND LEFT TIBIA AND FIBULA. BONE SCLER-
OSIS IN NECK OF LEFT FEMUR, COARSENING OF TRABECULATION OF RIGHT
AND LEFT FEMUR, AND RIGHT TIBIA.

03-462-31A
03-462-31B
03-462-31C
03-462-31D
03-462-31E
03-462-31F
03-462-31G

CLINICAL LABORATORY FINDINGS

08-02-58 HG 14.7 HTC RBC 4.62
WBC 8400 DIFF. P 57 ST 2 L 35 M 3 E 3 B

03-462-40
03-462-40A
03-462-40B

670 -11 LOCAL EXCISION OF ANAL FISSURE

03-462-67

TOOTH MEASUREMENT

SAMPLE 14.01 TOOTH PREMOLAR
TOTAL WT. 1.0760 CALC.GMS.CA. 0.3013
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY
48.6 78.7 62 261.2 0.5510

03-462-73
03-462-73A
03-462-73B
03-462-73C
03-462-73D

SAMPLE 14.02 TOOTH MOLAR
TOTAL WT. 2.2697 CALC.GMS.CA. 0.6355
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY
60.0 93.0 64.5 146.27 0.309

03-462-74A
03-462-74B
03-462-74C
03-462-74D

DATA REVISED 05-07-68

03-462-99

PATIENT 03-463	BORN 10-02-18	03-463-01
DECEASED		03-463-02
		03-463-02A
FEMALE		03-463-05
DECEASED 11-18-66		03-463-06
DEATH CERT.NO.	AUTOPSY YES	03-463-07
INTERMENT	OTTAWA AVENUE CEMETERY, OTTAWA, ILL.	03-463-08
CAUSES OF DEATH	INFARCTION RIGHT AND LEFT CEREBRAL HEMISPHERES	03-463-09
	RUPTURED ANEURYSM OF ANTERIOR COMMUNICATING ARTERY	03-463-09A
SOURCE OF CASE	SEARCH BY CEM	03-463-10
EXPOSURE	DIAL PAINTER 01	03-463-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILLINOIS, 1942 TO PRESENT.		03-463-13
PAINTED DIALS ABOUT 60 PERCENT OF TOTAL TIME, DARKROOM INSPECTOR		03-463-13A
10 PERCENT, SUPERVISING AND MIXING OF MATERIALS (BUT NOT WEIGH-		03-463-13B
ING) 30 PERCENT. NEVER POINTED BRUSHES IN MOUTH. NEVER PAINTED		03-463-13C
OWN PERSON.		03-463-13D
FAMILY HISTORY		03-463-15
NEVER MARRIED		03-463-15A
MEDICAL HISTORY		03-463-20
SURGERY--APPENDECTOMY 1948. NO OTHER SERIOUS ILLNESSES OR SURGERY.		03-463-20A
INQUIRY BY SYSTEMS NEGATIVE. TEETH--SEVERAL EXTRACTED.		03-463-20B
GAMMA-RAY MEASUREMENTS		03-463-25
08-02-58 RAB,RAC 0.010 UCI HGS 1 TILTING CHAIR CEM		03-463-25A
COMPUTED TOTAL-BODY RADIUM		03-463-27
08-02-58 0.010 UCI 0.033 UCI TOTAL 0.31		03-463-27A
X-RAY EXAMINATION	NOT DONE	03-463-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-463-40
661 -12 APPENDECTOMY		03-463-67
932 -500.7 INFARCTION OF CEREBRAL HEMISPHERES (RIGHT,LEFT)		03-463-67A
4773 -942.5 RUPTURE OF ANTERIOR COMMUNICATING ARTERY		03-463-67B
DATA REVISED 08-20-68		03-463-99

PATIENT 03-464	BORN 09-13-07	03-464-01
		03-464-02
FEMALE		03-464-03
		03-464-05
SOURCE OF CASE	SEARCH BY CEM	03-464-10
EXPOSURE	DIAL PAINTER 01	03-464-12
SOURCE RADIUM DIAL CO., ABOUT 1 YEAR, 1923 TO 1924. PAINTED NUMERALS		03-464-13
AND POINTED BRUSH IN MOUTH. PAINTED FINGERNAILS, DRESS BUTTONS,		03-464-13A
RINGS AND TEETH WITH LUMINOUS MATERIAL.		03-464-13B
ASSUMED WORK PERIOD 07-01-1923 TO 07-01-1924		03-464-13*
15.79 YEARS OF AGE WHEN FIRST EMPLOYED.		03-464-13Z
FAMILY HISTORY		03-464-15
MARRIED 1925	PARA 2 GRAVIDA 4 (2 MISCARRIAGES)	03-464-15A
HUSBAND	DECEASED 1950	03-464-15B
MARRIED 1951		03-464-15C
CHILDREN	MALE L W	03-464-16
	FEMALE L W	03-464-16A
MEDICAL HISTORY		03-464-20
APPENDECTOMY 1940 AND HEMORRHOIDECTOMY 1952. NERVOUS DISORDER		03-464-20A
1957. INQUIRY BY SYSTEMS--CHRONIC BRONCHITIS AND MILD RIGHT		03-464-20B
SHOULDER DISCOMFORT RECENTLY; OTHERWISE NEGATIVE. DENTAL HISTORY		03-464-20C
--THREE TEETH EXTRACTED. (08-05-58)		03-464-20D
GAMMA-RAY MEASUREMENTS		03-464-25
08-05-58 RAB,RAC LESS THAN 0.001 LCI HGS 1 TILTING CHAIR CEM		03-464-25A
COMPUTED TOTAL-BODY RADIUM		03-464-27
08-05-58 LESS THAN 0.001 UCI LESS THAN 0.004 UCI TOTAL 0.31		03-464-27A
X-RAY EXAMINATION		03-464-30
PARTIAL SKELETAL SURVEY		03-464-30A
08-05-58 ANL X-RAY NO. R-52 LOC. ANL		03-464-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-464-30C
PPE. NONE.		03-464-30D
CLINICAL LABORATORY FINDINGS		03-464-40
08-05-58 HG 13.4 HTC RBC 3.67		03-464-40A
WBC 4800 DIFF. P 57 ST 1 L 35 M 5 E 2 B		03-464-40B
67X -11 HEMORRHOIDECTOMY		03-464-67
661 -12 APPENDECTOMY		03-464-67A

PATIENT 03-465	BORN 02-07-08	03-465-01
		03-465-02
		03-465-03
		03-465-04
		03-465-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-465-10
EXPOSURE	DIAL PAINTER 01	03-465-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 2 MONTHS STARTING JULY 1925.		03-465-13
PAINTED NUMERALS AND POINTED BRUSH IN HER MOUTH, NEVER PAINTED		03-465-13A
ANY PART OF HER BODY.		03-465-13B
ASSUMED WORK PERIOD 07-01-1925 TO 09-01-1925		03-465-13*
17.39 YEARS OF AGE WHEN FIRST EMPLOYED.		03-465-13Z
FAMILY HISTORY		03-465-15
MARRIED 1927	PARA 1 GRAVIDA 1	03-465-15A
MARRIED 1951		03-465-15B
MEDICAL HISTORY		03-465-20
APPENDECTOMY 1918. NO SERIOUS ILLNESSES, EXCEPT FOR MILD CCLITIS.		03-465-20A
INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--THREE		03-465-20B
TEETH EXTRACTED. (08-05-58)		03-465-20C
GAMMA-RAY MEASUREMENTS		03-465-25
08-05-58 RAB,RAC 0.0006 UCI HGS 1 TILTING CHAIR CEM		03-465-25A
COMPUTED TOTAL-BODY RADIUM		03-465-27
08-05-58 0.0006 UCI 0.002 UCI TOTAL 0.31		03-465-27A
X-RAY EXAMINATION		03-465-30
COMPLETE SKELETAL SURVEY		03-465-30A
08-05-58 ANL X-RAY NO. R-51 LOC. ANL		03-465-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-465-30C
PPF NONE.		03-465-30D
CLINICAL LABORATORY FINDINGS		03-465-40
08-05-58 HG 13.6 HTC RBC 4.11		03-465-40A
WBC 8500 DIFF. P 59 ST L 39 M 2 E B		03-465-40B
661 -12 APPENDECTOMY		03-465-67

PATIENT 03-466	BORN 05-30-04	03-466-01
		03-466-02
FEMALE		03-466-03
		03-466-05
SOURCE OF CASE	SEARCH BY CEM	03-466-10
EXPOSURE	DIAL PAINTER 01	03-466-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 2 TO 3 MONTHS 1924. PAINTED		03-466-13
NUMERALS AND POINTED BRUSH IN HER MOUTH. NEVER PAINTED ANY		03-466-13A
PART OF HER BODY.		03-466-13B
ASSUMED WORK PERIOD 07-01-1924 TO 09-15-1924.		03-466-13*
20.08 YEARS OF AGE WHEN FIRST EMPLOYED.		03-466-13Z
FAMILY HISTORY		03-466-15
MARRIED	PARA 2 GRAVIDA 2	03-466-15A
CHILDREN	MALE 1933 L W	03-466-16
	MALE 1934 L W	03-466-16A
MEDICAL HISTORY		03-466-20
GYNECOLOGICAL SURGERY 1935. KNOWN HYPERTENSION SINCE 1953.		03-466-20A
ARTHRITIS IN LEFT KNEE FOR PAST FEW MONTHS. INQUIRY BY SYSTEMS		03-466-20B
OTHERWISE NEGATIVE. DENTAL HISTORY--ALL TEETH EXTRACTED. (08-19-58)		03-466-20C
GAMMA-RAY MEASUREMENTS		03-466-25
08-19-58 RAB,RAC C.001 UCI HGS 1 TILTING CHAIR CEM		03-466-25A
COMPUTED TOTAL-BODY RADIUM		03-466-27
08-19-58 0.001 UCI 0.004 UCI TOTAL 0.31		03-466-27A
X-RAY EXAMINATION		03-466-30
COMPLETE SKELETAL SURVEY		03-466-30A
08-19-58 ANL X-RAY NO. R-56 LOC. ANL		03-466-30B
NEGATIVE FOR CHANGES. TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-466-30C
PPF NONE.		03-466-30D
CLINICAL LABORATORY FINDINGS		03-466-40
08-19-58 HG 15.7 HTC RBC 4.85		03-466-40A
WBC 11,800 DIFF. P 58 ST L 33 M 4 E 5 B		03-466-40B
47X -X30 ESSENTIAL HYPERTENSION		03-466-67

PATIENT 03-467	BORN 10-26-11	03-467-01
		03-467-02
		03-467-03
		03-467-04
		03-467-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-467-10
EXPOSURE	DIAL PAINTER 01	03-467-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 8 YRS., SEPT. 1926 TO 1934.		03-467-13
PAINTED WITH BRUSHES FIRST 6 MONTHS, GLASS PENS THEREAFTER.		03-467-13A
POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-467-13B
ASSUMED WORK PERIOD 09-01-1926 TO 09-01-1934		03-467-13*
14.84 YEARS OF AGE WHEN FIRST EMPLOYED.		03-467-13Z
FAMILY HISTORY		03-467-15
MARRIED	PARA 2 GRAVIDA 3 (1 MISCARRIAGE)	03-467-15A
CHILDREN		
FEMALE 1934	L W	03-467-16
FEMALE 1947	L W	03-467-16A
MEDICAL HISTORY		03-467-20
APPENDECTOMY 1932. TREATED FOR HYPOTHYROIDISM PAST YEAR WITH		03-467-20A
MEDICATION. NO OTHER SERIOUS DISEASE. INQUIRY BY SYSTEMS NEGATIVE.		03-467-20B
DENTAL HISTORY--5 LOWER MOLARS EXTRACTED. (08-19-58)		03-467-20C
GAMMA-RAY MEASUREMENTS		03-467-25
08-19-58 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-467-25A
COMPUTED TOTAL-BODY RADIUM		03-467-27
08-19-58 0.005 UCI 0.015 UCI TOTAL 0.31		03-467-27A
X-RAY EXAMINATION		03-467-30
COMPLETE SKELETAL SURVEY		03-467-30A
08-19-58 ANL X-RAY NO. R-57 LOC. ANL		03-467-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-467-30C
PPF NONE.		03-467-30D
CLINICAL LABORATORY FINDINGS		03-467-40
08-19-58 HG 14.6 HTC RBC 4.55		03-467-40A
WBC 9000 DIFF. P 62 ST L 36 M 1 E 1 B		03-467-40B
661 -12 APPENDECTOMY		03-467-67
810 -7722 HYPOTHYROIDISM		03-467-67A

PATIENT 03-468	BORN 02-26-08	03-468-01
		03-468-02
FEMALE		03-468-03
		03-468-05
SOURCE OF CASE	SEARCH BY CEM	03-468-10
EXPOSURE	DIAL PAINTER 01	03-468-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., FEB. TO JUNE 1926. RADIUM		03-468-13
DIAL CO., OTTAWA, ILL., JUNE 1926 TO JUNE 1928. PAINTED DIALS		03-468-13A
AND USED GLASS PENS BUT CLEANED DIALS WITH BRUSH POINTED IN HER		03-468-13B
MOUTH. NEVER PAINTED ANY PART OF HER BODY. HER CLOTHES GLOWED		03-468-13C
AT NIGHT.		03-468-13D
ASSUMED WORK PERIOD 02-01-1926 TO 06-01-1928		03-468-13*
17.93 YEARS OF AGE WHEN FIRST EMPLOYED.		03-468-13Z
FAMILY HISTORY		03-468-15
MARRIED	PARA 0 GRAVIDA 2 (2 MISCARRIAGES)	03-468-15A
MEDICAL HISTORY		03-468-20
NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--		03-468-20A
OCCASIONAL SWOLLEN ANKLES AND MILD CONTINUOUS LOW BACKACHE FOR		03-468-20B
PAST 25 YEARS. DENTAL HISTORY--SEVERAL TEETH EXTRACTED.(08-20-58)		03-468-20C
GAMMA-RAY MEASUREMENTS		03-468-25
08-20-58 RAB,RAC 0.010 UCI HGS 1 TILTING CHAIR CEM		03-468-25A
COMPUTED TOTAL-BODY RADIUM		03-468-27
08-20-58 0.010 UCI 0.029 UCI TOTAL 0.31		03-468-27A
X-RAY EXAMINATION		03-468-30
COMPLETE SKELETAL SURVEY		03-468-30A
08-20-58 ANL X-RAY NO. R-59 LOC. ANL		03-468-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-468-30C
PPF INTERVERTEBRAL DISC DISEASE BETWEEN L5 AND S1, PROBABLY		03-468-30D
UNRELATED TO RADIUM.		03-468-30E
CLINICAL LABORATORY FINDINGS		03-468-40
08-20-58 HGB 13.5 HTC RBC 4.18		03-468-40A
WBC 7100 DIFF. P 53 ST 2 L 38 M 7 E B		03-468-40B
DATA REVISED 08-02-67		03-468-99

PATIENT 03-469	BORN 05-26-03	03-469-01
		03-469-02
		03-469-03
FEMALE		03-469-05
SOURCE OF CASE	SEARCH BY CEM	03-469-10
EXPOSURE	DIAL PAINTER 01	03-469-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 6 TO 8 MONTHS 1925. PAINTED		03-469-13
NUMERALS ON DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY		03-469-13A
PART OF HER BODY.		03-469-13B
ASSUMED WORK PERIOD 04-01-1925 TO 11-01-1925		03-469-13*
21.84 YEARS OF AGE WHEN FIRST EMPLOYED.		03-469-13Z
FAMILY HISTORY		03-469-15
MARRIED	PARA 1 GRAVIDA 1	03-469-15A
CHILDREN	MALE L W	03-469-16
MEDICAL HISTORY		03-469-20
TREATED WITH RADIUM FOR CANCER OF UTERUS, AUGUST 1938. RHEUMATIC		03-469-20A
FEVER WITH SEVERE POLYARTHRITIS, 1948. INQUIRY BY SYSTEMS--		03-469-20B
OCCASIONAL ARTHRITIS SINCE EPISODE 1948. DENTAL HISTORY--		03-469-20C
EXTRACTIONS OF REMAINING TEETH IN PROGRESS. (08-20-58)		03-469-20D
GAMMA-RAY MEASUREMENTS		03-469-25
08-02-58 RAB,RAC C.003 UCI HGS 1 TILTING CHAIR CEM		03-469-25A
COMPUTED TOTAL-BODY RADIUM		03-469-27
08-02-58 0.003 UCI 0.010 UCI TOTAL 0.31		03-469-27A
X-RAY EXAMINATION		03-469-30
COMPLETE SKELETAL SURVEY		03-469-30A
08-20-58 ANL X-RAY NO. R-58 LOC. ANL		03-469-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-469-30C
PPF NONE.		03-469-30D
CLINICAL LABORATORY FINDINGS		03-469-40
08-20-58 Hg 15.2 HTC RBC 4.30		03-469-40A
WBC 10,900 DIFF. P 55 ST L 41 M 3 E 1 B		03-469-40B
MALIGNANT TUMOR CARCINOMA OF UTERUS		03-469-60
010 -932 RHEUMATIC FEVER		03-469-67
782 -8+ TUMOR OF UTERUS, UNLISTED, MALIGNANT NEOPLASM		03-469-67A

PATIENT C3-470	BORN 10-01-26	03-470-01
		03-470-02
		03-470-03
FEMALE		03-470-05
SOURCE OF CASE	SEARCH BY CEM	03-470-10
EXPOSURE	DIAL PAINTER 01	03-470-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., SEPT. 1942 TO		03-470-13
JUNE 1947. PAINTED CLOCK FACES AND AIRPLANE INSTRUMENTS WITH		03-470-13A
GLASS PENS AND BRUSHES. NEVER PUT THESE IMPLEMENTS IN MOUTH.		03-470-13B
FAMILY HISTORY		03-470-15
MARRIED	PARA 1 GRAVIDA 1	03-470-15A
CHILDREN	FEMALE L W	03-470-16
MEDICAL HISTORY		03-470-20
NO SURGERY OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE.		03-470-20A
HOSPITALIZED SEPT. 1958 FOR EXTRACTION OF 6 TEETH. ALMOST ALL		03-470-20B
TEETH EXTRACTED. (10-13-58)		03-470-20C
GAMMA-RAY MEASUREMENTS		03-470-25
10-13-58 KAB,RAC C.007 UCI HGS 1 TILTING CHAIR CEM		03-470-25A
COMPUTED TOTAL-BODY RADIUM		03-470-27
10-13-58 0.007 UCI 0.023 UCI TOTAL 0.31		03-470-27A
X-RAY EXAMINATION	NOT DONE	03-470-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-470-40

PATIENT 03-471	BORN 03-18-08	03-471-01
		03-471-02
		03-471-03
FEMALE		03-471-05
SOURCE OF CASE	SEARCH BY CEM	03-471-10
EXPOSURE	DIAL PAINTER 01	03-471-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1.5 TO 2 YEARS, STARTING SEPT. 1926. PAINTED DIALS. DID NOT POINT BRUSH IN MOUTH, ALTHOUGH LUMINOUS MATERIAL WAS SPLATTERED OVER FACE, HANDS, AND CLOTHES. USED BLOTTER TO POINT BRUSHES BECAUSE OF AVERSION TO POINTING BRUSH IN MOUTH. ALSO OPERATED STAMPING MACHINE FOR SEVERAL MONTHS. CLOTHES GLOWED AT NIGHT.		03-471-13
		03-471-13A
		03-471-13B
		03-471-13C
		03-471-13D
		03-471-13E
ASSUMED WORK PERIOD 09-01-1926 TO 06-01-1928		03-471-13*
18.45 YEARS OF AGE WHEN FIRST EMPLOYED.		03-471-13Z
FAMILY HISTORY		03-471-15
MARRIED	PARA 0 GRAVIDA 4	03-471-15A
MEDICAL HISTORY		03-471-20
PATIENT HAS HAD ASTHMA SINCE AGE OF 3. SUSTAINED FRACTURE OF LEFT ANKLE 1955. TONSILLECTOMY IN CHILDHOOD AND LEFT MASTECTOMY FOR CARCINOMA 1957. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR BURSITIS IN LEFT SHOULDER AND ACHES AND PAINS IN LEFT ARM. DENTAL HISTORY ONE OR TWO TEETH EXTRACTED. (10-13-58)		03-471-20A
		03-471-20B
		03-471-20C
		03-471-20D
		03-471-20E
GAMMA-RAY MEASUREMENTS		03-471-25
10-13-58 RAB,RAC C.004 UCI HGS 1 TILTING CHAIR CEM		03-471-25A
COMPUTED TOTAL-BODY RADIUM		03-471-27
10-13-58 0.004 UCI 0.013 UCI TOTAL 0.31		03-471-27A
X-RAY EXAMINATION		03-471-30
COMPLETE SKELETAL SURVEY		03-471-30A
10-13-58 ANL X-RAY NO. R-64 LOC. ANL		03-471-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-471-30C
PPF NONE.		03-471-30D
CLINICAL LABORATORY FINDINGS		03-471-40
10-13-58 HG 13.2 HTC RBC 3.95		03-471-40A
WBC 7700 DIFF. P 69 ST 3 L 18 M 6 E 3 B 1		03-471-40B
MALIGNANT TUMOR CARCINOMA OF BREAST (1957)		03-471-60
190 -10 MASTECTOMY		03-471-67
190 -8191 CARCINOMA, UNSPECIFIED, OF THE BREAST (LEFT)		03-471-67A
23735-416 FRACTURE OF THE MEDIAL MALLEOLUS OF THE TIBIA		03-471-67B
634 -12 TONSILLECTOMY		03-471-67C
DATA REVISED 08-02-67		03-471-99

PATIENT 03-472	BORN 06-23-22	03-472-01
		03-472-02
		03-472-03
		03-472-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-472-10
EXPOSURE	DIAL PAINTER 01	03-472-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., JAN. 1941 TO OCT. 1945. PAINTED DIALS. DID NOT PCINT BRUSH IN MOUTH.		03-472-13
		03-472-13A
FAMILY HISTORY		03-472-15
MARRIED	PARA 2 GRAVIDA 3 (1 STILLBIRTH)	03-472-15A
CHILDREN	FEMALE 1948 L W	03-472-16
	MALE 1951 L W	03-472-16A
MEDICAL HISTORY		03-472-20
SURGERY--TONSILLECTOMY CHILDHOOD, APPENDECTOMY 1938, EXPLORATORY		03-472-20A
LAPARCTOMIES FOR ADHESIONS 1942, AGAIN 1951, CHOLECYSTECTOMY		03-472-20B
1954, LEFT OVARIECTOMY AND TUBAL LIGATION 1957. BELL'S PALSY		03-472-20C
1 MCNTH 1953. INQUIRY BY SYSTEMS--NEGATIVE EXCEPT FOR BACKACHE		03-472-20D
PAST 6 WEEKS. TEETH--SEVERAL EXTRACTIENS. (10-13-58)		03-472-20E
GAMMA-RAY MEASUREMENTS		03-472-25
10-13-58 RAB,RAC C.003 UCI HGS 1 TILTING CHAIR CEM		03-472-25A
COMPUTED TOTAL-BODY RADIUM		03-472-27
10-13-58 0.003 UCI 0.011 UCI TOTAL 0.31		03-472-27A
X-RAY EXAMINATION		03-472-30
	NOT DONE	
CLINICAL LABORATORY FINDINGS		03-472-40
	NOT DONE	
634 -12 TONSILLECTOMY		03-472-67
661 -12 APPENDECTOMY		03-472-67A
687 -12 CHOLECYSTECTOMY		03-472-67B
787 -74 LIGATION OF FALLOPIAN TUBE		03-472-67C
788 -10 UNILATERAL OOPHORECTOMY		03-472-67D
DATA REVISED 08-02-67		03-472-99

PATIENT 03-473	BORN 04-25-04	03-473-01
DECEASED		03-473-02
		03-473-02A
		03-473-03
FEMALE		03-473-05
OTHER PERTINENT NOS.	AMBH	03-473-05A
DECEASED 11-11-65		03-473-06
DEATH CERT. NO.	AUTOPSY NONE	03-473-07
INTERMENT	PERU CEMETERY, PERU, ILLINOIS	03-473-08
CAUSES OF DEATH	CORONARY THROMBOSIS, ARTERIOSCLEROTIC HEART DISEASE	03-473-09
SOURCE OF CASE	SEARCH BY CEM	03-473-10
LITERATURE CITATION		03-473-11
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN.,		03-473-11A
MINNEAPOLIS (1960).		03-473-11B
ROWLAND, ANL-6104 (1959) PP. 30-33.		03-473-11C
HASTERLIK AND FINKEL, MED.CLIN.N.AMER. 49,285 (JAN. 1965).		03-473-11D
EXPOSURE	DIAL PAINTER 01	03-473-12
SOURCE RADIUM DIAL CO., PERU, ILL., FOR SEVERAL MONTHS, AND OTTAWA,		03-473-13
ILL. THEREAFTER, 1923 TO 1925, TOTAL OF ABOUT 2 YEARS. (PERU		03-473-13A
PLANT CLOSED SEPT. 1922, DATES SHE GAVE ARE DOUBTFUL.)		03-473-13B
PAINTED DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED HER OWN BODY.		03-473-13C
ASSUMED WORK PERIOD 07-01-1922 TO 01-01-1925		03-473-13*
18.17 YEARS OF AGE WHEN FIRST EMPLOYED.		03-473-13Z
FAMILY HISTORY		03-473-15
MARRIED 1926	PARA 1 GRAVIDA 1	03-473-15A
CHILDREN	FEMALE 1938 L W	03-473-16
MEDICAL HISTORY		03-473-20
NO SERIOUS SURGERY. HOSPITALIZED APPROX. 1950 FOR REMOVAL OF		03-473-20A
FLUID FROM KNEE. HAS HAD STIFF LEFT HIP SINCE 1938, STARTED WITH		03-473-20B
PAIN, HER PHYSICIAN DIAGNOSED THIS ILLNESS AS OSTEOARTHRITIS.		03-473-20C
HAD RENAL STONE SEVERAL YEARS AGO. INQUIRY BY SYSTEMS OTHERWISE		03-473-20D
NEGATIVE. TEETH--EDENTULOUS EXCEPT FOR ONE WISDOM TOOTH REMAIN-		03-473-20E
ING. PRESENTLY EMPLOYED FULL-TIME AS COMPTOMETER AND SWITCH-		03-473-20F
BOARD OPERATOR. (10-21-58)		03-473-20G
ANOTHER RENAL STONE PRESUMABLY PASSED ABOUT 3 YEARS AGO. HAD		03-473-21A
BEEN TREATED FOR MIDDLE EAR INFECTION ON LEFT SIDE FOR PAST 3		03-473-21B
WEEKS. HAD DIZZINESS AND TRUE VERTIGO AT ONSET OF ILLNESS, WAS		03-473-21C
CONFINED TO BED FOR 1 WEEK. GANGLION REMOVED FROM DORSUM RIGHT		03-473-21D
HAND OVER THIRD AND FOURTH METACARPALS. CANNOT ABDUCT THIGHS.		03-473-21E
GAIT CONFINED TO SHUFFLING, HOLDS ON TO FURNITURE AND WALKS		03-473-21F
MAXIMUM OF ONE BLOCK. LEFT SHOE IS BUILT UP 1-1/2 INCHES. HAS		03-473-21G
HAD PAIN IN POSTERIOR LEFT HIP FOR PAST 5 DAYS. (09-26-62)		03-473-21H

SUSPICION OF LEFT MASTOID PATHOLOGY ON SKULL FILMS DATED 09-26-62.					03-473-22A
DR. NEUFELD, , REPORTED ON 03-19-63. THAT HE HAD BEEN TREAT-					03-473-22B
ING PATIENT FOR GELATINOUS DISCHARGE FROM LEFT EAR THOUGHT TO BE					03-473-22C
CHOLESTEATOMA. (03-19-63)					03-473-22D
GAMMA-RAY MEASUREMENTS					03-473-25
10-21-58	RAB,RAC	0.390 UCI	HGS 1 TILTING CHAIR	CEM	03-473-25B
09-26-62	RAB,RAC	0.379 UCI	HGS 1 TILTING CHAIR	CEM	03-473-25C
BREATH MEASUREMENTS					03-473-26
04-08-53	EM-222		RADON BREATH	TS	03-473-26A
COMPUTED TOTAL-BODY RADIUM					03-473-27
10-21-58	0.390 UCI		1.260 UCI TOTAL	0.31	03-473-27B
09-26-62	0.379 UCI		1.170 UCI TOTAL	0.31	03-473-27C
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON					03-473-28
04-08-53			1.28 UCI TOTAL		03-473-28A
X-RAY EXAMINATION					03-473-30
COMPLETE SKELETAL SURVEY					03-473-30A
10-21-58	ANL	X-RAY NO. R-67	LOC. ANL		03-473-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 39					03-473-30C
PPF ASEPTIC NECROSIS AND MARKED DESTRUCTION OF THE HEADS OF					03-473-30D
RIGHT HUMERUS AND RIGHT AND LEFT FEMURS. PARTIAL DESTRUCTION OF					03-473-30E
BODY OF NINTH THORACIC VERTEBRA. AREAS OF BCNE RESORPTION SEEN IN					03-473-30F
SKULL, PELVIS, RIGHT AND LEFT CLAVICLE, RIGHT AND LEFT RADIUS AND					03-473-30G
ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, AND					03-473-30H
RIGHT AND LEFT METATARSALS. EXTENSIVE COARSENING OF TRABECULATION					03-473-30I
THROUGHOUT SKELETON. EROSION OF PETROUS PYRAMID ON LEFT SIDE					03-473-30J
UNDER TEGMEN TYMPANI.					03-473-30K
COMPLETE SKELETAL SURVEY					03-473-31A
09-26-62	ANL	X-RAY NO. R-67B	LOC. ANL		03-473-31B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 43					03-473-31C
PPF FURTHER DESTRUCTIVE CHANGES BEYOND THOSE SEEN PREVIOUSLY.					03-473-31D
QUESTION OF NEOPLASTIC PROCESS IN MASTOID AIR CELLS, WHICH APPEAR					03-473-31E
TO BE LARGER THAN NORMAL.					03-473-31F
SPECIAL VIEWS--RIGHT AND LEFT AP MASTOIDS AND LATERAL MASTOIDS					03-473-32A
03-13-63	ANL	X-RAY NO. R-67C	LOC. ANL		03-473-32B
VIEWS OF LEFT MASTOID DEMONSTRATE 8 MM SIZE AREA OF BCNE RESORP-					03-473-32C
TION. POSSIBLE NEOPLASM OF LEFT MASTOID.					03-473-32D
SPECIAL VIEWS--SKULL AND MASTOID					03-473-33A
05-04-63	U OF C CLINICS	UNIT NO.	LOC. AMBH		03-473-33B
MULTIPLE AREAS OF DESTRUCTION THROUGHOUT THE CALVARIUM WITH					03-473-33C
DESTRUCTION OF THE OUTER TABLES OF THE SKULL. MASTOID AIR CELLS					03-473-33D
ARE PARTIALLY OBSCURED BILATERALLY, THOUGHT TO REPRESENT CHRONIC					03-473-33E
MASTOIDITIS RATHER THAN NEOPLASM.					03-473-33F
CLINICAL LABORATORY FINDINGS					03-473-40
09-26-62	HG 15.1	HTC	RBC 4.52		03-473-40A
WBC 9000	DIFF. P 62	ST	L 35 M 1 E 2 B		03-473-40B
SPECIMENS AVAILABLE					03-473-50
BONE--BONY SEQUESTUM REMOVED FROM LEFT MANDIBLE (07-58)					RER 03-473-50A
TOOTH--IMPACTED MANDIBULAR THIRD MOLAR (01-59)					RER 03-473-50B

AUTORADIOGRAPHIC ANALYSES

BONY SEQUESTRUM FROM LEFT MANDIBLE
 MAXIMUM HOT SPOT 3.3 PCI RA-226/MG
 AVERAGE DIFFUSE LEVEL 0.18 PCI RA-226/MG
 CALCULATED UNIFORM LABEL 0.20 PCI RA-226/MG
 HOT SPOT TO DIFFUSE RATIO 18
 DIFFUSE TO UNIFORM LABEL 0.9

RER 03-473-53
 03-473-53A
 03-473-53B
 03-473-53C
 03-473-53D
 03-473-53E
 03-473-53F

TOOTH, IMPACTED THIRD MOLAR
 MAXIMUM HOT SPOT 21.1 PCI RA-226/MG
 AVERAGE DIFFUSE LEVEL 0.1 PCI RA-226/MG
 HOT SPOT TO DIFFUSE RATIO 211
 DIFFUSE TO UNIFORM LABEL 0.5

RER 03-473-54A
 03-473-53B
 03-473-53C
 03-473-53D
 03-473-53E

410 -516 ARTERIOSCLEROTIC HEART DISEASE
 430 -516.7 MYOCARDIAL INFARCTION
 722 -615 CALCULUS IN THE PELVIS OF THE KIDNEY

03-473-67
 03-473-67A
 03-473-67B

DATA REVISED 02-07-68

03-473-99

PATIENT 03-474	BORN 03-30-09	03-474-01
		03-474-02
FEMALE		03-474-03
		03-474-05
SOURCE OF CASE	SEARCH BY CEM	03-474-10
EXPOSURE	DIAL PAINTER 01	03-474-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APPROX. 6 MONTHS, NOV. 1925		03-474-13
TO APRIL 1926. PAINTED DIALS AND POINTED BRUSH IN MOUTH. NEVER		03-474-13A
PAINTED ANY PART OF BODY. LUMINOUS SPOTS GLOWED ON CLOTHES		03-474-13B
AT NIGHT.		03-474-13C
ASSUMED WORK PERIOD 11-01-1925 TO 04-01-1926		03-474-13*
16.58 YEARS OF AGE WHEN FIRST EMPLOYED.		03-474-13Z
FAMILY HISTORY		03-474-15
MARRIED	PARA 5 GRAVIDA 5	03-474-15A
CHILDREN		
MALE 1934	L W	03-474-16
FEMALE 1935	L W	03-474-16A
MALE 1936	L W	03-474-16B
FEMALE 1941	L W	03-474-16C
FEMALE 1944	L W	03-474-16D
MEDICAL HISTORY		03-474-20
NO SURGERY OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--CHRONIC		03-474-20A
SINUS HEADACHES AND OCCASIONAL MILD BACKACHES, OTHERWISE NEGATIVE.		03-474-20B
DENTAL HISTORY--SEVERAL TEETH EXTRACTED. (10-22-58)		03-474-20C
GAMMA-RAY MEASUREMENTS		03-474-25
10-22-58 RAB,RAC 0.006 UCI HGS 1 TILTING CHAIR CEM		03-474-25A
COMPUTED TOTAL-BODY RADIUM		03-474-27
10-22-58 0.006 UCI 0.019 UCI TOTAL 0.31		03-474-27A
X-RAY EXAMINATION.		03-474-30
COMPLETE SKELETAL SURVEY		03-474-30A
10-22-58 ANL X-RAY NO. R-69 LOC. ANL		03-474-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-474-30C
PPF NONE, EXCEPT FOR SOME WIDENING OF THE PULP CAVITY OF TEETH.		03-474-30D
CLINICAL LABORATORY FINDINGS		03-474-40
10-22-58 HG 11.6 HTC RBC 3.74		03-474-40A
WBC 8200 DIFF. P 70 ST L 28 M 1 E 1 B		03-474-40B
320 -100 SINUSITIS		03-474-67
DATA REVISED 08-02-67		03-474-99

PATIENT 03-475	BORN 05-07-03	03-475-01
DECEASED		03-475-02
		03-475-02A
		03-475-02B
		03-475-03
		03-475-05
FEMALE		
DECEASED 12-28-62		03-475-06
DEATH CERT. NO.	AUTOPSY YES	03-475-07
INTERMENT	OAKWOOD MEMORIAL PARK, OTTAWA, ILL.	03-475-08
CAUSES OF DEATH	GLOMERULONEPHRITIS, UREMIA,	03-475-09
	FRACTURE OF LEFT FEMUR FROM FALL	03-475-09A
SOURCE OF CASE	SEARCH BY CEM	03-475-10
EXPOSURE	DIAL PAINTER 01	03-475-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., APPROX. 15 MONTHS NOV. 1921	03-475-13
	TO FEB. 1923. PAINTED WATCH AND CLOCK DIALS. POINTED BRUSH IN	03-475-13A
	MOUTH FREQUENTLY. NEVER PAINTED ANY PART OF HER BODY.	03-475-13B
	ASSUMED WORK PERIOD 11-01-1922 TO 02-01-1924	03-475-13*
	19.48 YEARS OF AGE WHEN FIRST EMPLOYED.	03-475-13Z
FAMILY HISTORY		03-475-15
MARRIED	PARA 1 GRAVIDA 3	03-475-15A
CHILDREN	MALE 1923 L W	03-475-16
MEDICAL HISTORY		03-475-20
	APPENDECTOMY AGE 16, TONSILLECTOMY AGE 17, SCARLET FEVER AGE 28,	03-475-20A
	CHOLECYSTECTOMY AGE 45. CHRONIC BACKACHE SINCE PREGNANCY 35 YEARS	03-475-20B
	AGO. CORONARY OCCLUSION JANUARY 1957, HISTORY OF KIDNEY INFECTION.	03-475-20C
	ARTHRITIC, LEGS AND HANDS SWOLLEN, STIFF. EDENTULOUS. (10-22-58)	03-475-20D
GAMMA-RAY MEASUREMENTS		03-475-25
	10-22-58 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM	03-475-25A
COMPUTED TOTAL-BODY RADIUM		03-475-27
	10-22-58 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31	03-475-27A
X-RAY EXAMINATION		03-475-30
COMPLETE SKELETAL SURVEY		03-475-30A
10-22-58 ANL X-RAY NO. R-68 LOC. ANL		03-475-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-475-30C
PPF MODERATE HYPERTROPHIC OSTEOARTHROPATHY OF THORACIC AND		03-475-30D
LUMBAR SPINE. PARTIAL DESTRUCTION OF BODY OF L2. MARKED OSTEO-		03-475-30E
POROSIS OF SPINE AND BONES OF FEET NOTED. OUTWARD BOWING OF		03-475-30F
BOTH FEMURS. MAY IN PART BE OWING TO SEVERE JUVENILE RICKETS.		03-475-30G

CLINICAL LABORATORY FINDINGS

10-22-58 HG 11.4 HTC RBC 4.27
WBC 7500 DIFF. P 53 ST L 35 M 10 E B 2

03-475-40
03-475-40A
03-475-40B

010 -102 SCARLET FEVER
430 -516.7 MYOCARDIAL INFARCTION
634 -12 TONSILLECTOMY
661 -12 APPENDECTOMY
687 -12 CHOLECYSTECTOMY

03-475-67
03-475-67A
03-475-67B
03-475-67C
03-475-67D

DATA REVISED 02-07-68

03-475-99

PATIENT 03-476	BORN 04-23-95	03-476-01
		03-476-02
		03-476-03
		03-476-04
		03-476-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-476-10
LITERATURE CITATION		03-476-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-476-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-476-11B
EXPOSURE	DIAL PAINTER 01	03-476-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 6 WKS., OCT-NOV 1927. (DATE		03-476-13
DOUBTFUL SINCE PATIENT STATED SHE POINTED BRUSH IN MOUTH, OTHER		03-476-13A
EVIDENCE INDICATES THIS PRACTICE DISCONTINUED BY 1927).		03-476-13B
ASSUMED WORK PERIOD 10-01-1927 TO 11-15-1927		03-476-13*
32.43 YEARS OF AGE WHEN FIRST EMPLOYED.		03-476-13Z
FAMILY HISTORY		03-476-15
MARRIED	PARA 2 GRAVIDA 2	03-476-15A
CHILDREN	MALE 1918 L W	03-476-16
	MALE 1920 L W	03-476-16A
MEDICAL HISTORY		03-476-20
CARCINOMA OF UTERUS TREATED WITH RADIATION ABOUT 1954, NO		03-476-20A
SURGERY. BACK PAIN INTERMITTENTLY FOR 25 YEARS WHICH PHYSICIAN		03-476-20B
STATED IS ATTRIBUTABLE TO ARTHRITIS. (10-28-58)		03-476-20C
GAMMA-RAY MEASUREMENTS		03-476-25
10-28-58 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-476-25A
COMPUTED TOTAL-BODY RADIUM		03-476-27
10-28-58 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-476-27A
X-RAY EXAMINATION		03-476-30
COMPLETE SKELETAL SURVEY		03-476-30A
10-28-58 ANL X-RAY NO. R-72 LOC. ANL		03-476-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0.		03-476-30C
PPF NONE.		03-476-30D
CLINICAL LABORATORY FINDINGS		03-476-40
10-28-58 HG 12.7 HTC RBC 4.21		03-476-40A
WBC 9800 DIFF. P 84 ST L 12 M 3 E 1 B		03-476-40B
MALIGNANT TUMOR CARCINOMA OF UTERUS		03-476-60
782 -8091 ADENOCARCINOMA OF THE UTERUS		03-476-67
DATA REVISED 11-07-67		03-476-99

PATIENT	03-477					03-477-01
						03-477-02
						03-477-03
	FEMALE					03-477-05
SOURCE OF CASE		SEARCH BY CEM				03-477-10
EXPOSURE		DIAL PAINTER	01			03-477-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS, JUNE THROUGH AUGUST, 1925.					03-477-13
	PAINTED CLOCK DIALS. POINTED BRUSH IN MOUTH.					03-477-13A
	ASSUMED WORK PERIOD 06-01-1925 TO 09-01-1925					03-477-13*
	25.49 YEARS OF AGE WHEN FIRST EMPLOYED.					03-477-13Z
FAMILY HISTORY		NOT OBTAINED				03-477-15
MEDICAL HISTORY		NOT OBTAINED				03-477-20
GAMMA-RAY MEASUREMENTS						03-477-25
09-29-59	RAB,RAC	0.003 UCI	HGS 1 TILTING CHAIR	CEM		03-477-25A
COMPUTED TOTAL-BODY RADIUM						03-477-27
09-29-59	0.003 UCI		0.011 UCI TOTAL	0.31		03-477-27A
X-RAY EXAMINATION						03-477-30
	PARTIAL SKELETAL SURVEY					03-477-30A
09-29-59	ANL	X-RAY NO. R-172	LOC. ANL			03-477-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.					03-477-30C
	PPF NONE					03-477-30D
CLINICAL LABORATORY FINDINGS						03-477-40
09-29-59	HG 8.8	HTC	RBC 4.04			03-477-40A
	WBC 10,000 DIFF. P 70	ST	L 27 M 3 E B.			03-477-40B
DATA REVISED	C5-06-68					03-477-99

PATIENT	C3-478	BORN	08-28-07	03-478-01
				03-478-02
				03-478-03
				03-478-05
	FEMALE			
SOURCE OF CASE		SEARCH BY	CEM	03-478-10
EXPOSURE		DIAL PAINTER	01	03-478-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 1924, PERIOD OF 6 TO 8 WEEKS. PAINTED DIALS OF ALARM CLOCKS. TIPPED BRUSH WITH TONGUE, BUT DID NOT PAINT ANY PART OF HER BODY. ASSUMED WORK PERIOD 08-01-1924 TO 10-01-1924 16.92 YEARS OF AGE WHEN FIRST EMPLOYED.			03-478-13
				03-478-13A
				03-478-13B
				03-478-13*
				03-478-13Z
FAMILY HISTORY				03-478-15
MARRIED		PARA 5	GRAVIDA 5	03-478-15A
CHILDREN	FEMALE	L W		03-478-16
	FEMALE	L W		03-478-16A
	FEMALE	L W		03-478-16B
	FEMALE	DEC. AT 2 YEARS		03-478-16C
	MALE	L W		03-478-16D
MEDICAL HISTORY				03-478-20
	GOOD HEALTH EXCEPT FOR TREATMENT FOR HYPERTENSION AND MORE RECENTLY ANEMIA. NO HISTORY OF ARTHRITIS. (10-29-58)			03-478-20A
				03-478-20B
GAMMA-RAY MEASUREMENTS				03-478-25
	10-29-58	RAB,RAC	LESS THAN 0.002 UCI HGS 1 TILTING CHAIR CEM	03-478-25A
COMPUTED TOTAL-BODY RADIUM				03-478-27
	10-29-58	LESS THAN 0.002 UCI	LESS THAN 0.005 UCI TOTAL 0.31	03-478-27A
X-RAY EXAMINATION				03-478-30
	COMPLETE SKELETAL SURVEY			03-478-30A
	10-29-58	ANL	X-RAY NO. R-73 LOC. ANL	03-478-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0			03-478-30C
	PPF NONE.			03-478-30D
CLINICAL LABORATORY FINDINGS				03-478-40
	10-29-58	HG 12.5	HTC RBC 4.21	03-478-40A
	WBC 5100	DIFF. P 66	ST 1 L 27 M 5 E 1 B	03-478-40B
47X -X30	ESSENTIAL HYPERTENSION			03-478-67
DATA REVISED	05-09-68			03-478-99

PATIENT	03-479	BORN	09-20-08	03-479-01
				03-479-02
				03-479-03
				03-479-05
FEMALE				
SOURCE OF CASE	SEARCH BY CEM			03-479-10
EXPOSURE	DIAL PAINTER 01			03-479-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 6 MONTHS, JUNE TO DEC. 1924.			03-479-13
	'PAINTED DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF OWN PERSON.			03-479-13A
				03-479-13B
	ASSUMED WORK PERIOD 06-01-1924 TO 12-01-1924			03-479-13*
	15.69 YEARS OF AGE WHEN FIRST EMPLOYED.			03-479-13Z
FAMILY HISTORY				03-479-15
MARRIED	PARA 1	GRAVIDA 1		03-479-15A
CHILDREN	MALE	1931	L W	03-479-16
MEDICAL HISTORY				03-479-20
	APPENDECTOMY 1945. ARTHRITIS IN LEFT FOOT FOR NUMBER OF YEARS,			03-479-20A
	FOOT SURGERY SCHEDULED FOR AUTUMN 1958. CHRONIC LOW BLOOD COUNT			03-479-20B
	PAST 20 YEARS, TREATED BY LIVER AND IRON THERAPY STARTING 1938.			03-479-20C
	FELL DOWN FLIGHT OF STAIRS, INJURED BACK 1942. INQUIRY BY SYSTEMS			03-479-20D
	OTHERWISE NEGATIVE. TEETH--MANY EXTRACTED, PATIENT WEARS PARTIAL			03-479-20E
	DENTURE. (10-31-58)			03-479-20F
GAMMA-RAY MEASUREMENTS				03-479-25
10-31-58	RAB,RAC	0.022 UCI	HGS 1 TILTING CHAIR CEM	03-479-25A
COMPUTED TOTAL-BODY RADIUM				03-479-27
10-31-58	0.022 UCI	0.072 UCI TOTAL	0.31	03-479-27A
X-RAY EXAMINATION				03-479-30
	COMPLETE SKELETAL SURVEY			03-479-30A
10-31-58	ANL	X-RAY NO. R-75	LOC. ANL	03-479-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0			03-479-30C
	PPF SLIGHTLY INCREASED SCLEROSIS AT TIP OF RIGHT MASTOID.			03-479-30D
CLINICAL LABORATORY FINDINGS				03-479-40
10-31-58	HG 12.3	HTC	RBC 3.96	03-479-40A
WBC 6700	DIFF. P 56	ST	L 38 M 5 E 1 B	03-479-40B
RADIOCHEMICAL ANALYSIS				03-479-51
	TOE		HFL	03-479-51A
07-59	1.44 G ASH	25 UUG/G ASH RA-226	0.042 UUCI/G ASH TH-228	03-479-51A
661 -12	APPENDECTOMY			03-479-67
DATA REVISED	08-09-67			03-479-99

PATIENT 03-480	BORN 05-26-09	03-480-01
		03-480-02
		03-480-02
		03-480-03
FEMALE		03-480-05
SOURCE OF CASE	SEARCH BY CEM	03-480-10
EXPOSURE	DIAL PAINTER 01	03-480-12
SOURCE RADIUM DIAL CO., 2 TO 3 MONTHS SPRING AND SUMMER 1924.		03-480-13
PAINTED DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART		03-480-13A
OF OWN BODY.		03-480-13B
ASSUMED WORK PERIOD 04-01-1924 TO 06-15-1924		03-480-13*
14.84 YEARS OF AGE WHEN FIRST EMPLOYED.		03-480-13Z
FAMILY HISTORY		03-480-15
MARRIED	PARA 3 GRAVIDA 3	03-480-15A
CHILDREN	MALE 1928 L W	03-480-16
	FEMALE 1931 L W	03-480-16A
	FEMALE 1939 L W	03-480-16B
MEDICAL HISTORY		03-480-20
SURGERY--TONSILLECTOMY WHEN CHILD, APPENDECTOMY 1926,		03-480-20A
HYSTERECTOMY FOR UTERINE FIBROIDS 1953. SEVERE LACERATION OF		03-480-20B
LEFT KNEE 09-20-55. INQUIRY BY SYSTEMS--OCCASIONAL MIGRAINE		03-480-20C
HEADACHE, NERVOUS BOWEL, OCCASIONAL SWOLLEN ANKLES. TEETH--		03-480-20D
12 EXTRACTIIONS. (10-31-58)		03-480-20E
GAMMA-RAY MEASUREMENTS		03-480-25
10-31-58 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-480-25A
COMPUTED TOTAL-BODY RADIUM		03-480-27
10-31-58 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-480-27A
X-RAY EXAMINATION		03-480-30
COMPLETE SKELETAL SURVEY		03-480-30A
10-31-58 ANL X-RAY NO. R-74 LOC. ANL		03-480-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-480-30C
PPF NONE.		03-480-30D
CLINICAL LABORATORY FINDINGS		03-480-40
10-31-58 HG 14.8 HTC RBC 4.58		03-480-40A
WBC 9300 CIFF. P 73 ST L 24 M 1 E 2 B		03-480-40B
634 -12 TONSILLECTOMY		03-480-67
661 -12 APPENDECTOMY		03-480-67A
782 -10 HYSTERECTOMY		03-480-67B
930 -X41 MIGRAINE		03-480-67C
DATA REVISED 08-03-67		03-480-99

PATIENT 03-481	BORN 10-12-22	03-481-01
		03-481-02
		03-481-03
FEMALE		03-481-05
SOURCE OF CASE	SEARCH BY CEM	03-481-10
EXPOSURE	DIAL PAINTER 01	03-481-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., DEC. 1941 TO MARCH 1951. PAINTED AIRPLANE INSTRUMENTS DURING THE WAR AND CLOCK HANDS SUBSEQUENTLY. NEVER POINTED BRUSH IN HER MOUTH.		03-481-13
		03-481-13A
		03-481-13B
ASSUMED WORK PERIOD 12-01-1941 TO 03-01-1951		03-481-13*
19.13 YEARS OF AGE WHEN FIRST EMPLOYED.		03-481-13Z
FAMILY HISTORY		03-481-15
MARRIED 1948	PARA 3 GRAVIDA 4 (1 MISCARRIAGE)	03-481-15A
CHILDREN	MALE 1951 L W	03-481-16
	MALE 1952 L W	03-481-16A
	FEMALE 1956 L W	03-481-16B
MEDICAL HISTORY		03-481-20
MINOR GYNECOLOGICAL SURGERY 1957, NO OTHER SURGERY. NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--SEVERAL TEETH EXTRACTED. (11-05-58)		03-481-20A
		03-481-20B
		03-481-20C
GAMMA-RAY MEASUREMENTS		03-481-25
11-05-58 RAB,RAC C.006 UCI HGS 1 TILTING CHAIR CEM		03-481-25A
COMPUTED TOTAL-BODY RADIUM		03-481-27
11-05-58 0.006 UCI 0.020 UCI TOTAL 0.31		03-481-27A
X-RAY EXAMINATION		03-481-30
DENTAL FILMS		03-481-30A
07-20-57 DR. DAUGHERTY		03-481-30B
DENTAL FILMS OF CENTRAL INCISORS AND PREMOLARS SHOW NO CHANGES TYPICAL OF RADIUM IN THE TEETH.		03-481-30C
		03-481-30D
COMPLETE SKELETAL SURVEY		03-481-31A
11-05-58 ANL X-RAY NO. R-78 LOC. ANL		03-481-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-481-31C
PPF NONE.		03-481-31D
CLINICAL LABORATORY FINDINGS		03-481-40
11-05-58 HG 13.6 HTC RBC 3.84		03-481-40A
WBC 5700 DIFF. P 51 ST L 41 M 5 E 3 B		03-481-40B
DATA REVISED 08-10-67		03-481-99

PATIENT 03-482	BORN 07-22-27	03-482-01
		03-482-02
		03-482-02
		03-482-03
		03-482-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-482-10
EXPOSURE	DIAL PAINTER 01	03-482-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., JAN. 1944		03-482-13
TO JULY 1946, 2-1/2 YEARS. PAINTED CLOCK DIALS 1 YEAR,		03-482-13A
INSPECTOR 1-1/2 YEARS. NEVER POINTED BRUSH IN MOUTH.		03-482-13B
ASSUMED WORK PERIOD 01-01-1944 TO 07-01-1946		03-482-13*
16.44 YEARS OF AGE WHEN FIRST EMPLOYED.		03-482-13Z
FAMILY HISTORY		03-482-15
MARRIED 1947	PARA 2 GRAVIDA 2	03-482-15A
CHILDREN	MALE 1950 L W	03-482-16
	FEMALE 1953 L W	03-482-16A
MEDICAL HISTORY		03-482-20
SURGERY--APPENDECTOMY 1953. TREATED FOR GYNECLOGICAL PROBLEMS		03-482-20A
SEVERAL YEARS AGO. INQUIRY BY SYSTEMS--CHRONIC HEADACHES MANY		03-482-20B
YEARS, HIGH AND MIDDLE BACKACHES. TEETH--SEVERAL EXTRACTIONS.		03-482-20C
(11-05-58)		03-482-20D
GAMMA-RAY MEASUREMENTS		03-482-25
11-05-58 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-482-25A
COMPUTED TOTAL-BODY RADIUM		03-482-27
11-05-58 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-482-27A
X-RAY EXAMINATION		03-482-30
COMPLETE SKELETAL SURVEY		03-482-30A
11-05-58 ANL X-RAY NO. R-79 LOC. ANL		03-482-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-482-30C
PPF MILD KYPHOSIS WITH MILD SECONDARY HYPERTROPHIC OSTEO-		03-482-30D
ARTHRITIC LIPPING OF BODIES OF THORACIC SPINE.		03-482-30E
CLINICAL LABORATORY FINDINGS		03-482-40
11-05-58 HG 13.2 HTC RBC 3.96		03-482-40A
WBC 4300 DIFF. P 60 ST L 38 M 2 E B		03-482-40B
661 -12 APPENDECTOMY		03-482-67

PATIENT 03-483	BORN 09-25-01	03-483-01
		03-483-02
FEMALE		03-483-04
		03-483-05
SOURCE OF CASE	SEARCH BY CEM	03-483-10
EXPOSURE	DIAL PAINTER 01	03-483-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., FEB. 1922 TO JULY 1925.		03-483-13
MAY HAVE INCLUDED TIME AT RADIUM DIAL CO., PERU, ILL. PAINTED		03-483-13A
VARIETY OF DIALS FOR FIRST 6 MONTHS, SUBSEQUENT 3 YEARS WEIGHED		03-483-13B
LUMINOUS COMPOUNDS. NEVER POINTED BRUSH IN MOUTH.		03-483-13C
ASSUMED WORK PERIOD 02-01-1922 TO 07-01-1925		03-483-13*
20.35 YEARS OF AGE WHEN FIRST EMPLOYED.		03-483-13Z
FAMILY HISTORY		03-483-15
MARRIED 1927	PARA 0 GRAVIDA 0	03-483-15A
DIVORCED 1945		03-483-15B
MEDICAL HISTORY		03-483-20
APPENDECTOMY 1932, VENOUS LIGATION 1947, SUBMUCOUS RESECTION		03-483-20A
AND TONSILLECTOMY 1948, HYSTERECTOMY 1958. PATIENT STATED SHE HAS		03-483-20B
HAD FLU EVERY YEAR SINCE 1918. INQUIRY BY SYSTEMS OTHERWISE		03-483-20C
NEGATIVE. TEETH IN POOR CONDITION SINCE CHILDHOOD, ALL EXTRACTED		03-483-20D
EXCEPT FOR LOWER INCISORS AND CANINES. (11-13-58)		03-483-20E
GAMMA-RAY MEASUREMENTS		03-483-25
08-27-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-483-25A
BREATH MEASUREMENTS		03-483-26
08-27-59 EM-222 C.002 UCI RADON BREATH HELMET HFL		03-483-26A
COMPUTED TOTAL-BODY RADIUM		03-483-27
08-27-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-483-27A
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-483-28
08-27-59 0.002 UCI 0.003 UCI TOTAL 0.69		03-483-28A
X-RAY EXAMINATION		03-483-30
PARTIAL SKELETAL SURVEY		03-483-30A
11-13-58 ANL X-RAY NO. R-81 LOC. ANL		03-483-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2		03-483-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN SKULL. SLIGHT COARSEN-		03-483-30D
ING OF TRABECULATION IN RIGHT AND LEFT TIBIA.		03-483-30E
CLINICAL LABORATORY FINDINGS		03-483-40
11-13-58 HG 14.4 HTC RBC 4.81		03-483-40A
WBC 9100 DIFF. P 67 ST L 28 M 4 E 1 B		03-483-40B
480 -74 LIGATION OF VEINS		03-483-67
634 -12 TONSILLECTOMY		03-483-67A
661 -12 APPENDECTOMY		03-483-67B
782 -10 HYSTERECTOMY		03-483-67C
DATA REVISED 05-09-68		03-483-99

PATIENT 03-484	BORN 07-16-88	03-484-01
DECEASED		03-484-02
		03-484-02A
		03-484-03
FEMALE		03-484-05
OTHER PERTINENT NOS.	AMBH	03-484-05A
DECEASED 01-22-66		03-484-06
DEATH CERT.NO.	AUTOPSY NONE	03-484-07
INTERMENT	PERU CITY CEMETERY, PERU TWP., ILL.	03-484-08
CAUSES OF DEATH	CORONARY OCCLUSION	03-484-09
SOURCE OF CASE	SEARCH BY CEM	03-484-10
LITERATURE CITATION		03-484-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-484-11A
HASTERLIK AND FINKEL, MED.CLIN.N.AMER. 49,285 (JAN. 1965).		03-484-11B
EXPOSURE	DIAL PAINTER 01	03-484-12
SOURCE RADIUM DIAL CO., CHICAGO, ILL., AND PERU, ILL., 1919 TO		03-484-13
1921 (ABOUT 4 OR 5 MONTHS 1921), ABOUT 3 YEARS TOTAL. PAINTED		03-484-13A
DIALS AND CLOCKS. NEVER POINTED BRUSH IN MOUTH.		03-484-13B
ASSUMED WORK PERIOD 07-01-1919 TO 07-01-1922		03-484-13*
30.95 YEARS OF AGE WHEN FIRST EMPLOYED.		03-484-13Z
FAMILY HISTORY		03-484-15
MARRIED 1922	PARA 0 GRAVIDA C	03-484-15A
HUSBAND	L W	03-484-15B
MEDICAL HISTORY		03-484-20
NO SURGERY NOR SERIOUS ILLNESSES. NEVER HAD NEED TO SEE PHYSICIAN.		03-484-20A
INQUIRY BY SYSTEMS NEGATIVE. ALL TEETH EXTRACTED AFTER 1922, HOW-		03-484-20B
EVER, TROUBLE ANTEDATED WORK WITH RADIUM. (11-13-58)		03-484-20C
INTERVAL HISTORY REVEALS DUODENAL ULCER FOUND 1959, RECENT PAIN		03-484-21A
IN LEFT HIP SINCE ABOUT 1959. (12-13-62)		03-484-21B
GAMMA-RAY MEASUREMENTS		03-484-25
11-13-58 RAB,RAC C.480 UCI HGS 1 TILTING CHAIR CEM		03-484-25A
12-13-62 RAB,RAC C.449 UCI HGS 1 TILTING CHAIR CEM		03-484-25B
12-13-62 RAB,RAC C.503 UCI HGS 1 7-CRYST-PCS CEM		03-484-25C
COMPUTED TOTAL-BODY RADIUM		03-484-27
11-13-58 0.480 UCI 1.550 UCI TOTAL 0.31		03-484-27A
12-13-62 0.449 UCI 1.440 UCI TOTAL 0.31		03-484-27B
12-13-62 0.503 UCI 1.622 UCI TOTAL 0.31		03-484-27C

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

11-13-58 ANL X-RAY NO. R-80 LOC. ANL
 MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18
 PPF AREA OF BONE RESORPTION IN SKULL, MANDIBLE, RIGHT AND LEFT
 HUMERUS, LEFT RADIUS AND ULNA, RIGHT AND LEFT FEMUR, AND LEFT
 TIBIA. AREAS OF BONE SCLEROSIS IN HEAD OF LEFT HUMERUS AND IN
 DISTAL LEFT FEMUR. COARSENING OF TRABECULAR PATTERN THROUGHOUT
 PELVIS AND PROXIMAL FEMURS, RIGHT AND LEFT SCAPULA, RIGHT AND
 LEFT HUMERUS, RIGHT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND
 FIBULA.

03-484-30
 03-484-30A
 03-484-30B
 03-484-30C
 03-484-30D
 03-484-30E
 03-484-30F
 03-484-30G
 03-484-30H
 03-484-30I
 03-484-30J

COMPLETE SKELETAL SURVEY

12-13-62 ANL X-RAY NO. R-80B LOC. ANL
 MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 22
 PPF SLIGHT PROGRESSION IN NUMBER AND SEVERITY OF LESIONS SINCE
 LAST EXAMINATION 5 YEARS PREVIOUSLY.

03-484-31A
 03-484-31B
 03-484-31C
 03-484-31D
 03-484-31E

SPECIAL VIEWS--SINUSES, MASTOIDS, AND LAMINAGRAMS

10-01-64 U OF CHICAGO CLINICS UNIT NO. LCC. U CF C
 NORMAL PARANASAL AIR SINUSES. INDISTINCT MASTOID CELLULES WITH-
 OUT SPECIFIC AREA OF DESTRUCTION.

03-484-32A
 03-484-32B
 03-484-32C
 03-484-32D

CLINICAL LABORATORY FINDINGS

11-13-58 HG 12.9 HTC RBC 4.07
 WBC 7000 DIFF. P 63 ST L 35 M 1 E 1 B

03-484-40
 03-484-40A
 03-484-40B

12-13-62 HG 13.9 HTC 42 RBC 4.55
 WBC 9200 DIFF. P 62 ST L 29 M 7 E 1 B 1

03-484-41A
 03-484-41B

430 -516.7 MYOCARDIAL INFARCTION
 651 -951 DUODENAL ULCER

03-484-67
 03-484-67A

DATA REVISED 11-14-68

03-484-99

PATIENT 03-485	BORN 09-08-09	03-485-01
		03-485-02
		03-485-03
FEMALE		03-485-05
SOURCE OF CASE	SEARCH BY CEM	03-485-10
EXPOSURE	DIAL PAINTER 01	03-485-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1929 TO 1936. PAINTED DIALS		03-485-13
MOST OF TIME, ALSO PAINTED PULL CHAINS. NEVER POINTED BRUSH IN		03-485-13A
HER MOUTH OR PAINTED ANY PART OF HER BODY.		03-485-13B
ASSUMED WORK PERIOD 07-01-1929 TO 07-01-1936		03-485-13*
19.80 YEARS OF AGE WHEN FIRST EMPLOYED.		03-485-13Z
FAMILY HISTORY		03-485-15
MARRIED 1936	PARA 0 GRAVIDA 0	03-485-15A
MEDICAL HISTORY		03-485-20
GALL BLADDER SURGERY, APPENDECTOMY 1944. BULLET SHELL EXTRACTED		03-485-20A
FROM RIGHT THIGH IN 1958 AFTER HAVING BEEN PRESENT FOR 3 YEARS.		03-485-20B
INQUIRY BY SYSTEMS NEGATIVE EXCEPT STATES SHE IS FULL OF ACHES		03-485-20C
AND PAINS. DENTAL HISTORY--16 TEETH REMAINING BUT NO DENTURES.		03-485-20D
(11-19-58)		03-485-20E
GAMMA-RAY MEASUREMENTS		03-485-25
11-19-58 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-485-25A
COMPUTED TOTAL-BODY RADIUM		03-485-27
11-19-58 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TCTAL 0.31		03-485-27A
X-RAY EXAMINATION		03-485-30
PARTIAL SKELETAL SURVEY		03-485-30A
11-19-58 ANL X-RAY NO. R-83 LOC. ANL		03-485-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-485-30C
PPF NONE.		03-485-30D
CLINICAL LABORATORY FINDINGS		03-485-40
11-19-58 PG 14.0 HTC RBC 4.20		03-485-40A
WBC 10,900 DIFF. P 56 ST L 59 M 3 E 2 B		03-485-40B
SPECIMENS AVAILABLE		03-485-50
TEETH	LOC. ANL CEM	03-485-50A
661 -12 APPENDECTOMY		03-485-67
687 -12 CHOLECYSTECTOMY		03-485-67A
DATA REVISED 08-09-67		03-485-99

PATIENT 03-486	BORN 12-04-09	03-486-01
		03-486-02
FEMALE		03-486-03
		03-486-05
SOURCE OF CASE	SEARCH BY CEM	03-486-10
EXPOSURE	DIAL PAINTER 01	03-486-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APPROX. 1925 TO 1927 OR 1928, ABOUT 2 OR 3 YEARS, PATIENT CANNOT REMEMBER DATES. PAINTED DIALS AND POINTED BRUSH IN MOUTH BUT NEVER PAINTED ANY PART OF BODY. ASSUMED WORK PERIOD 07-01-1925 TO 07-01-1928 15.57 YEARS OF AGE WHEN FIRST EMPLOYED.		03-486-13
		03-486-13A
		03-486-13B
		03-486-13*
		03-486-13Z
FAMILY HISTORY		03-486-15
MARRIED 1931	PARA 2 GRAVIDA 2	03-486-15A
HUSBAND	1909 L W	03-486-15B
CHILDREN	MALE 1935 L W	03-486-16
	MALE 1939 L W	03-486-16A
MEDICAL HISTORY		03-486-20
THYROIDECTOMY 1950, APPENDECTOMY AND HYSTERECTOMY 1958. NO OTHER SERIOUS DISEASES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY-- SEVERAL TEETH HAVE FILLINGS, ONLY ONE EXTRACTED. (11-25-58)		03-486-20A
		03-486-20B
		03-486-20C
NO FRACTURES, SURGERY OR SERIOUS ILLNESS. INQUIRY BY SYSTEMS NEGATIVE. (11-07-66)		03-486-21A
		03-486-21B
GAMMA-RAY MEASUREMENTS		03-486-25
11-25-58 RAB,RAC	0.124 UCI HGS 1 TILTING CHAIR CEM	03-486-25A
11-07-66 RAB,RAC	0.083 UCI HGS 1 TILTING CHAIR CEM	03-486-25B
COMPUTED TOTAL-BODY RADIUM		03-486-27
11-25-58 0.124 UCI	0.400 UCI TOTAL 0.31	03-486-27A
11-07-66 0.083 UCI	0.267 UCI TOTAL 0.31	03-486-27B
X-RAY EXAMINATION		03-486-30
COMPLETE SKELETAL SURVEY		03-486-30A
11-25-58 ANL	X-RAY NO. R-86 LOC. ANL	03-486-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-486-30C
PPF MARKED THICKENING OF THE CALVARIUM, ESPECIALLY IN THE OCCIPITAL REGION, PROBABLY NOT RELATED TO RADIUM.		03-486-30D
		03-486-30E

COMPLETE SKELETAL SURVEY

11-07-66 ANL X-RAY NO. R-86B LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1
 PPF MARKED THICKENING OF CALVARIUM. POSSIBLE PAGET'S DISEASE.

03-486-31A
 03-486-31B
 03-486-31C
 03-486-31D

CLINICAL LABORATORY FINDINGS

11-25-58 HG 13.5 HTC RBC 4.57
 WBC 6500 DIFF. P 58 ST L 33 M 7 E 2 B

03-486-40
 03-486-40A
 03-486-40B

11-07-66 HG 12.8 HTC 40 RBC 4.33
 WBC 6100 DIFF. P 53 ST L 33 M 7 E 6 B 1

03-486-41A
 03-486-41B

661 -12 APPENDECTOMY
 782 -10 HYSTERECTOMY
 810 -10 THYROIDECTOMY

03-486-67
 03-486-67A
 03-486-67B

DATA REVISED 08-03-67

03-486-99

PATIENT	C3-487	BORN	11-26-07	03-487-01
	DECEASED			03-487-02
				03-487-02A
				03-487-03
	FEMALE			03-487-05
DECEASED	01-11-64			03-487-06
	DEATH CERT.NO.			03-487-07
CAUSES OF DEATH	BRONCHOPNEUMONIA,			03-487-09
	CHRONIC LYMPHOCYTIC LEUKEMIA			03-487-09A
SOURCE OF CASE	SEARCH BY CEM			03-487-10
LITERATURE CITATION				03-487-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-487-11A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-487-11B
EXPOSURE	DIAL PAINTER	01		03-487-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 1924 TO 1926, TOTAL 2-1/2 YRS.			03-487-13
	AGAIN FROM 1928 TO 1932, TOTAL 4 YRS.			03-487-13A
	LUMINOUS PROCESSES, INC., OTTAWA, 1934 TO 1937, TOTAL 3 YRS.			03-487-13B
	FIRST EMPLOYMENT--PAINTED DIALS, WEIGHED POWDER ON OPEN SCALE,			03-487-13C
	POINTED BRUSH IN MOUTH. SECOND AND THIRD EMPLOYMENT--PAINTED			03-487-13D
	DIALS, WEIGHED POWDER, AND PACKAGED ITEMS, PAINTED WITH GLASS			03-487-13E
	PENS, NEVER PAINTED ANY PART OF HER OWN BODY.			03-487-13F
	ASSUMED WORK PERIOD 07-01-1924 TO 07-01-1937			03-487-13*
	16.59 YEARS OF AGE WHEN FIRST EMPLOYED.			03-487-137
FAMILY HISTORY				03-487-15
MARRIED	1932	PARA 1	GRAVIDA 1	03-487-15A
CHILDREN	MALE	1938	L W	03-487-16
MEDICAL HISTORY				03-487-20
	SURGERY--APPENDECTOMY AND REMOVAL OF RIGHT OVARY 1936. FIBROUS			03-487-20A
	TUMOR OF UTERUS EXCISED 1940. DIAGNOSIS OF CHRONIC LYMPHOCYTIC			03-487-20B
	LEUKEMIA WAS MADE AT MAYO CLINIC, OCT. 1957. INQUIRY BY SYSTEMS--			03-487-20C
	ESSENTIALLY NEGATIVE EXCEPT FOR EPISODE OF SCIATIC RHEUMATISM,			03-487-20D
	AFTER FIRST OPERATION 1936, BUT NO DIFFICULTY SINCE 1938 WITH			03-487-20E
	THIS CONDITION. DENTAL HISTORY--WEARS PARTIAL PLATE. (12-09-58)			03-487-20F
GAMMA-RAY MEASUREMENTS				03-487-25
12-09-58	KAB,RAC	0.130 UCI	HGS 1 TILTING CHAIR	CEM
				03-487-25A
COMPUTED TOTAL-BODY RADIUM				03-487-27
12-09-58	0.130 UCI	0.367 UCI TOTAL	0.31	03-487-27A

X-RAY EXAMINATION	NOT DONE, DECLINED BY PATIENT	03-487-30
CLINICAL LABORATORY FINDINGS		03-487-40
12-09-58	HG 12.7 HTC RBC 4.23	03-487-40A
WBC 69,600 DIFF. P 7 ST L 93 M E B		03-487-40B
PLATELETS 97,900		03-487-40C
503 -820	CHRONIC LYMPHOCYTIC LEUKEMIA	03-487-67
661 -12	APPENDECTOMY	03-487-67A
782 -11	HYSTEROMYOMECTOMY	03-487-67B
782 -866A	MYCMA OF UTERUS (FIBROID)	03-487-67C
788 -1C	UNILATERAL OOPHORECTOMY	03-487-67D
BLOOD DYSCRASIAS	CHRONIC LYMPHATIC LEUKEMIA 1964	03-487-65
TOOTH MEASUREMENT		03-487-73
SAMPLE 7.01	TOOTH MOLAR	03-487-73A
TOTAL WT. 1.5636	CALC.GMS.CA. 0.4378	03-487-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA	RATIO-TOOTH/BODY	03-487-73C
204.4	466.9 1.272	03-487-73D
SAMPLE 7.02	TOOTH MOLAR FRAGMENTS	03-487-74A
TOTAL WT. 1.5139	CALC.GMS.CA. 0.4239	03-487-74B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA	RATIO-TOOTH/BODY	03-487-74C
70.86	167.2 0.455	03-487-74D
DATA REVISED 08-21-68		03-487-99

PATIENT 03-488	BORN 07-01-07	03-488-01
		03-488-02
		03-488-03
FEMALE		03-488-05
SOURCE OF CASE	SEARCH BY CEM	03-488-10
EXPOSURE	DIAL PAINTER 01	03-488-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 6 MONTHS BETWEEN SEPT. 1922		03-488-13
AND MARCH 1923. PAINTED DIALS AND PAINTED BRUSH IN MOUTH BUT		03-488-13A
NEVER PAINTED ANY PART OF HER BODY. REMEMBERED THAT HER TEETH,		03-488-13B
FACE, HAIR, AND FINGERNAILS WERE COVERED WITH RADIUM AND GLOWED		03-488-13C
AT NIGHT.		03-488-13D
ASSUMED WORK PERIOD 09-01-1922 TO 03-01-1923		03-488-13*
15.16 YEARS OF AGE WHEN FIRST EMPLOYED.		03-488-13Z
FAMILY HISTORY		03-488-15
MARRIED 1928	PARA 1 GRAVIDA 1	03-488-15A
HUSBAND	1907 L W	03-488-15B
CHILDREN	MALE 1932 L W	03-488-16
MEDICAL HISTORY		03-488-20
NO SURGERY, NO FRACTURES, AND NO SERIOUS ILLNESS. INQUIRY BY		03-488-20A
SYSTEMS ESSENTIALLY NEGATIVE, EXCEPT FOR OCCASIONAL BACKACHES,		03-488-20B
ATTRIBUTED BY PATIENT TO LIFTING 50-POUND PLATES AT PRESENT		03-488-20C
EMPLOYMENT. DENTAL HISTORY--FIVE TEETH EXTRACTED, PARTIAL BRIDGE.		03-488-20D
GAMMA-RAY MEASUREMENTS		03-488-25
12-10-58 RAB,RAC C.053 UCI HGS 1 TILTING CHAIR CEM		03-488-25A
COMPUTED TOTAL-BODY RADIUM		03-488-27
12-10-58 0.053 UCI 0.170 UCI TOTAL 0.31		03-488-27A
X-RAY EXAMINATION		03-488-30
DENTAL FILMS		03-488-30A
05-29-57 CR. GENTER		03-488-30B
CHANGES TYPICAL OF PRESENCE OF RADIUM IN TEETH.		03-488-30C
COMPLETE SKELETAL SURVEY		03-488-31A
12-10-58 ANL X-RAY NO. R-87 LOC. ANL		03-488-31B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2		03-488-31C
PPF MULTIPLE SMALL AREAS OF BONE RESORPTION IN SKULL.		03-488-31D
DENTAL FILMS		03-488-32A
10-26-59 CR. GENTER		03-488-32B
DESTRUCTIVE CHANGES IN DENTINE, TYPICAL OF RADIUM IN TEETH.		03-488-32C
CLINICAL LABORATORY FINDINGS		03-488-40
12-10-58 HGB 13.6 HTC RBC 4.13		03-488-40A
WBC 9400 DIFF. P 52 ST L 43 M 5 E B		03-488-40B
DATA REVISED 08-03-67		03-488-99

PATIENT	03-489	BCRN	C2-15-11	03-489-01
	DECEASED			03-489-02
				03-489-02A
				03-489-03
	FEMALE			03-489-05
DECEASED	03-26-64			03-489-06
DEATH CERT.NO.		AUTOPSY	NONE	03-489-07
INTERMENT	OTTAWA AVE. CEMETERY, OTTAWA, ILLINOIS			03-489-08
CAUSES OF DEATH	CARCINOMATOSIS, GENERALIZED			03-489-09
	CARCINOMA OF STOMACH			03-489-09A
SOURCE OF CASE	SEARCH BY CEM			03-489-10
LITERATURE CITATION				03-489-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-489-11A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-489-11B
EXPOSURE	DIAL PAINTER	01		03-489-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., AUTUMN 1926 TO LATE 1927,			03-489-13
	ABOUT 1 YEAR. PAINTED DIALS. POINTED BRUSH IN HER MOUTH, AND			03-489-13A
	REMARKED THAT HER CLOTHES GLOWED IN DARK.			03-489-13B
	ASSUMED WORK PERIOD 10-01-1926 TO 03-01-1928			03-489-13*
	15.62 YEARS OF AGE WHEN FIRST EMPLOYED.			03-489-13Z
FAMILY HISTORY				03-489-15
MARRIED	1930	PARA 2	GRAVIDA 2	03-489-15A
HUSBAND		1910	L W	03-489-15B
CHILDREN	FEMALE	1931	L W	03-489-16
	FEMALE	1943	L W	03-489-16A
MEDICAL HISTORY				03-489-20
	NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE.			03-489-20A
	DENTAL HISTORY--SEVERAL TEETH EXTRACTED. (12-10-58)			03-489-20B
GAMMA-RAY MEASUREMENTS				03-489-25
12-10-58	RAB,RAC	C.037 UCI	HGS 1 TILTING CHAIR CEM	03-489-25A
COMPUTED TOTAL-BODY RADIUM				03-489-27
12-10-58	0.037 UCI	0.120 UCI TOTAL	0.31	03-489-27A
X-RAY EXAMINATION				03-489-30
COMPLETE SKELETAL SURVEY				03-489-30A
12-10-58	ANL	X-RAY NO. R-88	LOC. ANL	03-489-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 0	03-489-30C
	PPF SOLITARY SMALL BONE CYST IN LATERAL EPICONDYLE OF RIGHT			03-489-30D
	FEMUR, PROBABLY UNRELATED TO RADIUM.			03-489-30E

CLINICAL LABORATORY FINDINGS

12-10-58 HG 13.0 HTC RBC 4.58
WBC 7400 DIFF. P 60 ST I L 32 M 6 E 1 B

03-489-40
03-489-40A
03-489-40B

640 -8191 CARCINOMA OF THE STOMACH

03-489-67

MALIGNANT TUMOR CARCINOMA OF STOMACH 1964

03-489-60

DATA REVISED 08-03-67

03-489-99

PATIENT 03-490	BCRN 08-05-04	03-490-01
MALE		03-490-02
		03-490-05
SOURCE OF CASE	SEARCH BY CEM	03-490-10
EXPOSURE	OTHER OCCUPATIONAL--SPRAYER, DRIVER 03	03-490-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., MARCH 25 TO AUG. 1928.		03-490-13
WORKED AT ODD JOBS ABOUT PLANT INCLUDING SPRAYING WITH WHITE		03-490-13A
LACQUER AND TRANSPORTING PRODUCTS TO FACTORY IN NEIGHBORING CITY.		03-490-13B
NEVER WORKED DIRECTLY WITH RADIUM COMPOUNDS.		03-490-13C
ASSUMED WORK PERIOD 03-01-1925 TO 08-01-1928		03-490-13*
20.56 YEARS OF AGE WHEN FIRST EMPLOYED.		03-490-13Z
FAMILY HISTORY		03-490-15
NEVER MARRIED		03-490-15A
MEDICAL HISTORY		03-490-20
NO SURGERY OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE		03-490-20A
EXCEPT FOR CHRONIC COUGH ATTRIBUTED TO CIGARETTES AND ELEVATED		03-490-20B
BLOOD PRESSURE PAST 5 YEARS. TEETH--2 EXTRACTED. (12-16-58)		03-490-20C
GAMMA-RAY MEASUREMENTS		03-490-25
12-16-58 RAB,RAC 0.009 UCI HGS 1 TILTING CHAIR CEM		03-490-25A
COMPUTED TOTAL-BODY RADIUM		03-490-27
12-16-58 0.009 UCI 0.029 UCI TOTAL 0.31		03-490-27A
X-RAY EXAMINATION		03-490-30
COMPLETE SKELETAL SURVEY		03-490-30A
12-16-58 ANL X-RAY NO. R-89 LOC. ANL		03-490-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3		03-490-30C
PPF COARSENING OF TRABECULAR PATTERN NOTED IN RIGHT AND LEFT		03-490-30D
RADIUS AND ULNA, AND RIGHT AND LEFT TIBIA AND FIBULA. SCATTERED		03-490-30E
AREAS OF BONE RESORPTION IN SKULL.		03-490-30F
CLINICAL LABORATORY FINDINGS		03-490-40
12-16-58 HGB 15.5 HTC RBC 5.02		03-490-40A
WBC 8800 DIFF. P 75 ST 1 L 20 M 4 E B		03-490-40B
DATA REVISED 08-03-67		03-490-99

PATIENT	03-491	BORN	11-28-08	03-491-01
				03-491-02
				03-491-03
	FEMALE			03-491-05
SOURCE OF CASE		SEARCH BY CEM		03-491-10
EXPOSURE		DIAL PAINTER	01	03-491-12
SOURCE	RADIUM DIAL CO., STREATOR, ILL., 2 WEEKS ABOUT 1924.			03-491-13
	PAINTED DIALS. POINTED BRUSH IN MOUTH.			03-491-13A
	ASSUMED WORK PERIOD 07-01-1924 TO 07-15-1924			03-491-13*
	15.58 YEARS OF AGE WHEN FIRST EMPLOYED.			03-491-13Z
FAMILY HISTORY				03-491-15
MARRIED	1926	PARA	1 GRAVIDA 1	03-491-15A
CHILDREN	FEMALE	1901	L W	03-491-16
MEDICAL HISTORY				03-491-20
	RHEUMATIC FEVER 1939. APPENDECTOMY 1953, BENIGN BREAST TUMOR			03-491-20A
	EXCISED 1957. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR MILD			03-491-20B
	ARTHRITIS IN ALL EXTREMITIES. TEETH--SEVERAL MOLARS EXTRACTED.			03-491-20C
	(01-07-59)			03-491-20D
GAMMA-RAY MEASUREMENTS				03-491-25
01-07-59	RAB,RAC	C.017 UCI	HGS 1 TILTING CHAIR CEM	03-491-25A
COMPUTED TOTAL-BODY RADIUM				03-491-27
01-07-59	0.017 UCI	0.056 UCI TOTAL	0.31	03-491-27A
X-RAY EXAMINATION				03-491-30
	PARTIAL SKELETAL SURVEY.			03-491-30A
01-07-59	ANL	X-RAY NO. R-91	LOC. ANL	03-491-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0			03-491-30C
	PPF NONE.			03-491-30D
CLINICAL LABORATORY FINDINGS				03-491-40
01-07-59	HG 13.0	HTC	RBC 4.46	03-491-40A
	WBC 10,300 DIFF. P 69	ST 4	L 24 M 3 E B	03-491-40B
010 -932	RHEUMATIC FEVER			03-491-67
190 -16	BICPSY OF BREAST (BENIGN LESION)			03-491-67A
661 -12	APPENDECTOMY			03-491-67B
TOOTH MEASUREMENT				03-491-73
SAMPLE 15.0C	TOOTH PREMOLAR			03-491-73A
TOTAL WT. 0.8000	CALC.GMS.CA. 0.224C			03-491-73B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-491-73C
11.0	40.70	23.4	181.7 3.244	03-491-73D

PATIENT 03-492	BORN 02-28-28	03-492-01
		03-492-02
		03-492-03
FEMALE		03-492-05
SOURCE OF CASE	SEARCH BY CEM	03-492-10
EXPOSURE	DIAL PAINTER 01	03-492-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., MARCH 1946 TO		03-492-13
JUNE 1952, APPROX. 6 YEARS. PAINTED DIALS WITH SCREENING		03-492-13A
PROCESS, DID NOT POINT BRUSH IN MOUTH, PAINTED FINGERNAILS AT		03-492-13B
TIMES. PROTECTIVE SMOCK WOULD SOMETIMES GLOW IN DARK. ROOM WAS		03-492-13C
VERY DUSTY. RADIUM POWDER DRIED AND WAS PART OF DUST AND PATIENT		03-492-13D
BELIEVED THAT SCREENING PROCESS WAS MORE DANGEROUS THAN BRUSH		03-492-13E
WORK. OCCASIONALLY ATE CANDY BARS WHILE WORKING.		03-492-13F
ASSUMED WORK PERIOD 03-01-1946 TO 06-01-1952		03-492-13*
18.00 YEARS OF AGE WHEN FIRST EMPLOYED.		03-492-13Z
FAMILY HISTORY		03-492-15
MARRIED 1951	PARA 2 GRAVIDA 3 (1 MISCARRIAGE)	03-492-15A
HUSBAND	LIVING, NOT WELL	03-492-15B
CHILDREN	MALE L W	03-492-16
	FEMALE L W	03-492-16A
MEDICAL HISTORY		03-492-20
NO SERIOUS ILLNESS OR SURGERY EXCEPT FOR MINOR GYNECOLOGICAL		03-492-20A
SURGERY. INQUIRY BY SYSTEMS NEGATIVE. TEETH ARE INTACT EXCEPT		03-492-20B
FOR ONE WISDOM TOOTH EXTRACTED. (01-07-59)		03-492-20C
GAMMA-RAY MEASUREMENTS		03-492-25
01-07-59 RAB,RAC C.002 UCI HGS 1 TILTING CHAIR CEM		03-492-25A
COMPUTED TOTAL-BODY RADIUM		03-492-27
01-07-59 0.002 UCI 0.005 UCI TOTAL 0.31		03-492-27A
X-RAY EXAMINATION		03-492-30
PARTIAL SKELETAL SURVEY		03-492-30A
01-07-59 ANL X-RAY NO. R-90 LOC. ANL		03-492-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-492-30C
PPF NONE		03-492-30D
CLINICAL LABORATORY FINDINGS		03-492-40
01-07-59 HG 14.2 HTC RBC 4.43		03-492-40A
WBC 12,600 DIFF. P 7C ST 3 L 23 M 2 E 1 B 1		03-492-40B

PATIENT 03-493	BORN 09-02-93	03-493-01
		03-493-02
FEMALE		03-493-03
		03-493-05
SOURCE OF CASE	SEARCH BY CEM	03-493-10
EXPOSURE	DIAL PAINTER 01	03-493-12
SOURCE RADIUM DIAL CO., CHICAGO, ILL., SUMMER 1920 TO MAY 1924.		03-493-13
ANOTHER PATIENT STATED THAT SHE WORKED WITH AT		03-493-13A
RADIUM DIAL CO., PERU, ILL. PAINTED DIALS WITH RADIUM ABOUT 75		03-493-13B
PERCENT OF TIME, REMAINDER DID OFFICE WORK. POINTED BRUSH IN		03-493-13C
MOUTH OCCASIONALLY, USUALLY POINTED BRUSH BETWEEN FINGERS.		03-493-13D
ALSO WORKED AT ELGIN WATCH CO., 1914, AS DIAL PAINTER BUT NO		03-493-13E
RADIUM WAS INVOLVED.		03-493-13F
ASSUMED WORK PERIOD 07-01-1920 TO 05-01-1924		03-493-13*
26.82 YEARS OF AGE WHEN FIRST EMPLOYED.		03-493-13Z
FAMILY HISTORY		03-493-15
MARRIED 1924	PARA 1 GRAVIDA 1	03-493-15A
HUSBAND	1899 L W	03-493-15B
CHILDREN	FEMALE 1925 L W	03-493-16
MEDICAL HISTORY		03-493-20
PATIENT HAD UTERINE POLYP REMOVED 1946. NO SERIOUS ILLNESSES.		03-493-20A
INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--PATIENT WEARS DOUBLE		03-493-20B
DENTURES. (01-20-59)		03-493-20C
GAMMA-RAY MEASUREMENTS		03-493-25
01-20-59 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-493-25A
COMPUTED TOTAL-BODY RADIUM		03-493-27
01-20-59 0.002 UCI 0.007 UCI TOTAL 0.31		03-493-27A
X-RAY EXAMINATION		03-493-30
PARTIAL SKELETAL SURVEY		03-493-30A
01-20-59 ANL X-RAY NO. R-92 LOC. ANL		03-493-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-493-30C
PPF SOLITARY AREA OF BONE RESORPTION OF UNEXPLAINED ETIOLOGY		03-493-30D
IN LEFT TEMPORAL BONE. MODERATE GENERALIZED OSTEOPOROSIS OF		03-493-30E
ENTIRE SKELETON.		03-493-30F
CLINICAL LABORATORY FINDINGS		03-493-40
01-20-59 HG 12.6 HTC RBC 4.17		03-493-40A
WBC 5600 DIFF. P 68 ST L 29 M 2 E 1 B		03-493-40B
785 -944 UTERINE POLYP		03-493-67
DATA REVISED 02-07-68		03-493-99

PATIENT: 03-494	BORN 08-08-02	03-494-01
		03-494-02
		03-494-03
FEMALE		03-494-05
SOURCE OF CASE	SEARCH BY CEM	03-494-10
EXPOSURE	DIAL PAINTER 01	03-494-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 1 YEAR FROM 1924 TO 1925.		03-494-13
RADIUM DIAL CO., OTTAWA, ILL., 2 YEARS FROM 1925 TO 1927, AND		03-494-13A
RETURNED FOR A PERIOD ESTIMATED AT 6 MONTHS TO 1 YEAR IN 1928.		03-494-13B
PAINTED DIALS, PUT BRUSH IN MOUTH A FEW TIMES BUT NOT EVERY DAY.		03-494-13C
ASSUMED WORK PERIOD 05-01-1925 TO 10-01-1928		03-494-13*
22.72 YEARS OF AGE WHEN FIRST EMPLOYED.		03-494-13Z
FAMILY HISTORY		03-494-15
MARRIED 1927	PARA 2 GRAVIDA 2	03-494-15A
CHILDREN	MALE 1932 L W	03-494-16
	MALE 1938 L W	03-494-16A
MEDICAL HISTORY		03-494-20
HISTORY OF LEFT MASTECTOMY 1939. NO OTHER SURGERY OR SERIOUS		03-494-20A
ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. TEETH ESSENTIALLY		03-494-20B
INTACT EXCEPT FOR 5 EXTRACTED. (01-27-59)		03-494-20C
GAMMA-RAY MEASUREMENTS		03-494-25
01-27-59 RAB,RAC 0.001 UCI HGS 1 TILTING CHAIR CEM		03-494-25A
COMPUTED TOTAL-BODY RADIUM		03-494-27
01-27-59 0.001 UCI 0.004 UCI TOTAL 0.31		03-494-27A
X-RAY EXAMINATION		03-494-30
PARTIAL SKELETAL SURVEY		03-494-30A
01-27-59 ANL X-RAY NO. R-93 LOC. ANL		03-494-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-494-30C
PPF NONE		03-494-30D
CLINICAL LABORATORY FINDINGS		03-494-40
01-27-59 HG 13.8 HTC RBC 4.84		03-494-40A
WBC 7000 DIFF. P 65 ST L 28 M 5 E 2 B		03-494-40B
190 -10 MASTECTOMY (LEFT)		03-494-67

PATIENT 03-495	BORN 04-27-10	03-495-01
		03-495-02
		03-495-03
FEMALE		03-495-05
SOURCE OF CASE	SEARCH BY CEM	03-495-10
EXPOSURE	DIAL PAINTER 01	03-495-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 6 TO 8 WEEKS 1923 OR 1924.		03-495-13
PAINTED LARGE CLOCK DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED OWN PERSON.		03-495-13A
		03-495-13B
ASSUMED WORK PERIOD 07-01-1923 TO 09-01-1923		03-495-13*
13.17 YEARS OF AGE WHEN FIRST EMPLOYED.		03-495-13Z
FAMILY HISTORY		03-495-15
MARRIED 1926	PARA 3 GRAVIDA 3	03-495-15A
MARRIED 1944		03-495-15B
CHILDREN	FEMALE 1928 L W	03-495-16
	MALE PREMATURE, DECEASED 3 DAYS	03-495-16A
	MALE 1930 L W	03-495-16B
MEDICAL HISTORY		03-495-20
NO SURGERY, NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE		03-495-20A
EXCEPT FOR PANCREATIC STONES. TEETH--13 EXTRACTIIONS WITH		03-495-20B
ADDITIONAL EXTRACTIIONS SCHEDULED. (01-27-59)		03-495-20C
GAMMA-RAY MEASUREMENTS		03-495-25
01-27-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-495-25A
COMPUTED TOTAL-BODY RADIUM		03-495-27
01-27-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-495-27A
X-RAY EXAMINATION		03-495-30
PARTIAL SKELETAL SURVEY		03-495-30A
01-27-59 ANL X-RAY NO. R-95 LOC. ANL		03-495-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-495-30C
PPF NONE.		03-495-30D
CLINICAL LABORATORY FINDINGS		03-495-40
01-27-59 Hg 13.3 HTC RBC 4.43		03-495-40A
WBC 8800 DIFF. P 55 ST L 38 M 4 E 1 B 2		03-495-40B
692 -615 CALCULUS OF THE PANCREATIC DUCT		03-495-67

PATIENT 03-496	BORN 05-12-07	03-496-01 03-496-02 03-496-03 03-496-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-496-10
EXPOSURE	DIAL PAINTER 01	03-496-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 6 TO 8 WEEKS, EITHER 1923 OR 1924. PAINTED DIALS AND TIPPED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-496-13 03-496-13A 03-496-13B
ASSUMED WORK PERIOD 07-01-1923 TO 09-01-1923		03-496-13*
16.13 YEARS OF AGE WHEN FIRST EMPLOYED.		03-496-13Z
FAMILY HISTORY		03-496-15
MARRIED 1934	PARA 2 GRAVIDA 2	03-496-15A
MARRIED 1952		03-496-15B
CHILDREN	FEMALE 1936 L W	03-496-16
	FEMALE 1938 L W	03-496-16A
MEDICAL HISTORY		03-496-20
HYSTERECTOMY 1949. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS		03-496-20A
NEGATIVE. DENTAL HISTORY--ALL TEETH EXTRACTED, PATIENT WEARS		03-496-20B
DOUBLE DENTURES. (01-27-59)		03-496-20C
GAMMA-RAY MEASUREMENTS		03-496-25
01-27-59 RAB,RAC C.001 UCI HGS 1 TILTING CHAIR CEM		03-496-25A
COMPUTED TOTAL-BODY RADIUM		03-496-27
01-27-59 0.001 UCI 0.003 UCI TOTAL 0.31		03-496-27A
X-RAY EXAMINATION		03-496-30
PARTIAL SKELETAL SURVEY		03-496-30A
01-27-59 ANL X-RAY NO. R-94 LOC. ANL		03-496-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-496-30C
PPF NONE.		03-496-30D
CLINICAL LABORATORY FINDINGS		03-496-40
01-27-59 HG 14.6 HTC RBC 4.87		03-496-40A
WBC 11,400 DIFF. P 64 ST L 21 M 5 E B		03-496-40B
782 -10 HYSTERECTOMY		03-496-67
DATA REVISED 08-03-67		03-496-99

PATIENT 03-497	BORN 11-01-03	03-497-01
		03-497-02
		03-497-03
		03-497-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-497-10
EXPOSURE	DIAL PAINTER 01	03-497-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL. 1923-1927 OR 1928,	03-497-13
	4 TO 5 YEARS TOTAL. PAINTED DIALS 4 TO 6 WEEKS, USED MOSTLY	03-497-13A
	ZINC COMPOUND PRACTICE MATERIAL. POINTED BRUSH IN MOUTH.	03-497-13B
FAMILY HISTORY		03-497-15
MARRIED 1929	PARA 0 GRAVIDA 0	03-497-15A
HUSBAND	1902 L W	03-497-15B
MEDICAL HISTORY		03-497-20
	PULMONARY TUBERCULOSIS BEFORE MARRIAGE, OUT OF WORK 14 MO.	03-497-20A
	NO OTHER SERIOUS ILLNESS. INQUIRY BY SYSTEMS NEGATIVE. (01-28-59)	03-497-20B
GAMMA-RAY MEASUREMENTS		03-497-25
01-28-59 RAB,RAC C.005 UCI	HGS 1 TILTING CHAIR CEM	03-497-25A
COMPUTED TOTAL-BODY RADIUM		03-497-27
01-28-59 0.005 UCI	0.016 UCI TOTAL 0.31	03-497-27A
X-RAY EXAMINATION	NOT DONE	03-497-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-497-40
360 -123 PULMONARY TUBERCULOSIS		03-497-67
DATA REVISED 08-03-67		03-497-99

PATIENT 03-498	BORN 05-30-05	03-498-01
		03-498-02
		03-498-03
		03-498-04
		03-498-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-498-10
EXPOSURE	DIAL PAINTER 01	03-498-12
SOURCE RADIUM DIAL CO., LUMINOUS PROCESSES, INC., OTTAWA, ILL.,		03-498-13
NOV. 1923 TO JULY 1943. (CHANGE IN NAME OF FIRMS OCCURRED ON		03-498-13A
10-27-34, ACCORDING TO PATIENT.) NEVER PAINTED DIALS, DID MOSTLY		03-498-13B
OFFICE WORK ALTHOUGH OCCASIONALLY WEIGHED MATERIALS AND WORKED IN		03-498-13C
PACKING ROOM.		03-498-13D
FAMILY HISTORY		03-498-15
MARRIED 1925	PARA 0 GRAVIDA 1 (1 MISCARRIAGE)	03-498-15A
MARRIED 1949		03-498-15B
HUSBAND	L W	03-498-15C
MEDICAL HISTORY		03-498-20
SURGERY--2 PROCEDURES FOR GYNECOLOGICAL PROBLEMS. FRACTURED		03-498-20A
PELVIS IN AUTO ACCIDENT 1937. INQUIRY BY SYSTEMS NEGATIVE AND		03-498-20B
PATIENT HAS BEEN IN GOOD HEALTH. DENTAL HISTORY--ALL TEETH		03-498-20C
EXTRACTED 1958. (01-28-59)		03-498-20D
GAMMA-RAY MEASUREMENTS		03-498-25
01-28-59 RAB,RAC 0.001 UCI HGS 1 TILTING CHAIR CEM		03-498-25A
COMPUTED TOTAL-BODY RADIUM		03-498-27
01-28-59 0.001 UCI 0.003 UCI TOTAL 0.31		03-498-27A
X-RAY EXAMINATION	NOT DONE	03-498-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-498-40
22X -416 FRACTURE OF THE PELVIS		03-498-67
DATA REVISED 02-07-68		03-498-99

PATIENT	03-499	BORN	C9-06-06	03-499-01
				03-499-02
				03-499-02A
				03-499-03
				03-499-05
FEMALE				
SOURCE OF CASE	SEARCH BY	CEM		03-499-10
LITERATURE CITATION				03-499-11
MILLER, ANL-6839 (1964) PP. 18-39.				03-499-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING				03-499-11B
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).				03-499-11C
EXPOSURE	DIAL PAINTER	01		03-499-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., JUNE 1924 TO JULY 1925, TOTAL			03-499-13
	APPROX. 1 YEAR. PAINTED DIALS OF LARGE AND SMALL CLOCKS. PAINTED			03-499-13A
	BRUSH IN MOUTH REGULARLY BUT NEVER PAINTED HER OWN PERSON.			03-499-13B
	HER CLOTHES GLOWED IN DARK.			03-499-13C
	ASSUMED WORK PERIOD 06-01-1924 TO 07-01-1925			03-499-13*
	17.73 YEARS OF AGE WHEN FIRST EMPLOYED.			03-499-13Z
FAMILY HISTORY				03-499-15
MARRIED 1924	PARA 2	GRAVIDA 2		03-499-15A
HUSBAND	1900	L W		03-499-15B
CHILDREN	MALE	1931	L W	03-499-16
	MALE	1937	L W	03-499-16A
MEDICAL HISTORY				03-499-20
HISTORY OF THYROID SURGERY 1951 (DX MALIGNANT THYROID ADENOMA).				03-499-20A
HYSTERECTOMY 1952. KNOWN DIABETIC SINCE 1958, MILD ARTHRITIS OF				03-499-20B
HANDS AND TOES. TEETH HAVE ALL BEEN EXTRACTED AND PATIENT HAS				03-499-20C
DOUBLE DENTURES. (01-28-59)				03-499-20D
THYROID SURGERY, MAY 1961, FOR RECURRENT NODULE. VAGUE DISCOMFORT				03-499-21A
LEFT EAR FOR MANY YEARS, FRIGHTFULLY PAINFUL. ALSO HAS LOW AND				03-499-21B
MID BACKACHES. (02-26-64)				03-499-21C
GAMMA-RAY MEASUREMENTS				03-499-25
01-28-59	RAB,RAC	C.080 UCI	HGS 1 TILTING CHAIR	CEM
	TL 208	C.007 UCI		
02-26-64	RAB,RAC	C.070 UCI	HGS 1 TILTING CHAIR	CEM
	TL 208	C.002 UCI		
COMPUTED TOTAL-BODY RADIUM				03-499-27
01-28-59	0.080 UCI	0.260 UCI TOTAL	0.31	03-499-27A
	TL 208	0.007 UCI TOTAL	1.00	03-499-27B
02-26-64	0.070 UCI	0.225 UCI TOTAL	0.31	03-499-27C
	TL 208	0.002 UCI TOTAL		03-499-27D

X-RAY EXAMINATION		03-499-30
COMPLETE SKELETAL SURVEY		03-499-30A
01-28-59	ANL X-RAY NO. R-96 LOC. ANL	03-499-30B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 19		03-499-30C
PPF MULTIPLE AREAS OF BONE RESORPTION SEEN IN SKULL, RIBS,		03-499-30D
RIGHT HUMERUS, BOTH FOREARMS. SIMILAR LESIONS SEEN IN LONG		03-499-30E
BONES OF LOWER EXTREMITIES AND LEFT FOOT. THICKENING OF CORTEX		03-499-30F
OF RIGHT AND LEFT FEMURS.		03-499-30G
COMPLETE SKELETAL SURVEY		03-499-31A
09-06-66	ANL X-RAY NO. R-96B LOC. ANL	03-499-31B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18		03-499-31C
PPF MULTIPLE AREAS OF BONE RESORPTION SEEN IN SKULL, RIBS, RIGHT		03-499-31D
HUMERUS, BOTH FOREARMS, FEMORA, TIBIAE AND FIBULAE. ONE AREA OF		03-499-31E
BONE RESORPTION IN LEFT CUNEIFORM BONE, MARKED CORTICAL THICKEN-		03-499-31F
ING, BOTH FEMORA.		03-499-31G
CLINICAL LABORATORY FINDINGS		03-499-40
01-28-59	HG 15.1 HTC RBC 5.03	03-499-40A
WBC 9200	DIFF. P 65 ST 2 L 24 M 5 E 4 B	03-499-40B
MALIGNANT TUMOR	CARCINOMA OF THYROID	03-499-60
782 -10	HYSTERECTOMY	03-499-67
810 -8091	ADENOCARCINOMA OF THE THYROID	03-499-67A
870 -785	DIABETES MELLITUS	03-499-67B
DATA REVISED 11-07-67		03-499-99

PATIENT 03-500	BORN 07-13-01	03-500-01
DECEASED		03-500-02
		03-500-02A
		03-500-03
FEMALE		03-500-05
DECEASED 03-08-59		03-500-06
DEATH CERT. NO.	AUTOPSY YES	03-500-07
INTERMENT	SUMMIT VIEW CEMETERY, OTTAWA, ILLINOIS	03-500-08
CAUSES OF DEATH	CORONARY INFARCTION, GENERALIZED ARTERIOSCLEROSIS, DIABETES MELLITTUS	03-500-09
		03-500-09A
SOURCE OF CASE	SEARCH BY CEM	03-500-10
EXPOSURE	DIAL PAINTER 01	03-500-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 2 MONTHS SPRING 1920 OR 1921. PAINTED DIALS, POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF BODY.	03-500-13
		03-500-13A
		03-500-13B
	ASSUMED WORK PERIOD 04-01-1922 TO 06-01-1922	03-500-13*
	20.71 YEARS OF AGE WHEN FIRST EMPLOYED.	03-500-13Z
FAMILY HISTORY		03-500-15
MARRIED 1923	PARA 4 GRAVIDA 5 (1 MISCARRIAGE)	03-500-15A
HUSBAND	1897 L W	03-500-15B
CHILDREN	MALE 1927 L W	03-500-16
	MALE 1929 L W	03-500-16A
	MALE 1939 L W	03-500-16B
	MALE 1944 L W	03-500-16C
MEDICAL HISTORY		03-500-20
	UNDER TREATMENT FOR HEART CONDITION, HAS HAD DIABETES MELLITUS FOR 10 YEARS. HEMORRHOID SURGERY 1953. FRACTURE OF RIGHT SHOULDER AND CLAVICLE IN AUTOMOBILE ACCIDENT 1948. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR CHRONIC BACK PAIN. TEETH--4 EXTRAC-	03-500-20A
	TIONS BECAUSE OF PYORRHEA. (01-29-55)	03-500-20B
		03-500-20C
		03-500-20D
		03-500-20E
GAMMA-RAY MEASUREMENTS		03-500-25
	01-29-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM	03-500-25A
COMPUTED TOTAL-BODY RADIUM		03-500-27
	01-29-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31	03-500-27A
X-RAY EXAMINATION		03-500-30
PARTIAL SKELETAL SURVEY		03-500-30A
01-29-59 ANL X-RAY NO. R-98 LOC. ANL		03-500-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5		03-500-30C
PPF SCATTERED SMALL AREAS OF BONE RESORPTION IN SKULL. COARSENING OF TRABECULAR PATTERN IN RIGHT AND LEFT TIBIA, AS WELL AS IN SCAPHOID BONE OF LEFT FOOT. ISLANDS OF BONE SCLEROSIS IN RIGHT TARSAL SCAPHOID AND DISTAL RIGHT FIBULA.		03-500-30D
		03-500-30E
		03-500-30F
		03-500-30G

CLINICAL LABORATORY FINDINGS

01-29-59 HG 13.7 HTC RBC 4.35
WBC 6700 DIFF. P 60 ST 1 L 27 M 10 E 2 B

03-500-40
03-500-40A
03-500-40B

67X -11 HEMORRHOIDECTOMY
227 -416 FRACTURE OF THE CLAVICLE
230 -416 FRACTURE OF THE HUMERUS
410 -516 ARTERIOSCLEROTIC HEART DISEASE
430 -516.7 MYOCARDIAL INFARCTION
870 -785 DIABETES MELLITUS

03-500-67
03-500-67A
03-500-67B
03-500-67C
03-500-67D
03-500-67E

DATA REVISED 10-23-67

03-500-99

PATIENT 03-501	BORN 06-27-12	03-501-01
		03-501-02
		03-501-03
FEMALE		03-501-05
SOURCE OF CASE	SEARCH BY CEM	03-501-10
EXPOSURE	DIAL PAINTER 01	03-501-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., AUG. 1928 TO OCT. 1928, TOTAL		03-501-13
2 MONTHS. PAINTED DIALS WITH STAMPING MACHINERY, MAY HAVE		03-501-13A
INHALED LUMINOUS POWDER WHILE MIXING. NEVER USED BRUSHES.		03-501-13B
ASSUMED WORK PERIOD 08-01-1928 TO 10-01-1928		03-501-13*
16.09 YEARS OF AGE WHEN FIRST EMPLOYED.		03-501-13Z
FAMILY HISTORY		03-501-15
MARRIED 1933	PARA 3 GRAVIDA 4 (1 ECTOPIC)	03-501-15A
HUSBAND	1906 L W	03-501-15B
MEDICAL HISTORY		03-501-20
NO SERIOUS ILLNESSES EXCEPT FOR RIGHT INGUINAL HERNIORRHAPHY 1950.		03-501-20A
INQUIRY BY SYSTEMS--VARICOSE VEINS LEFT LEGS AND CHRONIC BACK-		03-501-20B
ACHES PAST 15 YEARS. TEETH--3 EXTRACTED. (01-29-59)		03-501-20C
GAMMA-RAY MEASUREMENTS		03-501-25
01-29-59 RAB,RAC C.002 UCI HGS 1 TILTING CHAIR CEM		03-501-25A
COMPUTED TOTAL-BODY RADIUM		03-501-27
01-29-59 0.002 UCI 0.007 UCI TOTAL 0.31		03-501-27A
X-RAY EXAMINATION		03-501-30
COMPLETE SKELETAL SURVEY		03-501-30A
01-29-59 ANL X-RAY NO. R-97 LOC. ANL		03-501-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-501-30C
PPF NONE.		03-501-30D
CLINICAL LABORATORY FINDINGS		03-501-40
01-29-59 HG 14.8 HTC RBC 4.40		03-501-40A
WBC 5900 DIFF. P 63 ST 3 L 27 M 5 E.2 B		03-501-40B
48X -641 VARICOSE VEINS		03-501-67
0601 -5C INGUINAL HERNIORRHAPHY		03-501-67A
DATA REVISED 08-07-67		03-501-99

PATIENT 03-502	BORN 12-26-87	03-502-01
DECEASED		03-502-02
		03-502-03
FEMALE		03-502-05
DECEASED 07-22-64		03-502-06
SOURCE OF CASE	SEARCH BY CEM	03-502-10
EXPOSURE	DIAL PAINTER 01	03-502-12
SOURCE RADIUM DIAL CO., CHICAGO, ILL., PROB. 1918 TO 1921. PAINTED		03-502-13
WATCH DIALS. POINTED BRUSH IN MOUTH.		03-502-13A
ASSUMED WORK PERIOD 07-01-1918 TO 07-01-1921		03-502-13*
30.50 YEARS OF AGE WHEN FIRST EMPLOYED.		03-502-13Z
FAMILY HISTORY		03-502-15
MARRIED 1921	PARA 1 GRAVIDA 2 (1 STILLBIRTH)	03-502-15A
CHILDREN	MALE 1924 L W	03-502-16
MEDICAL HISTORY		03-502-20
SURGERY--BOWEL RESECTION BECAUSE OF TRAUMA INCURRED DURING FALL,		03-502-20A
APPENDECTOMY SAME TIME, AGE 18. UPPER AND LOWER JAW SURGERY IN		03-502-20B
DENTIST'S OFFICE MANY YEARS AGO, DATE UNKNOWN. INQUIRY BY SYSTEMS		03-502-20C
--GENERALIZED ACHING, INSOMNIA, AND FATIGUE, BUT COMPLAINTS ARE		03-502-20D
CONSISTENT WITH AGE OF PATIENT. MEDICAL HISTORY SOMEWHAT		03-502-20E
UNSATISFACTORY BECAUSE OF AGE AND POOR MEMORY OF PATIENT.		03-502-20F
(02-06-59)		03-502-20G
GAMMA-RAY MEASUREMENTS		03-502-25
02-06-59 RAB,RAC 0.051 UCI HGS 1 TILTING CHAIR CEM		03-502-25A
COMPUTED TOTAL-BODY RADIUM		03-502-27
02-06-59 0.051 UCI 0.170 UCI TOTAL 0.31		03-502-27A
X-RAY EXAMINATION		03-502-30
COMPLETE SKELETAL SURVEY		03-502-30A
02-06-59 ANL X-RAY NO. R-99 LOC. ANL		03-502-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 7		03-502-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN SKULL, RIGHT RADIUS		03-502-30D
AND ULNA, RIGHT FEMUR. COARSENING OF TRABECULATION NOTED IN		03-502-30E
RIGHT AND LEFT TIBIAE.		03-502-30F
CLINICAL LABORATORY FINDINGS		03-502-40
02-06-59 HG 14.5 HTC RBC 5.03		03-502-40A
WBC 11,000 DIFF. P 60 ST 1 L 35 M 3 E 1 B		03-502-40B
661 -12 APPENDECTOMY		03-502-67
DATA REVISED 08-07-67		03-502-99

PATIENT	03-503	BORN	04-17-94	03-503-01
DECEASED				03-503-02
				03-503-02A
				03-503-03
				03-503-04
				03-503-05
FEMALE				
DECEASED	01-31-60			03-503-06
DEATH CERT.NO.		AUTOPSY	NONE	03-503-07
INTERMENT	ST. JOSEPH'S CEMETERY, HALL TWP., BUREAU COUNTY, ILL.			03-503-08
CAUSES OF DEATH	CORONARY OCCLUSION DUE TO CORONARY HEART DISEASE			03-503-09
SOURCE OF CASE	SEARCH BY CEM			03-503-10
EXPOSURE	DIAL PAINTER 01			03-503-12
SOURCE	RADIUM DIAL CO., PERU, ILL., SPRING 1922 UNTIL FEB. 1923.			03-503-13
	RADIUM DIAL CO., OTTAWA, ILL. AUGUST 1923 UNTIL JUNE 1924.			03-503-13A
	AT BOTH JOBS SHE PAINTED DIALS 50 PERCENT OF TIME AND INSPECTED			03-503-13B
	DURING REMAINDER. POINTED BRUSH IN HER MOUTH.			03-503-13C
	ASSUMED WORK PERIOD 04-01-1922 TO 06-01-1924			03-503-13*
	27.95 YEARS OF AGE WHEN FIRST EMPLOYED.			03-503-13Z
FAMILY HISTORY				03-503-15
MARRIED 1918	PARA 2	GRAVIDA 2		03-503-15A
HUSBAND		DECEASED 1920		03-503-15B
MARRIED 1924	PARA 2	GRAVIDA 2		03-503-15C
HUSBAND		L (RECENTLY HOSPITALIZED FOR		03-503-15D
		SEVERE STROKE, AGE 71)		03-503-15E
CHILDREN	MALE	L W		03-503-16
	FEMALE	1919	L W	03-503-16A
	FEMALE	1925	L W	03-503-16B
	MALE	1927	L W	03-503-16C
MEDICAL HISTORY				03-503-20
	APPENDECTOMY 1922, CHOLECYSTECTOMY 1935, AND EXCISION OF CYSTS OF			03-503-20A
	CERVIX 1937. PATIENT HAD RADIATION STERILIZATION AT MAYO CLINIC			03-503-20B
	BECAUSE OF HYPERMENORRHEA. HOSPITALIZED 1956 BECAUSE OF SHINGLES			03-503-20C
	AND HAS PERSISTENT POST-HERPETIC PAIN UNTIL PRESENT. ALSO HCS-			03-503-20D
	PITALIZED SEVERAL TIMES RECENTLY FOR SLIGHT HEART ATTACKS. HAS			03-503-20E
	HAD DIABETES MELLITUS FOR PAST 27 YEARS, TREATED BY DAILY NPH			03-503-20F
	INSULIN. INQUIRY BY SYSTEMS--SEVERE AND FREQUENT MIGRAINE HEAD-			03-503-20G
	ACHES UNTIL MENOPAUSE 1940. OCCASIONAL LOW BACK PAIN AND RIGHT			03-503-20H
	SHOULDER AND ELBOW BURSTITIS. DENTAL HISTORY--ALL REMAINING TEETH			03-503-20I
	EXTRACTED SIX YEARS AGO BECAUSE OF PYORRHEA.			03-503-20J

GAMMA-RAY MEASUREMENTS				03-503-25
02-23-59	RAB,RAC	0.039 UCI	HGS 1 TILTING CHAIR CEM	03-503-25A
COMPUTED TOTAL-BODY RADIUM				03-503-27
02-23-59	0.039 UCI	0.125 UCI TOTAL	0.31	03-503-27A
X-RAY EXAMINATION				03-503-30
PARTIAL SKELETAL SURVEY				03-503-30A
02-23-59	ANL	X-RAY NO. R-101	LOC. ANL	03-503-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.				03-503-30C
PPF	NONE.		SCORE 0	03-503-30D
CLINICAL LABORATORY FINDINGS				03-503-40
02-23-59	HG 13.3	HTC	RBC 4.57	03-503-40A
WBC 7700	DIFF. P 64	ST	L 29 M 6 E 1 B	03-503-40B
110	-1764	HERPES ZOSTER		03-503-67
255	-430	BURSITIS, SUBDELTOID		03-503-67A
257	-430	BURSITIS, OLECRANON		03-503-67B
410	-516	ARTERIOSCLEROTIC HEART DISEASE		03-503-67C
430	-516.7	MYOCARDIAL INFARCTION		03-503-67D
661	-12	APPENDECTOMY		03-503-67E
687	-12	CHOLECYSTECTOMY		03-503-67F
783	-11	LOCAL EXCISION OF LESION OF CERVIX		03-503-67G
870	-785	DIABETES MELLITUS		03-503-67H
DATA REVISED 10-23-67				03-503-99

PATIENT 03-504.	BORN 11-19-05	03-504-01
		03-504-02
FEMALE		03-504-03
		03-504-05
SOURCE OF CASE	SEARCH BY CEM	03-504-10
EXPOSURE	DIAL PAINTER 01	03-504-12
SOURCE RADIUM DIAL CO., PERU, ILL., JULY 1922 TO FEB. 1923, TOTAL		03-504-13
OF 7 MONTHS. PAINTED NUMERALS. POINTED BRUSH IN MOUTH. NEVER		03-504-13A
PAINTED ANY PART OF HER BODY.		03-504-13B
ASSUMED WORK PERIOD 07-01-1922 TO 02-01-1923		03-504-13*
16.61 YEARS OF AGE WHEN FIRST EMPLOYED.		03-504-13Z
FAMILY HISTORY		03-504-15
MARRIED 1934	PARA 2 GRAVIDA 2	03-504-15A
HUSBAND	DEC. 1948	03-504-15B
CHILDREN	MALE 1943 L W	03-504-16
	FEMALE 1939 L W	03-504-16A
MEDICAL HISTORY		03-504-20
APPENDECTOMY AND LEFT OOPHORECTOMY 1939. OTHERWISE NO SERIOUS		03-504-20A
ILLNESSES. INQUIRY BY SYSTEMS--ARTHRITIS OF LOWER SPINE NOV.		03-504-20B
1957, BURSITIS OF BOTH SHOULDERS 1958, PAINFUL INTERMITTENT		03-504-20C
DISCOMFORT OF TERMINAL JOINT OF RIGHT INDEX FINGER. DENTAL		03-504-20D
HISTORY--TWO TEETH EXTRACTED FROM LOWER JAW. (02-23-59)		03-504-20E
GAMMA-RAY MEASUREMENTS		03-504-25
02-23-59 RAB,RAC 0.007 UCI HGS 1 TILTING CHAIR CEM		03-504-25A
COMPUTED TOTAL-BODY RADIUM		03-504-27
02-23-59 0.007 UCI 0.022 UCI TOTAL 0.31		03-504-27A
X-RAY EXAMINATION		03-504-30
COMPLETE SKELETAL SURVEY		03-504-30A
02-23-59 ANL X-RAY NO. R-100 LOC. ANL		03-504-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-504-30C
PPF NONE.		03-504-30D
CLINICAL LABORATORY FINDINGS		03-504-40
02-23-59 HG 14.0 HTC RBC 4.56		03-504-40A
WBC 7900 DIFF. P 64 ST. L 29 M 6 E 1 B		03-504-40B
661 -12 APPENDECTOMY		03-504-67
788 -10 UNILATERAL OOPHORECTOMY		03-504-67A

PATIENT 03-505

BORN 05-19-07

03-505-01
03-505-02
03-505-03
03-505-04
03-505-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

03-505-10

EXPOSURE

DIAL PAINTER 01

03-505-12

SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1923 TO 1924, CONTINUOUS
EMPLOYMENT EXCEPT FOR OCCASIONAL LAY-OFFS IN SLACK SEASON.
LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1934 TO 1948, EXCEPT FOR
INTERVAL OF 4 YEARS DURING WAR WHEN SHE WAS AWAY. PAINTED
DIALS AT BOTH ESTABLISHMENTS. POINTED BRUSH IN HER MOUTH DURING
EARLIER PERIOD.
ASSUMED WORK PERIOD 07-01-1923 TO 07-01-1924
16.11 YEARS OF AGE WHEN FIRST EMPLOYED.

03-505-13
03-505-13A
03-505-13B
03-505-13C
03-505-13D
03-505-13E
03-505-13*
03-505-13Z

FAMILY HISTORY

MARRIED 1937
HUSBANDPARA 2
1912GRAVIDA 2
L W03-505-15
03-505-15A
03-505-15B

CHILDREN

MALE
MALE1950
1953L W
L W03-505-16
03-505-16A

MEDICAL HISTORY

APPENDECTOMY 1935. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS
REVEALS MILD ARTHRITIS FOR PAST 2 YEARS. DENTAL HISTORY--TEETH
EXTRACTED 1942 BECAUSE OF CAVITIES, EXTRACTIONS DIFFICULT.
(02-24-59)

03-505-20
03-505-20A
03-505-20B
03-505-20C
03-505-20D

GAMMA-RAY MEASUREMENTS

02-24-59 RAB,RAC
03-03-65 RAB,RAC
03-03-65 RAB,RAC

0.057 UCI
0.047 UCI
0.052 UCI

HGS 1 TILTING CHAIR
HGS 1 TILTING CHAIR
HGS 1 7-CRYST-POS

CEM
CEM
CEM

03-505-25
03-505-25A
03-505-25C
03-505-25D

BREATH MEASUREMENTS

04-13-60 EM-222

0.116 UCI

RADON BREATH HELMET

HFL

03-505-26
03-505-26B

COMPUTED TOTAL-BODY RADIUM

02-24-59 0.057 UCI
03-03-65 0.047 UCI
03-03-65 0.052 UCI

0.180 UCI TOTAL
0.150 UCI TOTAL
0.169 UCI TOTAL

0.31
0.31
0.31

03-505-27
03-505-27A
03-505-27C
03-505-27D

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON

04-13-60

0.116 UCI

0.168 UCI TOTAL

0.69

03-505-28
03-505-28B

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

02-24-59 ANL X-RAY NO. R-103 LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
 PPF NONE.

03-505-30
 03-505-30A
 03-505-30B
 03-505-30C
 03-505-30D

COMPLETE SKELETAL SURVEY

03-03-65 ANL X-RAY NO. R-103B LOC. ANL
 MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 4
 PPF MULTIPLE AREAS OF BONE RESORPTION IN MANDIBLE AND LEFT FEMUR.

03-505-31A
 03-505-31B
 03-505-31C
 03-505-31D

CLINICAL LABORATORY FINDINGS

02-24-59 HG 14.3 HTC RBC 4.81
 WBC 8600 DIFF. P 50 ST L 37 M 8 E 5 B

03-505-40
 03-505-40A
 03-505-40B

03-03-65 HG 15.3 HTC RBC
 WBC 5700 DIFF. P 46 ST 1 L 47 M 4 E 2 B

03-505-41A
 03-505-41B

661 -12 APPENDECTOMY

03-505-67

DATA REVISED 11-07-67

03-505-99

PATIENT 03-506	BORN 07-23-17	03-506-01
		03-506-02
		03-506-03
FEMALE		03-506-05
SOURCE OF CASE	SEARCH BY CEM	03-506-10
EXPOSURE	DIAL PAINTER 01	03-506-12
SOURCE LUMINGUS PROCESSES, INC., OTTAWA, ILL., OCT. 1935 TO JUNE 1945, 1 YEAR 1953. PAINTED CLOCK HANDS, SEWED HANDS FOR SEVERAL YEARS, LATER PAINTED WAR INSTRUMENTS. NEVER POINTED BRUSH IN MOUTH.		03-506-13
		03-506-13A
		03-506-13B
		03-506-13C
ASSUMED WORK PERIOD 10-01-1935 TO 06-01-1945		03-506-13*
18.18 YEARS OF AGE WHEN FIRST EMPLOYED.		03-506-13Z
FAMILY HISTORY		03-506-15
MARRIED 1946	PARA 2	03-506-15A
HUSBAND	1911 GRAVIDA 2	03-506-15B
	L W	
CHILDREN	MALE 1948	03-506-16
	MALE 1955	03-506-16A
	L W	
	L W	
MEDICAL HISTORY		03-506-20
TONSILLECTOMY CHILDHOOD, NO SURGERY OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--COMPLETE UPPER DENTURE, UPPER TEETH EXTRACTED 1952, LOWER JAW 4 TEETH EXTRACTED. (02-24-59)		03-506-20A
		03-506-20B
		03-506-20C
		03-506-20D
GAMMA-RAY MEASUREMENTS		03-506-25
02-24-59 RAB,RAC C.005 UCI HGS 1 TILTING CHAIR CEM		03-506-25A
COMPUTED TOTAL-BODY RADIUM		03-506-27
02-24-59 0.005 UCI 0.017 UCI TOTAL 0.31		03-506-27A
X-RAY EXAMINATION		03-506-30
SPECIAL VIEWS, DENTAL FILMS		03-506-30A
10-20-50 ANL LOC. DR. W.P. DAUGHERTY		03-506-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-506-30C
PPF NONE.		03-506-30D
PARTIAL SKELETAL SURVEY		03-506-31A
02-24-59 ANL X-RAY NO. R-102 LOC. ANL		03-506-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-506-31C
PPF NONE.		03-506-31D
CLINICAL LABORATORY FINDINGS		03-506-40
02-24-59 HG 13.4 HTC RBC 4.05		03-506-40A
WBC 7100 DIFF. P 55 ST L 37 M 6 E 2 B		03-506-40B
634 -12 TONSILLECTOMY		03-506-67
DATA REVISED 08-07-67		03-506-99

PATIENT	G3-507	BORN	06-10-07	03-507-01
	DECEASED			03-507-02
				03-507-03
	FEMALE			03-507-05
OTHER PERTINENT NOS.	PRES.-ST.LUKE'S AUTOPSY			03-507-05A
DECEASED	11-14-62			03-507-06
DEATH CERT.NO.		AUTOPSY	YES	03-507-07
INTERMENT	UTICA, ILLINOIS			03-507-08
CAUSES OF DEATH	VASCULAR COLLAPSE AND RESPIRATORY ARREST, BRAIN EDEMA, ACOUSTIC NEURINOMA			03-507-09 03-507-09A 03-507-09B
SOURCE OF CASE	SEARCH BY CEM			03-507-10
LITERATURE CITATION				03-507-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-507-11A 03-507-11B
EXPOSURE	DIAL PAINTER 01			03-507-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 4 TO 6 WEEKS EITHER 1922 OR 1923. PAINTED DIALS AND POINTED BRUSH IN MOUTH. NEVER PAINTED OWN PERSON, BUT WAS SOMEWHAT CARELESS IN PAINTING PROCEDURE. ASSUMED WORK PERIOD 06-15-1923 TO 08-01-1923 16.01 YEARS OF AGE WHEN FIRST EMPLOYED.			03-507-13 03-507-13A 03-507-13B 03-507-13* 03-507-13Z
FAMILY HISTORY				03-507-15
MARRIED 1924	PARA 2	GRAVIDA 2		03-507-15A
HUSBAND	1908	L W		03-507-15B
CHILDREN	MALE	1926	L W	03-507-16
	MALE	1927	L, HEART SURGERY FOR MITRAL STENOSIS 1957, WELL NOW	03-507-16A 03-507-16B
MEDICAL HISTORY				03-507-20
	SURGERY--APPENDECTOMY 1935, SUSPENSION OF UTERUS 1940. RHEUMATISM AT AGE 22. NO OTHER SERIOUS ILLNESSES. LOSS OF HEARING RIGHT EAR STARTED 1957, RIGHT FACIAL HYPESTHESIA AND PARESTHESIA RIGHT SIDE OF MOUTH 1959. SYMPTOMS LED TO DIAGNOSIS OF FACIAL NEURITIS. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. TEETH--1 EXTRACTION. (02-26-59)			03-507-20A 03-507-20B 03-507-20C 03-507-20D 03-507-20E 03-507-20F
	ON 04-01-59 PATIENT WAS OPERATED ON AT PRES.-ST. LUKE'S HOSPITAL, CHICAGO, BY DR. ERIC OLDBERG FOR THE REMOVAL OF A RIGHT ACCUSTIC NERVE TUMOR. THE PATHOLOGIC REPORT FOLLOWS--THE HISTOLOGIC PREP- ARATIONS ARE CELLULAR, MESOBLASTIC TISSUES, PORTIONS MORE COMPACT THAN OTHER PORTIONS. THE MESOBLASTIC TISSUES HAVE ELONGATED SPIN- DLE-SHAPED CELLS WITH FIBRILLAR PROCESSES OR ANGULATED CELLS. THERE IS A FAINT SUGGESTION OF PALISADING OF THE CELLS AND SOME PIECES ARE MUCH MORE CELLULAR THAN OTHERS. THE PATIENT WAS RE- OPERATED ON 11-12-62 AT PRESBYTERIAN-ST. LUKE'S HOSPITAL BECAUSE OF A RECURRENCE OF THE TUMOR. SHE DIED ON 11-14-62. AN AUTOPSY LIMITED TO THE BRAIN WAS DONE. THE HISTOLOGIC APPEARANCE OF THE TUMOR WAS THE SAME AS ON THE ORIGINAL SLIDE MADE 3 YEARS EARLIER.			03-507-21A 03-507-21B 03-507-21C 03-507-21D 03-507-21E 03-507-21F 03-507-21G 03-507-21H 03-507-21I 03-507-21J 03-507-21K 03-507-21L

GAMMA-RAY MEASUREMENTS				03-507-25
02-26-59	RAB,RAC	0.004 UCI	HGS 1 TILTING CHAIR	03-507-25A
COMPUTED TOTAL-BODY RADIUM				03-507-27
02-26-59	0.004 UCI	0.012 UCI TOTAL	0.31	03-507-27A
X-RAY EXAMINATION				03-507-30
COMPLETE SKELETAL SURVEY				03-507-30A
02-26-59	ANL	X-RAY NO. R-105	LOC. ANL	03-507-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.				03-507-30C
PPF 10 X 12 MM AREA OF BONE RESORPTION PRESENT IN RIGHT				03-507-30D
PARIETAL BONE.				03-507-30E
CLINICAL LABORATORY FINDINGS				03-507-40
02-26-59	HG 12.1	HTC	RBC 4.06	03-507-40A
WBC 7500	DIFF. P 61	ST 1	L 31 M 4 E 3 B	03-507-40B
11-03-62 HG 13.2 HTC RBC				03-507-41A
WBC 6100				03-507-41B
MALIGNANT TUMOR ACOUSTIC NEUROMA 1962				03-507-60
661 -12	APPENDECTOMY			03-507-67
782 -56	UTERINE SUSPENSION			03-507-67A
966 -849	ACOUSTIC NEUROMA			03-507-67B
PRIMARY TUMOR SLIDE NOT AVAILABLE				03-507-70
AUTOPSY REPORT AT ANL				03-507-71
DATA REVISED 07-01-68				03-507-99

PATIENT 03-508.	BORN 08-15-05	03-508-01 03-508-02 03-508-03 03-508-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-508-10
EXPOSURE	DIAL PAINTER 01	03-508-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., ABOUT 2 MONTHS EITHER 1923 OR 1924. PAINTED DIALS. POINTED BRUSH IN MOUTH. LEFT JOB BECAUSE POINTING OF BRUSH MADE MOUTH SORE, LATER POINTING OF BRUSH IN PALM OF HAND CAUSED FISSURE AT ULNAR MARGIN OF HAND. ASSUMED WORK PERIOD 06-15-1923 TO 08-15-1923 17.82 YEARS OF AGE WHEN FIRST EMPLOYED.		03-508-13 03-508-13A 03-508-13B 03-508-13C 03-508-13* 03-508-13Z
FAMILY HISTORY		03-508-15
MARRIED 1922	PARA 2 GRAVIDA 2	03-508-15A
HUSBAND	1903 L W	03-508-15B
CHILDREN	MALE 1928 L W, STOMACH TROUBLE	03-508-16
	FEMALE 1931 L W	03-508-16A
MEDICAL HISTORY		03-508-20
SURGERY--CHOLECYSTECTOMY 1929, PARTIAL EXCISION OF RIGHT BREAST 1950. HOSPITALIZED HIGHLAND TUBERCULOSIS SANITORIUM, OTTAWA, 5 MONTHS 1952 AND TREATED WITH STREPTOMYCIN, PAS AND INH. CORONARY OCCLUSION ABOUT 1951, STILL HAS PERSISTENT ANGINA, TAKES CORONARY VASODILATORS. INQUIRY BY SYSTEMS--EPIGASTRIC DISTRESS PAST 3 MONTHS. DENTAL HISTORY--ALL TEETH EXTRACTED AGE 35, WEARS DOUBLE DENTURES. (02-26-59).		03-508-20A 03-508-20B 03-508-20C 03-508-20D 03-508-20E 03-508-20F 03-508-20G
GAMMA-RAY MEASUREMENTS		03-508-25
02-26-59 RAB,RAC	0.003 UCI HGS 1 TILTING CHAIR CEM	03-508-25A
COMPUTED TOTAL-BODY RADIUM		03-508-27
02-26-59 0.003 UCI	0.010 UCI TOTAL 0.31	03-508-27A
X-RAY EXAMINATION		03-508-30
COMPLETE SKELETAL SURVEY		03-508-30A
02-26-59 ANL	X-RAY NO. R-104 LOC. ANL	03-508-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-508-30C
PPF NONE.		03-508-30D
CLINICAL LABORATORY FINDINGS		03-508-40
02-26-59 HG 13.8 HTC	RBC 4.57	03-508-40A
WBC 7900 DIFF. P 66 ST	L 26 M 5 E 2 B	03-508-40B
190 -11	LOCAL EXCISION OF BREAST LESION (CYST)	03-508-67
360 -123	PULMONARY TUBERCULOSIS	03-508-67A
410 -516	ARTERIOSCLEROTIC HEART DISEASE	03-508-67B
430 -516.7	MYOCARDIAL INFARCTION	03-508-67C
687 -12	CHOLECYSTECTOMY	03-508-67D
DATA REVISED 08-07-67		03-508-99

PATIENT 03-509	BORN 03-10-10	03-509-01
		03-509-02
		03-509-04
FEMALE		03-509-05
SOURCE OF CASE	SEARCH BY CEM	03-509-10
LITERATURE CITATION		03-509-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-509-11A
EXPOSURE	DIAL PAINTER 01	03-509-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., FOR SEVERAL DAYS 1925. SUB-		03-509-13
SEQUENTLY, LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1936 TO		03-509-13A
PRESENT (1959). IN 1925 PAINTED DIALS WITH PRACTICE MATERIAL		03-509-13B
ONLY, LEFT JOB AT INSISTENCE OF MOTHER. AT SECOND EMPLOYMENT,		03-509-13C
PAINTED DIALS 15 YEARS, ASSEMBLED HANDS SINCE 1951. NO CONTACT		03-509-13D
WITH LUMINOUS MATERIALS SINCE 1951. NEVER POINTED BRUSH IN		03-509-13E
MOUTH, USED MOSTLY GLASS PENS.		03-509-13F
ASSUMED WORK PERIOD 07-01-1936 TO 02-27-1959		03-509-13*
26.30 YEARS OF AGE WHEN FIRST EMPLOYED.		03-509-13Z
FAMILY HISTORY		03-509-15
MARRIED 1927 DIV. 1930 PARA 1 GRAVIDA 1		03-509-15A
CHILDREN MALE L W		03-509-16
MEDICAL HISTORY		03-509-20
NO SURGERY AND NO SERIOUS ILLNESSES EXCEPT FOR RECURRENT STREP		03-509-20A
THROAT. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--		03-509-20B
4 TEETH EXTRACTED, REMAINDER IN GOOD CONDITION. (02-28-59)		03-509-20C
GAMMA-RAY MEASUREMENTS		03-509-25
02-28-59 RAB,RAC C.030 UCI HGS 1 TILTING CHAIR CEM		03-509-25A
COMPUTED TOTAL-BODY RADIUM		03-509-27
02-28-59 0.030 UCI 0.110 UCI TOTAL 0.31		03-509-27A
X-RAY EXAMINATION		03-509-30
COMPLETE SKELETAL SURVEY		03-509-30A
02-28-59 ANL X-RAY NO. R-107 LOC. ANL		03-509-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-509-30C
PPF NCNE.		03-509-30D
CLINICAL LABORATORY FINDINGS		03-509-40
02-28-59 FG 12.2 HTC RBC 3.86		03-509-40A
WBC 8000 DIFF. P 64 ST L 28 M 5 E 3 B		03-509-40B
DATA REVISED 08-07-67		03-509-99

PATIENT 03-510	BORN 01-20-07	03-510-01
		03-510-02
		03-510-03
FEMALE		03-510-05
OTHER PERTINENT NOS.	AMBH	03-510-05A
SOURCE OF CASE	SEARCH BY CEM	03-510-10
EXPOSURE	DIAL PAINTER 01	03-510-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SEPTEMBER, 1923 TO OCTOBER, 1934. LUMINOUS PROCESSES, INC., OTTAWA, ILL., OCTOBER, 1934 TO PRESENT (1962). DID NOT WORK FOR 1 YEAR, 1925. PAINTED DIALS FROM 1923 TO 1953, PAINTED HANDS SINCE 1953. POINTED BRUSH IN MOUTH TO TIME SHE WAS EXAMINED BY PHYSICIAN AT WHICH TIME THIS PRACTICE WAS DISCONTINUED. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 09-01-1923 TO 01-01-1925		03-510-13
16.61 YEARS OF AGE WHEN FIRST EMPLOYED.		03-510-13A
		03-510-13B
		03-510-13C
		03-510-13D
		03-510-13E
		03-510-13*
		03-510-13Z
FAMILY HISTORY		03-510-15
MARRIED 1943	PARA 0 GRAVIDA 0	03-510-15A
MEDICAL HISTORY		03-510-20
APPENDECTOMY 1925, URINARY BLADDER SURGERY, 1954, BROKEN BONE REMOVED FROM LEFT FOOT, 1955. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--MILD INTERMITTENT ARTHRITIS OF HANDS FOR PAST FIVE YEARS. DENTAL HISTORY--WEARS DOUBLE DENTURES, ALL TEETH EXTRACTED 10 YEARS EARLIER. (02-28-59)		03-510-20A
		03-510-20B
		03-510-20C
		03-510-20D
		03-510-20E
BENIGN TUMOR REMOVED FROM RIGHT BREAST SEPTEMBER 1959. NO OTHER INTERVAL CHANGES OF NOTE. (10-02-62)		03-510-21A
		03-510-21B
GAMMA-RAY MEASUREMENTS		03-510-25
02-28-59 RAB,RAC C.270 UCI HGS 1 TILTING CHAIR CEM		03-510-25A
10-06-62 RAB,RAC C.237 UCI HGS 1 TILTING CHAIR CEM		03-510-25B
10-06-62 RAB,RAC C.226 UCI HGS 1 7-CRYST-POS CEM		03-510-25C
COMPUTED TOTAL-BODY RADIUM		03-510-27
02-28-59 0.270 UCI 0.894 UCI TOTAL 0.31		03-510-27A
10-06-62 0.237 UCI 0.734 UCI TOTAL 0.31		03-510-27B
10-06-62 0.226 UCI 0.729 UCI TOTAL 0.31		03-510-27C
X-RAY EXAMINATION		03-510-30
COMPLETE SKELETAL SURVEY		03-510-30A
02-28-59 ANL X-RAY NO. R-106 LOC. ANL		03-510-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3.5		03-510-30C
PPF AREAS OF BONE RESORPTION IN SKULL. MASTOID AIR CELLS ARE DENSELY SCLEROTIC. BONE SCLEROSIS ALSO SEEN IN BOTH FEMURS.		03-510-30D
SLIGHT COARSENING OF TRABECULATION NOTED IN LEFT RADIUS AND ULNA, AND IN RIGHT AND LEFT FEMURS.		03-510-30E
		03-510-30F
		03-510-30G

COMPLETE SKELETAL SURVEY	03-510-31A
10-06-62 ANL X-RAY NO. R-106B LOC. ANL	03-510-31B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 14	03-510-31C
PPF AREAS OF BONE RESORPTION IN SKULL, MANDIBLE, RIGHT RADIUS,	03-510-31D
LEFT RADIUS AND ULNA, RIGHT FIBULA. AREAS OF BONE DESTRUCTION	03-510-31E
NOTED IN FIFTH LUMBAR VERTEBRA. SCLEROSIS OF MASTOID AIR CELLS	03-510-31F
AND TEMPORAL BONE, ALSO AREAS OF BONE SCLEROSIS SEEN IN RIGHT AND	03-510-31G
LEFT FEMURS. COARSENING OF TRABECULATION SEEN IN RIGHT RADIUS	03-510-31H
AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA.	03-510-31I
 SPECIAL VIEWS--SINUSES AND MASTOIDS, LAMINOGRAMS	03-510-32A
09-03-64 U OF C CLINICS UNIT NO. LOC. U OF C	03-510-32B
SOME DESTRUCTIVE LESIONS OF CALVARIUM INDICATIVE OF RADIUM	03-510-32C
EFFECT AND EVIDENCE OF TRABECULAR DISSOLUTION IN BOTH RIGHT	03-510-32D
AND LEFT MASTOIDS. SCLEROSIS OF BOTH MASTOID PROCESSES. LATERAL	03-510-32E
LAMINOGRAM ON LEFT SIDE SHOWS SOME SCLEROSIS, FINDING SUGGESTIVE	03-510-32F
OF MALIGNANT DEGENERATION.	03-510-32G
 CLINICAL LABORATORY FINDINGS	03-510-40
02-28-59 HG 13.0 HTC RBC 4.12	03-510-40A
WBC 7300 DIFF. P 47 ST L 42 M 7 E 4 B	03-510-40B
 2134 -4722.1 ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE	03-510-66
 190 -16 BIOPSY OF BREAST (BENIGN LESION)	03-510-67
661 -12 APPENDECTOMY	03-510-67A
 DATA REVISED 11-06-67	03-510-99

PATIENT 03-511	BORN 06-20-10	03-511-01
		03-511-02
FEMALE		03-511-03
		03-511-05
SOURCE OF CASE	SEARCH BY CEM	03-511-10
EXPOSURE	DIAL PAINTER 01	03-511-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., MARCH 19, 1946 TO		03-511-13
PRESENT, FEB. 1959. WORKED AT ASSEMBLY DURING FIRST SIX MONTHS		03-511-13A
BUT HAS PAINTED HANDS SINCE 1947. NEVER POINTED BRUSH IN MOUTH.		03-511-13B
ASSUMED WORK PERIOD 03-19-1946 TO 02-27-1959		03-511-13*
35.74 YEARS OF AGE WHEN FIRST EMPLOYED.		03-511-13Z
FAMILY HISTORY		03-511-15
MARRIED 1927	PARA 1 GRAVIDA 4 (3 MISCARRIAGES)	03-511-15A
CHILDREN FEMALE 1931	L W	03-511-16
MEDICAL HISTORY		03-511-20
SUSTAINED LACERATION OF RIGHT FOOT FOLLOWED BY ACUTE PHLEBITIS		03-511-20A
FOR WHICH SHE WAS HOSPITALIZED FOR SEVERAL WEEKS 1951. TONSILLEC-		03-511-20B
TOMY 1949. NO OTHER SURGERY OR SERIOUS ILLNESSES. INQUIRY BY		03-511-20C
SYSTEMS--HISTORY OF MIGRAINE HEADACHES LESS OFTEN RECENTLY THAN		03-511-20D
FORMERLY. DENTAL HISTORY--TWO TEETH EXTRACTED. (02-28-59)		03-511-20E
GAMMA-RAY MEASUREMENTS		03-511-25
02-28-59 RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM.		03-511-25A
COMPUTED TOTAL-BODY RADIUM		03-511-27
02-28-59 0.003 UCI 0.010 UCI TOTAL 0.31		03-511-27A
X-RAY EXAMINATION	NOT DONE	03-511-30
CLINICAL LABORATORY FINDINGS		03-511-40
02-28-59 HG 14.5 HTC RBC 4.56		03-511-40A
WBC 4700 DIFF. P 62 ST 2 L 31 M 4 E 1 B		03-511-40B
634 -12 TONSILLECTOMY		03-511-67
930 -X41 MIGRAINE		03-511-67A
DATA REVISED 08-07-67		03-511-99

PATIENT 03-512	BORN 04-15-06	03-512-01
		03-512-02
		03-512-03
FEMALE		03-512-05
SOURCE OF CASE	SEARCH BY CEM	03-512-10
EXPOSURE	DIAL PAINTER 01	03-512-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 6 MONTHS OCT. 1925 TO		03-512-13
MARCH 1926. PAINTED DIALS, DOES NOT REMEMBER POINTING BRUSH IN		03-512-13A
MOUTH, ALTHOUGH THIS WAS COMMON PRACTICE. NEVER PAINTED ANY PART		03-512-13B
OF HER BODY.		03-512-13C
ASSUMED WORK PERIOD 10-01-1925 TO 04-01-1926		03-512-13*
19.46 YEARS OF AGE WHEN FIRST EMPLOYED.		03-512-13Z
FAMILY HISTORY		03-512-15
MARRIED 1926	PARA 3	GRAVIDA 4 (1 MISCARRIAGE)
HUSBAND	1902	L W
		03-512-15A
		03-512-15B
CHILDREN	MALE 1927	L W
	MALE 1929	L W
	FEMALE 1935	L W
		03-512-16
		03-512-16A
		03-512-16B
MEDICAL HISTORY		03-512-20
CHOLECYSTECTOMY 1944. BLINDNESS LEFT EYE 1933 FOR 3 MONTHS		03-512-20A
BECAUSE OF HEMORRHAGE INTO OPTIC NERVE, COMPLETE RECOVERY. NO		03-512-20B
OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS REVEALS SHORTNESS OF		03-512-20C
BREATH AND TACHYCARDIA, RELIEVED BY DIGITALIS TAKEN REGULARLY.		03-512-20D
ARTHRITIS IN KNEES PAST 6 YEARS, SYMPTOMS IMPROVED WITH LOSS OF		03-512-20E
WEIGHT BY DELIBERATE DIET. DENTAL HISTORY--PARTIAL UPPER DENTURE		03-512-20F
REMAINING TEETH IN GOOD CONDITION. (03-04-59)		03-512-20G
GAMMA-RAY MEASUREMENTS		03-512-25
03-04-59 RAB,RAC C.003 UCI HGS 1 TILTING CHAIR CEM		03-512-25A
COMPUTED TOTAL-BODY RADIUM		03-512-27
03-04-59 0.003 UCI 0.011 UCI TOTAL 0.31		03-512-27A
X-RAY EXAMINATION		03-512-30
COMPLETE SKELETAL SURVEY		03-512-30A
03-04-59 ANL X-RAY NO. R-108 LOC. ANL		03-512-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-512-30C
PPF SCLEROTIC MASTOID AIR CELLS. TRAUMATIC COMPRESSION FRACTURES		03-512-30D
OF T7, T8, AND T9.		03-512-30E
CLINICAL LABORATORY FINDINGS		03-512-40
03-04-59 HG 16.0 HTC RBC 4.78		03-512-40A
WBC 11,400 DIFF. P 58 ST 1 L 34 M 3 E 4 B 1		03-512-40B
687 -12 CHOLECYSTECTOMY		03-512-67

PATIENT 03-513	BORN 11-09-08	03-513-01
		03-513-02
FEMALE		03-513-03
		03-513-05
SOURCE OF CASE	SEARCH BY CEM	03-513-10
EXPOSURE	DIAL PAINTER 01	03-513-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., JULY 1925 TO JUNE 1926.		03-513-13
PAINTED NUMERALS ON DIALS. POINTED BRUSH IN MOUTH, STATED SHE		03-513-13A
SWALLOWED LARGE QUANTITIES OF MATERIAL. NEVER PAINTED OWN PERSON.		03-513-13B
ASSUMED WORK PERIOD 07-01-1925 TO 06-01-1926		03-513-13*
16.63 YEARS OF AGE WHEN FIRST EMPLOYED.		03-513-13Z
FAMILY HISTORY		03-513-15
MARRIED 1926	PARA 6 GRAVIDA 6	03-513-15A
HUSBAND	1901 L W	03-513-15B
CHILDREN	FEMALE DEC. AGE 6, BURNS	03-513-16
	MALE 1929 L W	03-513-16A
	MALE 1935 L W	03-513-16B
	MALE 1939 L, MULTIPLE ALLERGIES	03-513-16C
	MALE 1942 L W	03-513-16D
	FEMALE 1945 L W	03-513-16E
MEDICAL HISTORY		03-513-20
SURGERY--TONSILLECTOMY 1946, EXPLORATORY LAPAROTOMY 1952.		03-513-20A
CURRENT URINARY TRACT DIFFICULTIES, PROBABLY CYSTITIS. TEETH--		03-513-20B
COMPLETE EXTRACTION OF UPPER TEETH AGE 28, LOWER TEETH 1957,		03-513-20C
DOUBLE DENTURES. (03-04-59)		03-513-20D
HYSTERECTOMY 1962. NO OTHER SURGERY, FRACTURES OR MAJOR ILLNESSES.		03-513-21A
PATIENT STILL HAS BLADDER DISCOMFORT. HAS OCCASIONAL PAIN IN		03-513-21B
RIGHT EAR. TREATED BY CHIROPRACTOR, HAD RESIDUAL NECK PAIN.		03-513-21C
(09-21-66)		03-513-21D
GAMMA-RAY MEASUREMENTS		03-513-25
03-04-59 RAB,RAC	0.042 UCI HGS 1 TILTING CHAIR	CEM 03-513-25A
09-21-66 RAB,RAC	0.029 UCI HGS 1 TILTING CHAIR	CEM 03-513-25B
09-21-66 RAB,RAC	0.030 UCI HGS 1 7-CRYST-POS	CEM 03-513-25C
COMPUTED TOTAL-BODY RADIUM		03-513-27
03-04-59 0.042 UCI	0.135 UCI TOTAL	0.31 03-513-27A
09-21-66 0.029 UCI	0.094 UCI TOTAL	0.31 03-513-27B
09-21-66 0.030 UCI	0.098 UCI TOTAL	0.31 03-513-27C

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

03-04-59 ANL X-RAY NO. R-109 LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
 PPF NONE.

03-513-30
 03-513-30A
 03-513-30B
 03-513-30C
 03-513-30D

COMPLETE SKELETAL SURVEY

09-21-66 ANL X-RAY NO. R-109B LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
 PPF NONE.

03-513-31A
 03-513-31B
 03-513-31C
 03-513-31D

CLINICAL LABORATORY FINDINGS

03-04-59 HG 15.5 HTC RBC 4.52
 WBC 10,200 DIFF. P 57 ST 2 L 35 M 4 E 1 B 1

03-513-40
 03-513-40A
 03-513-40B

09-21-66 HG 14.4 HTC 42 RBC
 WBC 11,500 DIFF. P 60 ST L 34 M 5 E 1 B

03-513-41A
 03-513-41B

060 -01 EXPLORATORY LAPAROTOMY
 634 -12 TONSILLECTOMY
 730 -100.0 CHRONIC CYSTITIS
 782 -10 HYSTERECTOMY

03-513-67
 03-513-67A
 03-513-67B
 03-513-67C

DATA REVISED 11-06-67

03-513-99

PATIENT 03-514	BORN 10-04-09	03-514-01
		03-514-02
FEMALE		03-514-03
		03-514-05
SOURCE OF CASE	SEARCH BY CEM	03-514-10
EXPOSURE	DIAL PAINTER 01	03-514-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 1 YEAR FROM 1925 TO 1926,		03-514-13
THEN FOR 3 YEARS, OTTAWA, ILL. TOTAL OF 4 YEARS, 1925 TO 1929.		03-514-13A
PAINTED DIALS. POINTED BRUSH IN HER MOUTH ONLY WHILE SHE WORKED		03-514-13B
AT STREATOR. NEVER PAINTED ANY PART OF HER BODY.		03-514-13C
ASSUMED WORK PERIOD 06-01-1925 TO 06-01-1929		03-514-13*
15.65 YEARS OF AGE WHEN FIRST EMPLOYED.		03-514-13Z
FAMILY HISTORY		03-514-15
MARRIED 1936	PARA 2 GRAVIDA 2	03-514-15A
HUSBAND	1907	03-514-15B
CHILDREN	FEMALE 1938 L.W.	03-514-16
	FEMALE 1943 L.W.	03-514-16A
MEDICAL HISTORY		03-514-20
NO SURGERY AND HAS NEVER BEEN HOSPITALIZED FOR ANY ILLNESS.		03-514-20A
INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR MILD CHRONIC SINUSITIS.		03-514-20B
DENTAL HISTORY--APPROXIMATELY 10 TEETH EXTRACTED. (03-04-59)		03-514-20C
GAMMA-RAY MEASUREMENTS		03-514-25
03-04-59	RAB,RAC 0.008 UCI HGS 1 TILTING CHAIR CEM	03-514-25A
COMPUTED TOTAL-BODY RADIUM		03-514-27
03-04-59	0.008 UCI 0.026 UCI TOTAL 0.31	03-514-27A
X-RAY EXAMINATION		03-514-30
	NOT DONE	
CLINICAL LABORATORY FINDINGS		03-514-40
	NOT DONE	
320 -100 SINUSITIS		03-514-67
DATA REVISED 08-07-67		03-514-99

PATIENT 03-515	BORN 08-23-08	03-515-01
		03-515-02
		03-515-03
FEMALE		03-515-05
SOURCE OF CASE	SEARCH BY CEM	03-515-10
EXPOSURE	DIAL PAINTER 01	03-515-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., JULY 1925 TO JUNE 1926.		03-515-13
RADIUM DIAL CO., OTTAWA, ILL., JULY 1926 TO APPROX. APRIL 1927.		03-515-13A
PAINTED NUMERALS ON DIALS. POINTED BRUSH IN MOUTH PART OF TIME.		03-515-13B
ASSUMED WORK PERIOD 07-01-1925 TO 04-01-1927		03-515-13*
16.85 YEARS OF AGE WHEN FIRST EMPLOYED.		03-515-13Z
FAMILY HISTORY		03-515-15
MARRIED 1933	PARA 6 GRAVIDA 8 (2 MISCARRIAGES)	03-515-15A
HUSBAND 1904	L W (DIABETES)	03-515-15B
CHILDREN		03-515-16
MALE 1934	L W	03-515-16A
MALE 1935	L W	03-515-16B
MALE 1937	L W	03-515-16C
MALE 1946	L W	03-515-16D
FEMALE 1948	L W	03-515-16E
MALE 1951	L W	
MEDICAL HISTORY		03-515-20
TONSILLECTOMY AGE 20, THYROID SURGERY AGE 19. HISTORY STOMACH		03-515-20A
ULCER 1950 BUT NO SYMPTOMS SINCE THAT TIME. NO OTHER SERIOUS		03-515-20B
ILLNESSES. INQUIRY BY SYSTEMS--OCCASIONAL SEVERE LOW BACKACHES.		03-515-20C
DENTAL HISTORY--ALL REMAINING TEETH EXTRACTED 1957 BECAUSE OF		03-515-20D
PYORRHEA. (03-05-59)		03-515-20E
GAMMA-RAY MEASUREMENTS		03-515-25
03-05-59 RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM		03-515-25A
COMPUTED TOTAL-BODY RADIUM		03-515-27
03-05-59 0.003 UCI 0.011 UCI TOTAL 0.31		03-515-27A
X-RAY EXAMINATION		03-515-30
PARTIAL SKELETAL SURVEY		03-515-30A
03-05-59 ANL X-RAY NO. R-111 LOC. ANL		03-515-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-515-30C
PPF NONE.		03-515-30D
CLINICAL LABORATORY FINDINGS		03-515-40
03-05-59 HG 13.9 HTC RBC 4.28		03-515-40A
WBC 6100 DIFF. P 65 ST L 29 M 4 E 2 B		03-515-40B
634 -12 TONSILLECTOMY		03-515-67
640 -951 ULCER OF THE STOMACH		03-515-67A
810 -12 THYROIDECTOMY, TOTAL		03-515-67B

PATIENT 03-516	BORN 03-24-11	03-516-01
		03-516-02
		03-516-03
		03-516-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-516-10
EXPOSURE	DIAL PAINTER 01	03-516-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., AUTUMN 1925 TO JULY 1926.		03-516-13
RADIUM DIAL CO., OTTAWA, ILL., JULY 1926 TO MARCH 1929 AND		03-516-13A
1932 TO 1934. PAINTED DIALS. DID NOT POINT BRUSH IN MOUTH, USED		03-516-13B
INSTEAD JAR OF WATER AND BLOTTER. NEVER PAINTED ANY PART OF		03-516-13C
OWN BODY.		03-516-13D
ASSUMED WORK PERIOD 08-01-1925 TO 03-01-1929		03-516-13*
14.35 YEARS OF AGE WHEN FIRST EMPLOYED.		03-516-13Z
FAMILY HISTORY		03-516-15
MARRIED 1929	PARA 4 GRAVIDA 4	03-516-15A
CHILDREN		
MALE 1931	L W	03-516-16
FEMALE 1933	L W	03-516-16A
MALE 1944	L W	03-516-16B
FEMALE 1947	L W	03-516-16C
MEDICAL HISTORY		03-516-20
NO SURGERY OR FRACTURES. SEVERE ASTHMA STARTED AGE 23,		03-516-20A
HOSPITALIZATION FOR THIS CONDITION 1934, STILL HAS OCCASIONAL		03-516-20B
ASTHMATIC ATTACKS EACH SPRING. TEETH--COMPLETE EXTRACTION OF		03-516-20C
TEETH UPPER JAW AND MOLARS LOWER JAW, WEARS DENTURES. (03-05-59)		03-516-20D
GAMMA-RAY MEASUREMENTS		03-516-25
03-05-59 RAB,RAC 0.006 UCI HGS 1 TILTING CHAIR CEM		03-516-25A
COMPUTED TOTAL-BODY RADIUM		03-516-27
03-05-59 0.006 UCI 0.018 UCI TOTAL 0.31		03-516-27A
X-RAY EXAMINATION		03-516-30
COMPLETE SKELETAL SURVEY		03-516-30A
03-05-59 ANL X-RAY NO. R-110 LOC. ANL		03-516-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-516-30C
PPF MASTOID AIR CELLS APPEAR SOMEWHAT MORE SCLEROTIC THAN		03-516-30D
NORMAL. CERVICAL SPINE HAS EXAGGERATED LORDOSIS.		03-516-30E
CLINICAL LABORATORY FINDINGS		03-516-40
03-05-59 HG 15.1 HTC RBC 4.86		03-516-40A
WBC 9200 DIFF. P 75 ST L 22 M 1 E 2 B		03-516-40B
350 -390 ASTHMA		03-516-67
TOOTH MEASUREMENT		03-516-73
SAMPLE 9.01 TOOTH CANINE		03-516-73A
TOTAL WT. 0.6713 CALC.GMS.CA. 0.188C		03-516-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-516-73C
NOT DETECTABLE		03-516-73D
SAMPLE 9.02 TOOTH INCISOR		03-516-74A
TOTAL WT. 0.7872 CALC.GMS.CA. 0.2204		03-516-74B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-516-74C
8.84 4.0105 2.22		03-516-74D

SAMPLE 9.03	TOOTH	PREMOLAR			03-516-75A
TOTAL WT. 0.7512			CALC.GMS.CA. 0.2103		03-516-75B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA		RATIO-TOOTH/BODY	03-516-75C
7.31		34.75		1.93	03-516-75D
SAMPLE 9.04	TOOTH	PREMOLAR			03-516-76A
TOTAL WT. 0.5389			CALC.GMS.CA. 0.1509		03-516-76B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA		RATIO-TOOTH/BODY	03-516-76C
2.00		13.25		0.736	03-516-76D
SAMPLE 9.05	TOOTH	INCISOR			03-516-77A
TOTAL WT. 0.858			CALC.GMS.CA. 0.2402		03-516-77B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA		RATIO-TOOTH/BODY	03-516-77C
4.66		19.4		1.08	03-516-77D
SAMPLE 9.06	TOOTH	INCISOR			03-516-78A
TOTAL WT. 0.5229			CALC.GMS.CA. 1464		03-516-78B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA		RATIO-TOOTH/BODY	03-516-78C
NOT DETECTABLE					03-516-78D
SAMPLE 9.07	TOOTH	INCISOR			03-516-79A
TOTAL WT. 0.5730			CALC.GMS.CA. 0.1604		03-516-79B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA		RATIO-TOOTH/BODY	03-516-79C
NOT DETECTABLE					03-516-79D

PATIENT 03-517	BORN 10-04-22	03-517-01
		03-517-02
		03-517-03
		03-517-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-517-10
EXPOSURE	DIAL PAINTER 01	03-517-12
SOURCE KIRK-RICH DIAL CO., CHICAGO, ILL., 1943 TO 1948. PAINTED WATCH DIALS, RETOUCHING WORK. NEVER POINTED BRUSH IN MOUTH.		03-517-13
		03-517-13A
FAMILY HISTORY		03-517-15
MARRIED 1948	PARA 1 GRAVIDA 1	03-517-15A
HUSBAND	1921 L W	03-517-15B
CHILDREN	MALE L W	03-517-16
MEDICAL HISTORY		03-517-20
NO SERIOUS ILLNESSES OR SURGERY. INQUIRY BY SYSTEMS NEGATIVE		03-517-20A
EXCEPT FOR HISTORY HEADACHES FOR 1 YEAR 1948, POSSIBLY RELATED		03-517-20B
TO USE MAGNIFYING GLASS DURING WORK. TEETH--7 EXTRACTIONS.		03-517-20C
(03-06-51)		03-517-20D
GAMMA-RAY MEASUREMENTS		03-517-25
03-06-59 RAB,RAC	C.001 UCI HGS 1 TILTING CHAIR CEM	03-517-25A
COMPUTED TOTAL-BODY RADIUM		03-517-27
03-06-59 0.001 UCI	0.004 UCI TOTAL 0.31	03-517-27A
X-RAY EXAMINATION	NOT DONE	03-517-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-517-40
DATA REVISED 08-07-67		03-517-99

PATIENT 03-518	BORN 09-01-21	03-518-01
		03-518-02
		03-518-03
		03-518-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-518-10
EXPOSURE	DIAL PAINTER 01	03-518-12
SOURCE KIRK-RICH DIAL CORP., CHICAGO, ILL., MAY 1940 TO AUG. 1940.		03-518-13
CENTRAL DIAL CO., CHICAGO, ILL., 3 TO 5 MONTHS STARTING MAY 1941.		03-518-13A
KIRK-RICH DIAL CORP., APPROX. AUG. 1941 TO APRIL 1949. PAINTED		03-518-13B
DIALS AND OTHER INSTRUMENTS WITH LUMINOUS MATERIAL. NEVER POINTED		03-518-13C
BRUSH IN MOUTH.		03-518-13D
ASSUMED WORK PERIOD 05-01-1940 TO 04-01-1949		03-518-13*
18.66 YEARS OF AGE WHEN FIRST EMPLOYED.		03-518-13Z
FAMILY HISTORY		03-518-15
MARRIED JULY 1947	PARA 2	GRAVIDA 3 (1 MISCARRIAGE)
HUSBAND	1916	L W
		03-518-15A
		03-518-15B
CHILDREN	MALE 1950	L W
	FEMALE 1952	L W
		03-518-16
		03-518-16A
MEDICAL HISTORY		03-518-20
NO SERIOUS ILLNESSES OR SURGERY. INQUIRY BY SYSTEMS NEGATIVE.		03-518-20A
TEETH--MANY DENTAL CARIES, 6 EXTRACTED. (03-06-59)		03-518-20B
GAMMA-RAY MEASUREMENTS		03-518-25
03-06-59 RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM		03-518-25A
COMPUTED TOTAL-BODY RADIUM		03-518-27
03-06-59 0.003 UCI 0.011 UCI TOTAL 0.31		03-518-27A
X-RAY EXAMINATION		03-518-30
PARTIAL SKELETAL SURVEY		03-518-30A
03-06-59 ANL X-RAY NO. R-112 LOC. ANL		03-518-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-518-30C
PPF NONE.		03-518-30D
CLINICAL LABORATORY FINDINGS		03-518-40
03-06-59 HG 14.0 HTC RBC 4.24		03-518-40A
WBC 8100 DIFF. P 61 ST L 29 M 1 E 3 B		03-518-40B

PATIENT 03-519	BORN 03-23-03	03-519-01
		03-519-02
		03-519-03
FEMALE		03-519-05
SOURCE OF CASE	SEARCH BY CEM	03-519-10
EXPOSURE	DIAL PAINTER 01	03-519-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 2 MONTHS SUMMER 1924. PAINTED		03-519-13
DIALS. POINTED BRUSH IN MOUTH BUT DID NOT PAINT OWN BODY.		03-519-13A
ASSUMED WORK PERIOD 07-01-1924 TO 09-01-1924		03-519-13*
21.27 YEARS OF AGE WHEN FIRST EMPLOYED.		03-519-13Z
FAMILY HISTORY		03-519-15
MARRIED 1925	PARA 0 GRAVIDA 2 (2 MISCARRIAGES)	03-519-15A
HUSBAND	1906 L W	03-519-15B
MEDICAL HISTORY		03-519-20
NO SURGERY. PATIENT HAD KIDNEY STONE FEB. 1952. DIAGNOSIS OF		03-519-20A
TUBERCULOSIS OF KIDNEY FEB. 1953, TREATED BY DRUGS FROM 1953		03-519-20B
TO 1957. INQUIRY BY SYSTEMS--DIZZINESS FOR 2 YEARS UP TO FEB.		03-519-20C
1959, BLURRED VISION PRESENT TIME, AND LOW BACK PAINS SINCE 1957.		03-519-20D
DENTAL HISTORY--SEVERAL EXTRACTIONS. (03-09-59)		03-519-20E
GAMMA-RAY MEASUREMENTS		03-519-25
03-09-59 RAB,RAC 0.030 UCI HGS 1 TILTING CHAIR CEM		03-519-25A
COMPUTED TOTAL-BODY RADIUM		03-519-27
03-09-59 0.030 UCI 0.098 UCI TOTAL 0.31		03-519-27A
X-RAY EXAMINATION		03-519-30
COMPLETE SKELETAL SURVEY		03-519-30A
03-09-59 ANL X-RAY NO. R-115 LOC. ANL		03-519-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-519-30C
PPF NONE.		03-519-30D
CLINICAL LABORATORY FINDINGS		03-519-40
03-09-59 HG 12.3 HTC RBC 4.28		03-519-40A
WBC 9300 DIFF. P 63 ST L 32 M 3 E 2 B		03-519-40B
710 -123 TUBERCULOSIS OF THE KIDNEY		03-519-67
722 -615 CALCULUS IN THE PELVIS OF THE KIDNEY		03-519-67A
DATA REVISED 08-07-67		03-519-99

PATIENT 03-520	BORN 09-07-07	03-520-01
		03-520-02
		03-520-03
		03-520-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-520-10
EXPOSURE	DIAL PAINTER 01	03-520-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SUMMER 1925 TO APRIL 1927,		03-520-13
AND SPRING 1929 TO OCT. 1934. LUMINOUS PROCESSES, INC., OTTAWA,		03-520-13A
INTERMITTENTLY UNTIL 1948, TOTAL ABOUT 13 YEARS. PAINTED DIALS		03-520-13B
AT ALL JOBS, BUT POINTED BRUSH IN MOUTH ONLY DURING FIRST		03-520-13C
EMPLOYMENT FROM 1925 TO 1927. SUBSEQUENTLY, GLASS PENS USED,		03-520-13D
BRUSHES USED FOR CLEAN-UP WORK, WHICH WERE CLEANED WITH SPONGES.		03-520-13E
NEVER PAINTED ANY PART OF HER BODY.		03-520-13F
ASSUMED WORK PERIOD 07-01-1925 TO 04-01-1927		03-520-13*
17.81 YEARS OF AGE WHEN FIRST EMPLOYED.		03-520-13Z
FAMILY HISTORY		03-520-15
MARRIED 1927	PARA 1 GRAVIDA 1 ADOPTED 1	03-520-15A
HUSBAND	DECEASED 10-30-62	03-520-15B
CHILDREN MALE 1928 L W		03-520-16
MEDICAL HISTORY		03-520-20
GYNECOLOGICAL SURGERY 1936--REPAIR OF LACERATIONS INCURRED AT		03-520-20A
CHILDBIRTH, HYSTERECTOMY AND APPENDECTOMY PERFORMED 1951. NO		03-520-20B
OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR		03-520-20C
HISTORY TREATMENTS FOR ARTHRITIS OF LEGS ABOUT 1952. DENTAL		03-520-20D
HISTORY--WEARS PARTIAL UPPER DENTURE AND HAS LOST MOLARS OF		03-520-20E
LOWER JAW. (03-09-59)		03-520-20F
PATIENT HAS HAD NO FRACTURES OR SURGERY, NO SERIOUS ILLNESSES.		03-520-21A
WORKS FULL 40 HOUR WEEK AS NURSES AID. INQUIRY BY SYSTEMS REVEALS		03-520-21B
OCCASIONAL SINUS TROUBLE, HEARTBURN, NOCTURIA. TEETH ESSENTIALLY		03-520-21C
UNCHANGED, ONE MORE TOOTH EXTRACTED. (10-10-66)		03-520-21D
GAMMA-RAY MEASUREMENTS		03-520-25
03-09-59 RAB,RAC C.046 UCI HGS 1 TILTING CHAIR CEM		03-520-25A
10-10-66 RAB,RAC C.033 UCI HGS 1 TILTING CHAIR CEM		03-520-25B
COMPUTED TOTAL-BODY RADIUM		03-520-27
03-09-59 0.046 UCI 0.157 UCI TOTAL 0.31		03-520-27A
10-10-66 0.033 UCI 0.106 UCI TOTAL 0.31		03-520-27B

X-RAY EXAMINATION				03-520-30
COMPLETE SKELETAL SURVEY				03-520-30A
03-09-59	ANL	X-RAY NO. R-113	LOC. ANL	03-520-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.				03-520-30C
PPF	NONE.		SCORE 0	03-520-30D
COMPLETE SKELETAL SURVEY				03-520-31A
10-10-66	ANL	X-RAY NO. R-113B	LOC. ANL	03-520-31B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.				03-520-31C
PPF SCATTERED AREAS OF BONE RESORPTION IN LEFT PUBIS, BOTH				03-520-31D
PATELLAS, RIGHT FIBULA, LEFT FEMUR. SCLEROSIS OF PETROUS PYRAMIDS				03-520-31E
BILATERALLY.				03-520-31F
CLINICAL LABORATORY FINDINGS				03-520-40
03-09-59	HG 13.5	HTC	RBC 4.84	03-520-40A
WBC 11,000	DIFF. P 71	ST 3	L 21 M 5 E B	03-520-40B
10-10-66	HG 13.6	HTC 41	RBC 4.24	03-520-41A
WBC 6900	DIFF. P 68	ST	L 27 M 5 E 1 B	03-520-41B
661	-12	APPENDECTOMY		03-520-67
782	-10	HYSTERECTOMY		03-520-67A
DATA REVISED 08-07-67				03-520-99

PATIENT	03-521	BORN	08-29-07	03-521-01
	DECEASED			03-521-02
				03-521-02A
				03-521-03
	FEMALE			03-521-05
DECEASED	09-09-61			03-521-06
	DEATH CERT.NO.	AUTOPSY YES		03-521-07
	INTERMENT	OAKWOOD MEMORIAL PARK, OTTAWA, ILL.		03-521-08
CAUSES OF DEATH		CEREBROVASCULAR ACCIDENT, MYOCARDIAL ISCHEMIA		03-521-09
SOURCE OF CASE		SEARCH BY CEM		03-521-10
EXPOSURE		DIAL PAINTER		03-521-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS, FROM JULY 1925 TO SPRING 1926, ABOUT 9 MONTHS. PAINTED DIALS. OCCASIONALLY POINTED BRUSH IN HER MOUTH, BUT USUALLY USED ARM PIT OF WORK SMOCK TO POINT BRUSH. NEVER PAINTED ANY PART OF HER BODY.			03-521-13
	ASSUMED WORK PERIOD 07-01-1925 TO 04-01-1926			03-521-13A
	17.83 YEARS OF AGE WHEN FIRST EMPLOYED.			03-521-13B
				03-521-13C
				03-521-13*
				03-521-13Z
FAMILY HISTORY				03-521-15
MARRIED	1926	PARA 3	GRAVIDA 3	03-521-15A
HUSBAND		1903	L W	03-521-15B
CHILDREN	FEMALE	1928	L W	03-521-16
	FEMALE	1931	L W	03-521-16A
	MALE	1936	L W	03-521-16B
MEDICAL HISTORY				03-521-20
	SURGERY--TONSILLECTOMY IN CHILDHOOD, APPENDECTOMY 1936, PARTIAL HYSTERECTOMY 1953. NO OTHER ILLNESSES. INQUIRY BY SYSTEMS--			03-521-20A
	SWOLLEN ANKLES A YEAR AGO ASSOCIATED WITH ELEVATED BLOOD PRESSURE, RESPONDED TO TREATMENT. DENTAL HISTORY--9 TEETH EXTRACTED.			03-521-20B
	(03-09-59)			03-521-20C
				03-521-20D
				03-521-20E
GAMMA-RAY MEASUREMENTS				03-521-25
03-09-59	RAB,RAC	C.003 UCI	HGS 1 TILTING CHAIR CEM	03-521-25A
COMPUTED TOTAL-BODY RADIUM				03-521-27
03-09-59	0.003 UCI	0.010 UCI TOTAL	0.31	03-521-27A
X-RAY EXAMINATION				03-521-30
	COMPLETE SKELETAL SURVEY			03-521-30A
03-09-59	ANL	X-RAY NO. R-114	LOC. ANL	03-521-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0			03-521-30C
	PPF NONE			03-521-30D

CLINICAL LABORATORY FINDINGS

03-09-59 HG 13.4 HTC RBC 3.55
WBC 8600 DIFF. P 61 ST L 34 M 4 E 1 B

03-521-40
03-521-40A
03-521-40B

SPECIMENS AVAILABLE

TOOTH EXTRACTED 05-06-59

CEM

03-521-50
03-521-50A

47X -X30 ESSENTIAL HYPERTENSION
634 -12 TONSILLECTOMY
661 -12 APPENDECTOMY
782 -13 HYSTERECTOMY, PARTIAL

03-521-67
03-521-67A
03-521-67B
03-521-67C

DATA REVISED 10-02-67

03-521-99

PATIENT	03-522	BORN	12-23-98	03-522-01
				03-522-02
				03-522-03
				03-522-05
	FEMALE			
OTHER PERTINENT NOS.	AMBH			03-522-05A
SOURCE OF CASE	SEARCH BY CEM			03-522-10
LITERATURE CITATION				03-522-11
	MILLER, ANL-6839 (1964) PP. 18-39.			03-522-11A
EXPOSURE	DIAL PAINTER	01		03-522-12
SOURCE	RADIUM DIAL CO., PERU, ILL., 1 YEAR 1921 TO 1922. PAINTED NUMERALS AND HANDS. POINTED BRUSH IN MOUTH OCCASIONALLY. NEVER PAINTED ANY PART OF HER BODY.			03-522-13
	ASSUMED WORK PERIOD 06-01-1921 TO 06-01-1922			03-522-13A
	22.43 YEARS OF AGE WHEN FIRST EMPLOYED.			03-522-13B
				03-522-13*
				03-522-13Z
FAMILY HISTORY				03-522-15
MARRIED 1918	PARA 1	GRAVIDA 2 (1 MISCARRIAGE)		03-522-15A
HUSBAND	1892	L W		03-522-15B
CHILDREN	MALE	1924	L W	03-522-16
MEDICAL HISTORY				03-522-20
	NO SURGERY AND NO SERIOUS MEDICAL ILLNESS. BOTHERED WITH ARTHRITIS CONSISTING OF SWELLING AND PAIN OF LEFT ELBOW FOR 6 MONTHS AFTER WORKING AT ORDNANCE PLANT IN AMBOY, ILL. FOR 3 YEARS WHERE SHE WAS CLOSE TO EXPLOSIVE POWDER. HAD RHEUMATISM AS CHILD AND BEDRIDDEN AS RESULT. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--PATIENT HAS COMPLETE UPPER DENTURE AND REMAINING TEETH IN LOWER JAW ARE SCHEDULED FOR EARLY EXTRACTION. (03-10-59)			03-522-20A
				03-522-20B
				03-522-20C
				03-522-20D
				03-522-20E
				03-522-20F
				03-522-20G
				03-522-20H
	INTERVAL HISTORY NEGATIVE EXCEPT FOR RECENT ARTHRITIC PAIN IN RIGHT HIP. (09-28-64)			03-522-21A
				03-522-21B
GAMMA-RAY MEASUREMENTS				03-522-25
03-10-59	RAB,RAC	0.059 UCI	HGS 1 TILTING CHAIR	CEM 03-522-25A
09-28-64	RAB,RAC	0.038 UCI	HGS 1 TILTING CHAIR	CEM 03-522-25B
09-28-64	RAB,RAC	0.043 UCI	HGS 1 7-CRYST-POS	CEM 03-522-25C
COMPUTED TOTAL-BODY RADIUM				03-522-27
03-10-59	0.059 UCI	0.197 UCI TOTAL	0.31	03-522-27A
09-28-64	0.038 UCI	0.121 UCI TOTAL	0.31	03-522-27B
09-28-64	0.043 UCI	0.140 UCI TOTAL	0.31	03-522-27C

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

03-10-59 ANL X-RAY NO. R-117 LOC. ANL
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
PPF NONE.

03-522-30
03-522-30A
03-522-30B
03-522-30C
03-522-30D

COMPLETE SKELETAL SURVEY

09-28-64 ANL X-RAY NO. R-117B LOC. ANL
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
PPF QUESTIONABLE CHANGES IN MASTOID AIR CELLS. SKELETON OTHER-
WISE NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.

03-522-31A
03-522-31B
03-522-31C
03-522-31D
03-522-31E

SPECIAL VIEWS--SINUSES MASTOIDS AND LAMINAGRAMS

03-12-65 U OF C CLINICS UNIT NO. LOC. U OF C
PATIENT WITH RADIUM BURDEN WITH MINIMAL DESTRUCTIVE LESIONS IN
CALVARIUM. MAXILLARY ANTRAL THICKENING BILATERAL BUT WITHOUT
EVIDENCE OF BONE DESTRUCTION. NO POSITIVE EVIDENCE OF ABNORMALITY
OF MASTOID CELLS ON LAMINAGRAPHY.

03-522-32A
03-522-32B
03-522-32C
03-522-32D
03-522-32E
03-522-32F

CLINICAL LABORATORY FINDINGS

03-10-59 HG 13.1 HTC RBC 4.16
WBC 6600 DIFF. P 48 ST 1 L 45 M 4 E 2 B

03-522-40
03-522-40A
03-522-40B

09-28-64 HG 12.3 HTC 40 RBC
WBC 6800 DIFF. P 48 ST 1 L 44 M 6 E 1 B

03-522-41A
03-522-41B

DATA REVISED 02-28-68

03-522-99

PATIENT 03-523	BORN 03-08-00	03-523-01
		03-523-02
		03-523-03
FEMALE		03-523-05
SOURCE OF CASE	SEARCH BY CEM	03-523-10
EXPOSURE	DIAL PAINTER. 01	03-523-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 8 MONTHS APPROX. SEPT. 1923		03-523-13
TO APRIL 1924. PAINTED DIALS. POINTED BRUSH IN MOUTH. NEVER		03-523-13A
PAINTED ANY PART OF HER BODY. WESTCLOX PLANT, LASALLE, ILL.,		03-523-13B
1944 TO PRESENT, HANDLED FINISHED LUMINOUS DIALS OCCASIONALLY.		03-523-13C
MAY HAVE TERMINATED WORK ON 02-28-24.		03-523-13D
ASSUMED WORK PERIOD 09-01-1923 TO 04-01-1924		03-523-13*
23.47 YEARS OF AGE WHEN FIRST EMPLOYED.		03-523-13Z
FAMILY HISTORY		03-523-15
MARRIED 1922	PARA 1 GRAVIDA 1	03-523-15A
HUSBAND	1897 L W	03-523-15B
CHILDREN	FEMALE 1928 L W	03-523-16
MEDICAL HISTORY		03-523-20
APPENDECTOMY AND LEFT OVARECTOMY 1930, RIGHT OVARECTOMY 1932.		03-523-20A
D AND C 1931. TREATED WITH X-RAY AND RADIUM 1933 FOR MENORRHAGIA.		03-523-20B
TUMOR EXCISED FROM LEFT PRE-AURICULAR REGION, TREATED WITH		03-523-20C
EXTERNAL RADIUM APPLICATOR 1946. INQUIRY BY SYSTEMS--MULTIPLE		03-523-20D
MINOR COMPLAINTS, ESSENTIALLY NOT SIGNIFICANT. DENTAL HISTORY--		03-523-20E
7 TEETH LEFT IN UPPER JAR, HAS LOWER DENTURE. (03-10-59)		03-523-20F
GAMMA-RAY MEASUREMENTS		03-523-25
03-10-59 RAB,RAC 0.007 UCI HGS 1 TILTING CHAIR CEM		03-523-25A
COMPUTED TOTAL-BODY RADIUM		03-523-27
03-10-59 0.007 UCI 0.023 UCI TOTAL 0.31		03-523-27A
X-RAY EXAMINATION		03-523-30
COMPLETE SKELETAL SURVEY		03-523-30A
03-10-59 ANL X-RAY NO. R-116 LOC. ANL		03-523-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-523-30C
PPF NONE.		03-523-30D
CLINICAL LABORATORY FINDINGS		03-523-40
03-10-59 HG 13.8 HTC RBC 4.43		03-523-40A
WBC 7200 DIFF. P 58 ST 1 L 37 M 4 E B		03-523-40B
661 -12 APPENDECTOMY		03-523-67
785 -104 DILATATION AND CURRETTAGE OF THE UTERUS		03-523-67A
788 -12 BILATERAL OOPHORECTOMY		03-523-67B
DATA REVISED 08-07-67		03-523-99

PATIENT	03-524	BORN	06-19-03	03-524-01
				03-524-02
				03-524-03
FEMALE				03-524-05
SOURCE OF CASE	SEARCH BY CEM			03-524-10
EXPOSURE	DIAL PAINTER 01			03-524-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 1925 TO SUMMER 1929, LATER FROM 1930 TO 1931. PATIENT COULD NOT REMEMBER DATES DEFINITELY. PAINTED DIALS, POINTED BRUSH IN MOUTH, LATER WORKED WITH INKING MACHINE. WEIGHED LUMINOUS MATERIAL FOR SEVERAL WEEKS. SUBSEQUENTLY, BECAME DARKROOM INSPECTOR 1930. NEVER PAINTED ANY PART OF HER BODY ALTHOUGH WORK SMOCK GLOWED IN DARK. ASSUMED WORK PERIOD 07-01-1925 TO 07-01-1929 22.03 YEARS OF AGE WHEN FIRST EMPLOYED.			03-524-13 03-524-13A 03-524-13B 03-524-13C 03-524-13D 03-524-13E 03-524-13* 03-524-13Z
FAMILY HISTORY				03-524-15
MARRIED 1929	PARA 0	GRAVIDA C		03-524-15A
HUSBAND	1899	L W		03-524-15B
MEDICAL HISTORY				03-524-20
APPENDECTOMY 1923, BILATERAL OOPHORECTOMY IN MID 1920S. FRACTURE OF LOWER THORACIC SPINE AUTO ACCIDENT 1955. FRACTURE OF LEFT WRIST, FEB. 1956. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--EPISODE OF COLITIS 1942 CONTROLLED BY DIET, MIGRAINE HEADACHES PRECEDING MARRIAGE, RECURRENT OCCASIONAL KIDNEY INFECTION. DENTAL HISTORY--PARTIAL UPPER DENTURE AND SEVERAL WISDOM TEETH EXTRACTED. (03-19-59)			03-524-20A 03-524-20B 03-524-20C 03-524-20D 03-524-20E 03-524-20F 03-524-20G	
GAMMA-RAY MEASUREMENTS				03-524-25
03-19-59	RAB,RAC	0.021 UCI	HGS 1 TILTING CHAIR CEM	03-524-25A
COMPUTED TOTAL-BODY RADIUM				03-524-27
03-19-59	0.021 UCI	0.067 UCI TOTAL	0.31	03-524-27A
X-RAY EXAMINATION				03-524-30
COMPLETE SKELETAL SURVEY				03-524-30A
03-19-59	ANL	X-RAY NO. R-118	LOC. ANL	03-524-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 2.5	03-524-30C
PPF SCATTERED TINY AREAS OF BONE RESORPTION IN THE SKULL, RIGHT ULNA AND LEFT RADIUS. COMPRESSION FRACTURE OF T 12, PROBABLY NOT RELATED TO RADIUM.				03-524-30D 03-524-30E 03-524-30F
CLINICAL LABORATORY FINDINGS				03-524-40
03-19-59	HG 11.7	HTC	RBC 4.13	03-524-40A
WBC 6300	DIFF. P 55	ST 2	L 36 M 7 E B	03-524-40B
222 -416	FRACTURE OF THE THORACIC SPINE			03-524-67
661 -12	APPENDECTOMY			03-524-67A
788 -12	BILATERAL OOPHORECTOMY			03-524-67B
930 -X41	MIGRAINE			03-524-67C
23123-416	FRACTURE OF THE DISTAL THIRD OF THE RADIUS			03-524-67D
23223-416	FRACTURE OF THE DISTAL THIRD OF THE ULNA			03-524-67E
DATA REVISED	08-07-67			03-524-99

PATIENT 03-525	BORN 04-20-11	03-525-01
FEMALE		03-525-02
		03-525-05
SOURCE OF CASE	SEARCH BY CEM	03-525-10
EXPOSURE	DIAL PAINTER 01	03-525-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., JAN. 1931 TO JAN. 1932, LATER		03-525-13
OCT. 1933 TO OCT. 1934. LUMINOUS PROCESSES, INC., OTTAWA, ILL.,		03-525-13A
OCT. 1934 TO PRESENT (MARCH 1959). PAINTED DIALS AND HANDS,		03-525-13B
OTHER MISCELLANEOUS WORK. NEVER POINTED BRUSH IN MOUTH.		03-525-13C
ASSUMED WORK PERIOD 01-01-1931 TO 03-18-1959		03-525-13*
19.69 YEARS OF AGE WHEN FIRST EMPLOYED.		03-525-13Z
FAMILY HISTORY		03-525-15
NEVER MARRIED		03-525-15A
MEDICAL HISTORY		03-525-20
NASAL POLYPECTOMY 1931. NO OTHER SURGERY OR SERIOUS ILLNESSES.		03-525-20A
INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR CHRONIC SINUSITIS. DENTAL		03-525-20B
HISTORY--THREE TEETH EXTRACTED. (03-19-59)		03-525-20C
GAMMA-RAY MEASUREMENTS		03-525-25
03-19-59 RAB,RAC 0.006 UCI HGS 1 TILTING CHAIR CEM		03-525-25A
COMPUTED TOTAL-BODY RADIUM		03-525-27
03-19-59 0.006 UCI 0.019 UCI TOTAL 0.31		03-525-27A
X-RAY EXAMINATION		03-525-30
DENTAL FILMS--TWO PRE-MOLARS		03-525-30A
10-05-54 LOC. DR. W.P. DAUGHERTY		03-525-30B
NO CHANGES TYPICAL OF RADIUM DEPOSITION.		03-525-30C
PARTIAL SKELETAL SURVEY		03-525-31A
03-19-59 ANL X-RAY NO. R-119 LOC. ANL		03-525-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-525-31C
PPF NONE.		03-525-31D
CLINICAL LABORATORY FINDINGS		03-525-40
03-19-59 HG 14.2 HTC RBC 4.16		03-525-40A
WBC 8500 DIFF. P 58 ST L 27 M 3 E 12 B		03-525-40B
310 -11 EXCISION OF NASAL POLYP		03-525-67
320 -100 SINUSITIS		03-525-67A

PATIENT	03-526	BORN	06-01-96	03-526-01
				03-526-02
				03-526-03
				03-526-05
	FEMALE			
SOURCE OF CASE		SEARCH BY CEM		03-526-10
EXPOSURE		DIAL PAINTER	01	03-526-12
SOURCE	RADIUM DIAL CO., STREATOR, ILL., FROM 1924 TO 1925 (MORE LIKELY 1925 TO 1926). PAINTED DIALS FOR 2 WEEKS, WEIGHED AND MEASURED MATERIAL 8 MONTHS, WORKED AS INSPECTOR 3-1/2 MONTHS. POINTED BRUSH IN MOUTH DURING FIRST 2 WEEKS, OCCASIONALLY THERE- AFTER DURING INSPECTION. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 05-01-1925 TO 05-01-1926 28.90 YEARS OF AGE WHEN FIRST EMPLOYED.			03-526-13 03-526-13A 03-526-13B 03-526-13C 03-526-13D 03-526-13* 03-526-13Z
FAMILY HISTORY				03-526-15
MARRIED 1920		PARA 1	GRAVIDA 1	03-526-15A
HUSBAND		1890	L W	03-526-15B
CHILDREN	FEMALE	1932	L W	03-526-16
MEDICAL HISTORY				03-526-20
	FRACTURE RIGHT ELBOW 1940. CHOLECYSTECTOMY AND APPENDECTOMY 1956. INQUIRY BY SYSTEMS--2 EPISODES OF MOMENTARY BLINDNESS, DIZZINESS, DIARRHEA AND VOMITING, FOR WHICH DIAGNOSIS OF INNER-EAR DISEASE WAS MADE 1958. DENTAL HISTORY--TEETH NORMAL, 4 EXTRACTIONS. (04-21-59)			03-526-20A 03-526-20B 03-526-20C 03-526-20D 03-526-20E
GAMMA-RAY MEASUREMENTS				03-526-25
	04-21-59	RAB,RAC	LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM	03-526-25A
COMPUTED TOTAL-BODY RADIUM				03-526-27
	04-21-59	LESS THAN 0.0003 UCI	LESS THAN 0.001 UCI TOTAL 0.31	03-526-27A
X-RAY EXAMINATION				03-526-30
	COMPLETE SKELETAL SURVEY			03-526-30A
	04-21-59	ANL	X-RAY NO. R-121 LOC. ANL	03-526-30B
	MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3			03-526-30C
	PPF SOLITARY AREA OF BONE RESORPTION RIGHT OCCIPITAL BCNE,			03-526-30D
	WHICH MAY BE A BONE CYST. ISOLATED AREAS OF BONE RESORPTION			03-526-30E
	RIGHT CLAVICLE AND IN FIFTH LEFT METATARSAL. MODERATE COARSENING			03-526-30F
	OF TRABECULAR PATTERN THROUGHOUT WINGS OF ILIUM.			03-526-30G
CLINICAL LABORATORY FINDINGS				03-526-40
	04-21-59	HG 12.5	HTC RBC 4.55	03-526-40A
	WBC 9500	DIFF. P 62	ST L 33 M 4 E 1 B	03-526-40B
X85 -910	LABYRINTHITIS, DUE TO UNKNOWN CAUSE			03-526-67
661 -12	APPENDECTOMY			03-526-67A
687 -12	CHOLECYSTECTOMY			03-526-67B
23033-416	FRACTURE OF THE ELBOW			03-526-67C
DATA REVISED	08-07-67			03-526-99

PATIENT 03-527	BORN 07-16-09	03-527-01
		03-527-02
		03-527-03
		03-527-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-527-10
EXPOSURE	DIAL PAINTER 01	03-527-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 4 TO 5 MONTHS JAN. TO		03-527-13
JUNE 1925 (MORE LIKELY JANUARY TO MAY 1926). RADIUM DIAL CO.,		03-527-13A
OTTAWA, ILL., 2 YEARS, 1925 TO 1927 (MORE LIKELY 1926 TO 1928).		03-527-13B
PAINTED NUMERALS ON CLOCK FACES. POINTED BRUSH BETWEEN FINGERS,		03-527-13C
NEVER IN MOUTH, NEVER PAINTED OWN BODY.		03-527-13D
ASSUMED WORK PERIOD 01-01-1926 TO 07-01-1928		03-527-13*
16.45 YEARS OF AGE WHEN FIRST EMPLOYED.		03-527-13Z
FAMILY HISTORY		03-527-15
MARRIED 1949	PARA 0 GRAVIDA 0	03-527-15A
MEDICAL HISTORY		03-527-20
TONSILLECTOMY 1940, HYSTERECTOMY 1949. NO OTHER SERIOUS ILL-		03-527-20A
NESSES. INQUIRY BY SYSTEMS--OCCASIONAL MIGRAINE HEADACHES, OTHER		03-527-20B
WISE NEGATIVE. DENTAL HISTORY--3 TEETH EXTRACTED. (04-21-59)		03-527-20C
GAMMA-RAY MEASUREMENTS		03-527-25
04-21-59 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-527-25A
COMPUTED TOTAL-BODY RADIUM		03-527-27
04-21-59 0.002 UCI 0.005 UCI TOTAL 0.31		03-527-27A
X-RAY EXAMINATION		03-527-30
PARTIAL SKELETAL SURVEY		03-527-30A
04-21-59 ANL X-RAY NO. R-122 LOC. ANL		03-527-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-527-30C
PPF NONE, EXCEPT FOR SMALL CYSTIC AREAS AT HEAD OF RIGHT AND		03-527-30D
LEFT FIRST METATARSAL, PROBABLY UNRELATED TO RADIUM.		03-527-30E
CLINICAL LABORATORY FINDINGS		03-527-40
04-21-59 HG 12.6 HTC RBC 4.40		03-527-40A
WBC 9100 DIFF. P 67 ST 2 L 24 M 4 E 2 B 2		03-527-40B
634 -12 TONSILLECTOMY		03-527-67
782 -10 HYSTERECTOMY		03-527-67A
930 -X41 MIGRAINE		03-527-67B
DATA REVISED 08-08-67		03-527-99

PATIENT 03-528	BORN 07-14-04	03-528-01
		03-528-02
FEMALE		03-528-03
		03-528-05
OTHER PERTINENT NOS.	FRENCH HOSP.	03-528-05A
SOURCE OF CASE	SEARCH BY CEM	03-528-10
EXPOSURE	DIAL PAINTER 01	03-528-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1923 TO 1932, PERIOD OF NINE YEARS, ALSO WORKED ONE DAY PER WEEK FOR SIX MONTHS, 1953. ALSO LISTED IN PERU, ILL. CITY DIRECTORY AS HAVING WORKED AS ARTIST AT RADIUM DIAL CO. IN PERU. PAINTED DIALS, POINTED BRUSH IN HER MOUTH, BUT NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 06-01-1922 TO 07-01-1932 17.87 YEARS OF AGE WHEN FIRST EMPLOYED.		03-528-13
		03-528-13A
		03-528-13B
		03-528-13C
		03-528-13D
		03-528-13*
		03-528-13Z
FAMILY HISTORY		03-528-15
MARRIED 1924	PARA 1 GRAVIDA 1	03-528-15A
HUSBAND	1901 L W	03-528-15B
CHILDREN	FEMALE 1933 L W	03-528-16
MEDICAL HISTORY		03-528-20
DEVELOPED PAIN IN LOWER DORSAL REGION 1936, DIAGNOSIS OF OSTEO-POROSIS WAS MADE, PATIENT WORE BACK BRACE FOR 7 YEARS. SPONTANEOUS FRACTURE OF LEFT FEMUR 1952, SAME BONE FRACTURED SPONTANEOUSLY 1956, SECOND FRACTURE WAS TREATED WITH INSERTED ROD AND PINS. NO OTHER SURGICAL PROBLEMS EXCEPT FOR TONSILLECTOMY AT AGE 17. INQUIRY BY SYSTEMS OTHERWISE ESSENTIALLY NEGATIVE. DENTAL HISTORY--17 TEETH REMAINING BUT SEVERAL NEED EXTRACTION. (05-05-59)		03-528-20A
		03-528-20B
		03-528-20C
		03-528-20D
		03-528-20E
		03-528-20F
		03-528-20G
		03-528-20H
SUBTROCHANTERIC FRACTURE OF RIGHT FEMUR, PROBABLY PATHOLOGICAL, ON 11-08-63, TREATED WITH NAILING AND PLATING. (01-15-64)		03-528-21A
		03-528-21B
GAMMA-RAY MEASUREMENTS		03-528-25
05-05-59 RAB,RAC	0.505 UCI HGS 1 TILTING CHAIR CEM	03-528-25A
COMPUTED TOTAL-BODY RADIUM		03-528-27
05-05-59 0.505 UCI	1.630 UCI TOTAL 0.31	03-528-27A

X-RAY EXAMINATION		03-528-30
COMPLETE SKELETAL SURVEY		03-528-30A
05-05-59	ANL X-RAY NO. R-123 LOC. ANL	03-528-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 17		03-528-30C
PPF AREAS OF BONE RESORPTION NOTED IN SKULL, RIGHT AND LEFT		03-528-30D
RADIUS AND ULNA, AND RIGHT AND LEFT TIBIA AND FIBULA. COARSENING		03-528-30E
OF TRABECULATION NOTED IN RIGHT AND LEFT TIBIA AND FIBULA, PELVIS		03-528-30F
AND LONG BONES OF LEFT FOOT. HEALED PATHOLOGICAL FRACTURE OF LEFT		03-528-30G
FEMUR.		03-528-30H
CLINICAL LABORATORY FINDINGS		03-528-40
05-05-59	HG 13.3 HTC RBC 4.18	03-528-40A
WBC 10,000 DIFF. P 58 ST 1 L 38 M 2 E 1 B 0		03-528-40B
SPECIMENS AVAILABLE		03-528-50
TEETH AND BONE SECTIONS		RJH 03-528-50A
OTHER ANALYSES BONE BIOPSY, LEFT FEMUR		03-528-55
12-14-5 FRENCH HOSP., SAN FRANCISCO, CALIF. PATH.NO.		03-528-55A
BONE MARROW SHOWS MASSES OF CLOTTED BLOOD WITH BITS OF MYELOID		03-528-55B
TISSUE INTERMINGLED. THIS IS ABOUT 40 PERCENT ADULT FAT. THE		03-528-55C
CELLULAR CONSTITUENTS PRESENT AN AVERAGE DISTRIBUTION AS JUDGED		03-528-55D
BY FORMALIN FIXED MATERIAL WITH H AND E STAIN. BONE MARROW WITH-		03-528-55E
IN NORMAL LIMITS. THE BONE IS QUITE COMPACT WITH NARROW MEDULLARY		03-528-55F
SPACE CONTAINING SOME MEDULLARY ELEMENTS AND LOOSE CELLULAR		03-528-55G
GRANULATION TISSUE. ABOUT THE PERIPHERY THERE ARE NUMEROUS OSTEO-		03-528-55H
BLASTS PRESENT. IRREGULAR CALCIFIC DENSITIES ARE SEEN IN THE		03-528-55I
OSSEOUS PORTION WITH MANY AREAS OF NECROSIS INDICATED BY EMPTY		03-528-55J
LACUNAE. THE HAVERSIAN SYSTEMS ARE DISORDERLY AND IN SOME AREAS		03-528-55K
OBSCURED.		03-528-55L
235 -416	FRACTURE OF THE FEMUR (LEFT)	03-528-66
23519-416	SUBTROCHANTERIC FRACTURE OF FEMUR (RIGHT)	03-528-66A
23519-542	REPAIR OF SUBTROCHANTERIC FRACTURE WITH METAL PLATE	03-528-66B
200 -947	OSTEOPOROSIS, IDIOPATHIC	03-528-67
634 -12	TONSILLECTOMY	03-528-67A
TOOTH MEASUREMENT		03-528-73
TOTAL WT. 0.5965 CALC.GMS.CA. 0.1670		03-528-73A
SAMPLE 31.01 TOOTH INCISOR		03-528-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-528-73C
64.0	158.4 39.6 948.4 0.5818	03-528-73D
SAMPLE 31.02 TOOTH CANINE		03-528-74A
TOTAL WT. 0.9796 CALC.GMS.CA. 0.2743		03-528-74B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-528-74C
98.46	173.0 59.34 630.7 0.3869	03-528-74D
SAMPLE 31.03 TOOTH PREMOLAR		03-528-75A
TOTAL WT. 1.0092 CALC.GMS.CA. 0.2826		03-528-75B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-528-75C
96.8	164.1 61.1 580.7 0.3563	03-528-75D

SAMPLE 31.04		TOOTH INCISOR			03-528-76A
TOTAL WT. 0.5443		CALC.GMS.CA. 0.1524			03-528-76B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-528-76C
49.39	92.01	54	603.7	0.3704	03-528-76D

SAMPLE 31.05		TOOTH MOLAR			03-528-77A
TOTAL WT. 1.8742		CALC.GMS.CA. 0.5248			03-528-77B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-528-77C
157.0	272.1	58	518.5	0.3181	03-528-77D

SAMPLE 31.06		TOOTH MOLAR			03-528-78A
TOTAL WT. 1.9936		CALC.GMS.CA. 0.5582			03-528-78B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-528-78C
149.5	298.4	50	534.6	0.3280	03-528-78D

DATA REVISED 05-14-68

03-528-99

PATIENT 03-529	BORN 06-17-03	03-529-01
		03-529-02
		03-529-03
FEMALE		03-529-05
OTHER PERTINENT NOS.	AMBH	03-529-05A
SOURCE OF CASE	SEARCH BY CEM	03-529-10
EXPOSURE	DIAL PAINTER 01	03-529-12
SOURCE RADIUM DIAL CO., PERU, AND OTTAWA, ILL., MARCH 1921 TO JULY 1923, ABOUT 28 MONTHS. PAINTED DIALS. POINTED BRUSH IN MOUTH.		03-529-13
PAINTED HER FINGERNAILS WITH LUMINOUS MATERIAL.		03-529-13A
ASSUMED WORK PERIOD 03-01-1921 TO 07-01-1923		03-529-13B
17.70 YEARS OF AGE WHEN FIRST EMPLOYED.		03-529-13*
		03-529-13Z
FAMILY HISTORY		03-529-15
MARRIED 1923	PARA 2	03-529-15A
HUSBAND	1903 GRAVIDA 2	03-529-15B
	DECEASED 09-15-60	
CHILDREN	FEMALE 1924	03-529-16
	MALE 1934	03-529-16A
	L W	
	L W	
MEDICAL HISTORY		03-529-20
SEE RECORD AT U OF CHICAGO CLINICS FOR DETAILS (PATIENT OF		03-529-20A
DR. WALTER PALMER, GASTRO-INTESTINAL CLINIC, UNIT NO.).		03-529-20B
NO OTHER HOSPITALIZATIONS. INQUIRY BY SYSTEMS NEGATIVE EXCEPT		03-529-20C
FOR SOME ACHES AND PAINS IN JOINTS. DENTAL HISTORY--ALL TEETH		03-529-20D
EXTRACTED. (05-07-59)		03-529-20E
PATIENT HAS PERSISTENT COLON TROUBLE, CONTROLLED BY DIET. HIP		03-529-21A
ACHING DEVELOPED IN SEPT. 1965, CONSULTED AMBH, X-RAYS TAKEN		03-529-21B
(DR. DRUYAN, UNIT NO.) PAIN HAS SUBSIDED BUT WEAKNESS HAS		03-529-21C
PERSISTED IN LEFT HIP. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR		03-529-21D
OCCASIONAL FRONTAL HEADACHES, ONE RIGHT EARACHE 4 WEEKS AGO.		03-529-21E
NO ARTHRITIS. (10-05-66)		03-529-21F
GAMMA-RAY MEASUREMENTS		03-529-25
05-07-59 RAB,RAC 0.048 UCI HGS 1 TILTING CHAIR CEM		03-529-25A
10-05-66 RAB,RAC 0.031 UCI HGS 1 TILTING CHAIR CEM		03-529-25B
10-05-66 RAB,RAC 0.039 UCI HGS 1 7-CRYST-POS CEM		03-529-25C
COMPUTED TOTAL-BODY RADIUM		03-529-27
05-07-59 0.048 UCI 0.155 UCI TOTAL 0.31		03-529-27A
10-05-66 0.031 UCI 0.100 UCI TOTAL 0.31		03-529-27B
10-05-66 0.039 UCI 0.127 UCI TOTAL 0.31		03-529-27C

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

05-07-59 ANL X-RAY NO. R-126 LOC. ANL
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
PPF NONE.

03-529-30
03-529-30A
03-529-30B
03-529-30C
03-529-30D

COMPLETE SKELETAL SURVEY

10-05-66 ANL X-RAY NO. R-126B LOC. ANL
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 12
PPF MULTIPLE AREAS OF BONE RESORPTION IN SKULL, MANDIBLE, BOTH
RADII, LEFT ULNA, RIGHT FEMUR, BOTH TIBIAE AND FIBULAE. PATCHY
SCLEROSIS RIGHT ISCHIUM AND LEFT SCAPULA.

03-529-31A
03-529-31B
03-529-31C
03-529-31D
03-529-31E
03-529-31F

SPECIAL VIEW--SCAPULA

10-66 LOC. ANL
LEFT SCAPULA X-RAY UNCHANGED SINCE PREVIOUS FILM IN 1960.

03-529-32A
03-529-32B
03-529-32D

CLINICAL LABORATORY FINDINGS

05-07-59 HG 11.2 HTC RBC 4.24
WBC 4400 DIFF. P 58 ST L 36 M 4 E 2 B

03-529-40
03-529-40A
03-529-40B

10-05-66 HG 12.3 HTC 38 RBC 3.97

03-529-41A

WBC 5300 DIFF. P 64 ST 5 L 26 M 5 E B

03-529-41B

PATIENT 03-530	BORN 08-12-07	03-530-01
DECEASED		03-530-02
		03-530-02A
		03-530-03
		03-530-04
		03-530-04A
		03-530-04B
		03-530-05
FEMALE		
DECEASED 10-12-65		03-530-06
DEATH CERT.NO.	AUTOPSY NONE	03-530-07
INTERMENT	WEST SERENA CEMETERY, LASALLE CO., ILL.	03-530-08
CAUSES OF DEATH	TERMINAL BRONCHOPNEUMONIA	03-530-09
	HEART FAILURE	03-530-09A
	RHEUMATIC HEART DISEASE	03-530-09B
OTHER CONDITIONS--	HYPERTHYROIDISM, ABNORMAL MOBILITY OF RIGHT	03-530-09C
	HUMERUS DISTAL 1/3 DUE TO OLD NON-HEALING FRACTURE	03-530-09D
SOURCE OF CASE	SEARCH BY CEM	03-530-10
LITERATURE CITATION		03-530-11
	MILLER, ANL-6839 (1964) PP. 18-39.	03-530-11A
EXPOSURE	DIAL PAINTER 01	03-530-12
SOURCE	PATIENT WORKED AT RADIUM DIAL CO., OTTAWA, ILL. DURING	03-530-13
	SUMMER 1923 AND SUMMER 1924 TO SPRING 1925, TOTAL ABOUT 1-1/2	03-530-13A
	YEARS. PAINTED DIALS. PATIENT STATED THAT SHE TIPPED BRUSH EVERY	03-530-13A
	TIME SHE TOUCHED A DIAL. HER MOUTH GLOWED IN THE DARK. SHE ALSO	03-530-13B
	PAINTED HER FINGERNAILS.	03-530-13C
	ASSUMED WORK PERIOD 07-01-1923 TO 04-01-1925	03-530-13*
	15.88 YEARS OF AGE WHEN FIRST EMPLOYED.	03-530-13Z
FAMILY HISTORY		03-530-15
MARRIED, DIVORCED (4)	PARA 1 GRAVIDA 6 (5 MISC.)	03-530-15A
CHILDREN	MALE 1926 DECEASED 1956 (MENINGITIS AT	03-530-16
	AGE 16, RESIDUAL EPILEPSY)	03-530-16A
MEDICAL HISTORY		03-530-20
	PARTIAL OOPHORECTOMY AND UTERINE SURGERY 1936. SURGERY FOR ADHE-	03-530-20A
	SIONS AND BOWEL OBSTRUCTION 1937. CHOLECYSTECTOMY 1946. AUTO	03-530-20B
	ACCIDENT 1938 LED TO INJURY TO RIGHT ARM WITH RESIDUAL PSEUCO-	03-530-20C
	ARTHROSIS AND SUSTAINED FRACTURE OF SKULL, STERNUM, SEVERAL RIBS,	03-530-20D
	AND LEFT ANKLE. HISTORY OF HYPERTENSION PAST 20 YEARS. MYOCARDIAL	03-530-20E
	INFARCTION 1952 AND AGAIN 1954. EMERGENCY SURGERY FOR BOWEL OB-	03-530-20F
	STRUCTION 11-58. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. TEETH--	03-530-20G
	COMPLETE UPPER DENTURE PAST 7 YEARS, PARTIAL LOWER DENTURE.	03-530-20H
	WEIGHT CHANGE FROM 147 LBS 1959 TO 87 LBS IN 2 YEARS. PATIENT	03-530-21A
	SEEN AT MAYO CLINIC 1962. HAS HAD CARDIAC DECOMPENSATION AND	03-530-21B
	DIFFICULTY IN RETAINING EATEN FOOD. TAKES DIURETICS AND DIGITALIS	03-530-21C
	REGULARLY AS WELL AS NITROGLYCERINE FOR ANGINA AND OTHER DRUGS.	03-530-21D
	HOSPITALIZED AUG. 1961 FOR MILD CVA. (06-26-63)	03-530-21E

GAMMA-RAY MEASUREMENTS					03-530-25
05-07-59	RAB,RAC	0.162 UCI	HGS 1 TILTING CHAIR	CEM	03-530-25A
06-26-63	RAB,RAC	0.154 UCI	HGS 1 TILTING CHAIR	CEM	03-530-25B
06-23-63	RAB,RAC	0.147 UCI	HGS 1 7-CRYST-POS	CEM	03-530-25C
COMPUTED TOTAL-BODY RADIUM					03-530-27
05-07-59	0.162 UCI		0.523 UCI TOTAL	0.31	03-530-27A
06-26-63	0.154 UCI		0.497 UCI TOTAL	0.31	03-530-27B
06-26-63	0.147 UCI		0.474 UCI TOTAL	0.31	03-530-27C
X-RAY EXAMINATION					03-530-30
COMPLETE SKELETAL SURVEY					03-530-30A
05-07-59	ANL	X-RAY NO. R-125	LOC. ANL		03-530-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 7					03-530-30C
PPF MULTIPLE AREAS OF BONE RESORPTION BOTH HUMERI, RADII AND					03-530-30D
ULNAE, NON-UNION OF FRACTURE OF RIGHT HUMERUS.					03-530-30E
COMPLETE SKELETAL SURVEY					03-530-31A
06-23-63	ANL	X-RAY NO. R-125B	LOC. ANL		03-530-31B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 13					03-530-31C
PPF MULTIPLE AREAS OF BONE RESORPTION IN MANDIBLE, BOTH HUMERI,					03-530-31D
RADII AND ULNAE, RIGHT TIBIA AND FIBULA. PATCHY SCLEROSIS OF					03-530-31E
DISTAL FEMURS AND BOTH TEMPORAL BONES. NON-UNION OF FRACTURE OF					03-530-31F
RIGHT HUMERUS.					03-530-31G
CLINICAL LABORATORY FINDINGS					03-530-40
05-07-59	HG 12.6	HTC	RBC 4.49		03-530-40A
WBC 9400	DIFF. P 63	ST 3	L 23 M 5 E 5 B 1		03-530-40B
06-26-63	HG 13.8	HTC	RBC 4.13		03-530-41A
WBC 4700	DIFF. P 46	ST	L 37 M 10 E 5 B 2		03-530-41B
47X	-X30	ESSENTIAL HYPERTENSION			03-530-67
230	-416	FRACTURE OF THE HUMERUS			03-530-67A
361	-Y10	BRONCHOPNEUMONIA, UNDETERMINED CAUSE			03-530-67B
410	-932.0	RHEUMATIC HEART DISEASE			03-530-67C
430	-516.7	MYOCARDIAL INFARCTION			03-530-67D
687	-12	CHOLECYSTECTOMY			03-530-67E
788	-10	UNILATERAL OOPHORECTOMY			03-530-67F
810	-7722	HYPOTHYROIDISM			03-530-67G
DATA REVISED 10-23-67					03-530-99

PATIENT 03-531	BORN 01-31-06	03-531-01
		03-531-02
		03-531-03
FEMALE		03-531-05
SOURCE OF CASE	SEARCH BY CEM	03-531-10
EXPOSURE	DIAL PAINTER 01	03-531-12
SOURCE ILLINOIS WATCH CO., SPRINGFIELD, ILL., FROM OCT. 1925 TO		03-531-13
JULY 1933. PAINTED DIALS AND HANDS WITH RADIUM. POINTED BRUSH IN		03-531-13A
HER MOUTH UNTIL 1932 WHEN PENS WERE INTRODUCED. NEVER PAINTED		03-531-13B
ANY PART OF HER BODY.		03-531-13C
ASSUMED WORK PERIOD 10-01-1925 TO 07-01-1933		03-531-13*
19.66 YEARS OF AGE WHEN FIRST EMPLOYED.		03-531-13Z
FAMILY HISTORY		03-531-15
MARRIED 1934	PARA 2 GRAVIDA 2	03-531-15A
CHILDREN	MALE 1937 L W	03-531-16
	MALE 1942 L W	03-531-16A
MEDICAL HISTORY		03-531-20
APPENDECTOMY 1925, GYNECOLOGICAL SURGERY 1940. INQUIRY BY SYSTEMS		03-531-20A
REVEALS CHRONIC PERSISTENT PAIN ON RIGHT SIDE OF STERNUM FOR PAST		03-531-20B
FEW YEARS, OTHERWISE NEGATIVE. DENTAL HISTORY--3 TEETH EXTRACTED.		03-531-20C
(05-08-59)		03-531-20D
GAMMA-RAY MEASUREMENTS		03-531-25
05-08-59 RAB,RAC C.013 UCI HGS 1 TILTING CHAIR CEM		03-531-25A
COMPUTED TOTAL-BODY RADIUM		03-531-27
05-08-59 0.013 UCI 0.041 UCI TOTAL 0.31		03-531-27A
X-RAY EXAMINATION		03-531-30
COMPLETE SKELETAL SURVEY		03-531-30A
05-08-59 ANL X-RAY NO. R-127 LOC. ANL		03-531-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-531-30C
PPF THREE TINY AREAS OF BONE RESORPTION IN LEFT FEMUR, PROBABLY		03-531-30D
NOT RELATED TO RADIUM.		03-531-30E
CLINICAL LABORATORY FINDINGS		03-531-40
05-08-59 HG 13.1 HTC RBC 4.50		03-531-40A
WBC 6100 DIFF. P 60 ST L 36 M 4 E B		03-531-40B
661 -12 APPENDECTOMY		03-531-67

PATIENT 03-532	BORN 06-08-10	03-532-01
		03-532-02
		03-532-03
FEMALE		03-532-05
SOURCE OF CASE	SEARCH BY CEM	03-532-10
EXPOSURE	DIAL PAINTER 01	03-532-12
SOURCE ILLINOIS WATCH CO., SPRINGFIELD, ILL.; FROM SEPT. 1926 TO MAY 1930. PATIENT COATED DIALS WITH SULPHUR OR PHOSPHORUS COMPOUNDS AND ONLY OCCASIONALLY PAINTED RADIUM DIALS. POINTED BRUSH IN MOUTH OCCASIONALLY BUT NEVER PAINTED ANY PART OF HER BODY. WORKED NEXT TO A DIAL PAINTER AND MAY HAVE INHALED RADIUM CONTAINING DUST.		03-532-13
ASSUMED WORK PERIOD 09-01-1926 TO 05-01-1930		03-532-13A
16.22 YEARS OF AGE WHEN FIRST EMPLOYED.		03-532-13B
		03-532-13C
		03-532-13D
		03-532-13E
		03-532-13*
		03-532-13Z
FAMILY HISTORY		03-532-15
MARRIED 1929	PARA 2	03-532-15A
HUSBAND	1907 GRAVIDA 2	03-532-15B
	L, TUBERCULOSIS	
CHILDREN	FEMALE 1931	03-532-16
	FEMALE 1941	03-532-16A
	L W	
	L W	
MEDICAL HISTORY		03-532-20
NO SERIOUS ILLNESSES OR SURGERY. LACERATION OF FACE SUSTAINED IN AUTOMOBILE ACCIDENT IN 1945 BUT NO FRACTURES. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR FRONTAL HEADACHES FOR PAST 6 YEARS. POOR DENTAL HYGIENE ALTHOUGH 20 TEETH STILL REMAIN. (05-08-59)		03-532-20A
		03-532-20B
		03-532-20C
		03-532-20D
GAMMA-RAY MEASUREMENTS		03-532-25
05-08-59	RAB,RAC C.030 UCI HGS 1 TILTING CHAIR CEM	03-532-25A
COMPUTED TOTAL-BODY RADIUM		03-532-27
05-08-59	0.030 UCI 0.097 UCI TOTAL 0.31	03-532-27A
X-RAY EXAMINATION		03-532-30
COMPLETE SKELETAL SURVEY		03-532-30A
05-08-59	ANL X-RAY NO. R-129 LOC. ANL	03-532-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION SCORE 0		03-532-30C
PPF	NONE	03-532-30D
CLINICAL LABORATORY FINDINGS		03-532-40
05-08-59	HG 12.7 HTC RBC 3.94	03-532-40A
WBC 4600	DIFF. P 62 ST L 31 M 3 E 2 B 2	03-532-40B
TOOTH MEASUREMENT		03-532-73
SAMPLE 10.01	TOOTH CANINE	03-532-73A
TOTAL WT. 1.1277	CALC.GMS.CA. 0.3158	03-532-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA	RATIO-TOOTH/BODY	03-532-73C
13.73	43.5 0.448	03-532-73D

SAMPLE 10.02	TOOTH	PREMOLAR		03-532-74A
TOTAL WT. 1.1416		CALC.GMS.CA. 0.3196		03-532-74B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-532-74C
7.32	7.87	24.6	0.254	03-532-74D
SAMPLE 10.03	TOOTH	PREMOLAR		03-532-75A
TOTAL WT. 0.9222		CALC.GMS.CA. 0.2582		03-532-75B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-532-75C
5.49		21.28	0.219	03-532-75D
SAMPLE 10.04	TOOTH	INCISOR		03-532-76A
TOTAL WT. 0.4529		CALC.GMS.CA. 0.1268		03-532-76B
UNSEALED EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-532-76C
NOT DETECTABLE				03-532-76D

PATIENT 03-533	BORN 08-06-08	03-533-01
		03-533-02
FEMALE		03-533-03
		03-533-05
SOURCE OF CASE	SEARCH BY CEM	03-533-10
EXPOSURE	DIAL PAINTER 01	03-533-12
SOURCE ILLINOIS WATCH CO., SPRINGFIELD, ILL., FROM 1925 TO 1930.		03-533-13
PAINTED DIALS WITH BRUSH FOR FIRST YEAR AND DID OTHER WORK IN		03-533-13A
WATCH COMPANY SUBSEQUENTLY. POINTED BRUSH IN MOUTH BUT NEVER		03-533-13B
PAINTED ANY PART OF HER PERSON. REMEMBERED THAT HER HANDS AND		03-533-13C
CLOTHES WOULD GLOW IN DARK.		03-533-13D
ASSUMED WORK PERIOD 07-01-1925 TO 07-01-1930		03-533-13*
16.89 YEARS OF AGE WHEN FIRST EMPLOYED.		03-533-13Z
FAMILY HISTORY		03-533-15
MARRIED 1929	PARA 2	GRAVIDA 3 (1 MISC.)
HUSBAND	1908	L W
		03-533-15A
		03-533-15B
CHILDREN	FEMALE	1931
	FEMALE	L W
		DECEASED AT 6 DAYS
		03-533-16
		03-533-16A
MEDICAL HISTORY		03-533-20
TONSILLECTOMY 1937, APPENDECTOMY 1932, HYSTERECTOMY 1955 (CANCER		03-533-20A
SAID TO HAVE BEEN FOUND IN SURGICAL SPECIMEN). INQUIRY BY SYSTEMS		03-533-20B
NEGATIVE EXCEPT FOR ARTHRITIS OF WRISTS IN SUMMER, 1958. DENTAL		03-533-20C
HISTORY--THREE WISDOM TEETH EXTRACTED. (05-08-59)		03-533-20D
GAMMA-RAY MEASUREMENTS		03-533-25
05-08-59 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-533-25A
COMPUTED TOTAL-BODY RADIUM		03-533-27
05-08-59 0.005 UCI 0.016 UCI TOTAL 0.31		03-533-27A
X-RAY EXAMINATION		03-533-30
PARTIAL SKELETAL SURVEY		03-533-30A
05-08-59 ANL X-RAY NO. R-128 LOC. ANL		03-533-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-533-30C
PPF NONE		03-533-30D
CLINICAL LABORATORY FINDINGS		03-533-40
05-08-59 Hg 14.7 HTC RBC 4.73		03-533-40A
WBC 5500 DIFF. P 71 ST L 23 M 5 E 1 B		03-533-40B
634 -12 TONSILLECTOMY		03-533-67
661 -12 APPENDECTOMY		03-533-67A
782 -12 HYSTERECTOMY, COMPLETE		03-533-67B

PATIENT 03-534	BCRN 09-19-10	03-534-01
		03-534-02
		03-534-03
FEMALE		03-534-05
SOURCE OF CASE	SEARCH BY CEM	03-534-10
EXPOSURE	DIAL PAINTER 01	03-534-12
SCURCE RADIUM DIAL CO., STREATOR, ILL., 1 YEAR, 1926 (ENTIRE TIME		03-534-13
FACTORY WAS IN THIS CITY). OTTAWA, ILL. 1 YEAR, 1927. TOTAL 2		03-534-13A
YEARS, ALTHOUGH 1926-1927 GIVEN BY PATIENT MAY BE IN ERROR.		03-534-13B
PAINTED NUMERALS ON CLOCK DIALS. POINTED BRUSH IN MOUTH. DID NOT		03-534-13C
PAINT HER OWN PERSON BUT REMEMBERS CHEWING HER FINGERNAILS.		03-534-13D
ASSUMED WORK PERIOD 05-01-1925 TO 05-01-1927		03-534-13*
14.61 YEARS OF AGE WHEN FIRST EMPLOYED.		03-534-13Z
FAMILY HISTORY		03-534-15
MARRIED 1930	PARA 6 GRAVIDA 6	03-534-15A
HUSBAND DECEASED 1954		03-534-15B
MARRIED 1955 HUSBAND DECEASED 1957		03-534-15C
CHILDREN		
MALE 1930	L W	03-534-16
MALE 1932	L W	03-534-16A
MALE 1934	L W	03-534-16B
MALE 1936	L W	03-534-16C
FEMALE 1938	L W	03-534-16D
FEMALE 1942	L W	03-534-16E
MEDICAL HISTORY		03-534-20
FRACTURE RIGHT ANKLE 1952 AFTER HAVING BEEN HIT BY CROCKERY POT.		03-534-20A
BECAUSE OF PERSISTENT BONE PATHOLOGY, ANKLE PINNED APRIL 1957.		03-534-20B
TRIGEMINAL NEURALGIA 1957, TREATED WITH ALCOHOL INJECTIONS		03-534-20C
WITH SOME RECENT RECURRENCE OF SYMPTOMS. HYSTERECTOMY AND		03-534-20D
BLACDER REPAIR MARCH 1958. INQUIRY BY SYSTEMS NEGATIVE EXCEPT		03-534-20E
FOR PERIODIC HEADACHES, RECENT DIARRHEA OF SEVERAL WEEKS DURA-		03-534-20F
TION AND RECENTLY PAINFUL LEFT SHOULDER. TEETH ALL EXTRACTED		03-534-20G
EXCEPT FOR THREE IN UPPER JAW AND EIGHT IN LOWER JAW. (05-13-59)		03-534-20H
GAMMA-RAY MEASUREMENTS		03-534-25
05-13-59 RAB,RAC 0.001 UCI HGS 1 TILTING CHAIR CEM		03-534-25A
COMPUTED TOTAL-BODY RADIUM		03-534-27
05-13-59 0.001 UCI 0.003 UCI TOTAL 0.31		03-534-27A

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

05-13-59 ANL X-RAY NO. R-130 LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
 PPF METALLIC SCREW IS PRESENT THROUGH DISTAL END OF RIGHT
 TIBIA AND FIBULA, OBVIOUSLY PART OF TREATMENT OF OLD FRACTURE
 THAT EXTENDED THROUGH RIGHT ANKLE JOINT.

03-534-30
 03-534-30A
 03-534-30B
 03-534-30C
 03-534-30D
 03-534-30E
 03-534-30F

CLINICAL LABORATORY FINDINGS

05-13-59 HG 13.4 HTC RBC 4.30
 WBC 6500 DIFF. P 68 ST L 27 M 4 E 1 B

03-534-40
 03-534-40A
 03-534-40B

782 -10 HYSTERECTOMY
 964 -X30 TRIGEMINAL NEURALGIA
 23723-416 FRACTURE OF DISTAL THIRD OF THE TIBIA
 23823-416 FRACTURE OF DISTAL THIRD OF THE FIBULA

03-534-67
 03-534-67A
 03-534-67B
 03-534-67C

PATIENT 03-535	BORN 03-24-07	03-535-01
		03-535-02
		03-535-03
FEMALE		03-535-05
SOURCE OF CASE	RESPONSE TO NEWSPAPER NOTICE OF RADIUM RESEARCH AT ANL	03-535-10 03-535-10A
LITERATURE CITATION		03-535-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-535-11A
EXPOSURE	DIAL PAINTER 01	03-535-12
SOURCE RADIUM DIAL CO., PERU, ILLINOIS, FROM JUNE THROUGH OCTOBER 1922, AT AGE 15. PAINTED NUMERALS ON DIALS. POINTED BRUSH IN HER MOUTH, PAINTED HER FINGERNAILS, TEETH, AND BUTTONS ON CLOTHES. ASSUMED WORK PERIOD 06-01-1922 TO 11-01-1922 15.18 YEARS OF AGE WHEN FIRST EMPLOYED.		03-535-13 03-535-13A 03-535-13B 03-535-13* 03-535-13Z
FAMILY HISTORY		03-535-15
MARRIED 1939	PARA 1 GRAVIDA 2 (1 MISC.)	03-535-15A
HUSBAND	1908 L W	03-535-15B
CHILDREN	MALE 1943 L W	03-535-16
MEDICAL HISTORY		03-535-20
NO SURGERY EXCEPT FOR REMOVAL OF MOLE FROM RIGHT SIDE OF ABDOMEN. HAS HAD NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS REVEALS RECENT ONSET OF FATIGABILITY (8 MONTHS), AND ACHING PAIN EXTENDING FROM RIGHT GROIN DOWN THE ANTERIOR THIGH, ALSO RECENT THORACIC AND SACRAL BACKACHES. DENTAL HISTORY--4 TEETH EXTRACTED, WEARS PAR- TIAL PLATE. (05-14-59)		03-535-20A 03-535-20B 03-535-20C 03-535-20D 03-535-20E 03-535-20F
INTERVAL HISTORY--ABOUT 1945 PATIENT HAD BACK PAIN, WORE STEEL BRACE. NO RECURRENCE, EXCEPT THAT PATIENT HAS HAD LOW BACK DIS- COMFORT PAST 2 OR 3 WEEKS. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. (10-03-64)		03-535-21A 03-535-21B 03-535-21C 03-535-21D
GAMMA-RAY MEASUREMENTS		03-535-25
05-14-59 RAB,RAC 0.097 UCI HGS 1 TILTING CHAIR CEM		03-535-25A
10-05-64 RAB,RAC 0.071 UCI HGS 1 TILTING CHAIR CEM		03-535-25B
10-05-64 RAB,RAC 0.070 UCI HGS 1 7-CRYST-POS CEM		03-535-25C
COMPUTED TOTAL-BODY RADIUM		03-535-27
05-14-59 0.097 UCI 0.310 UCI TOTAL 0.31		03-535-27A
10-05-64 0.071 UCI 0.228 UCI TOTAL 0.31		03-535-27B
10-05-64 0.070 UCI 0.227 UCI TOTAL 0.31		03-535-27C
X-RAY EXAMINATION		03-535-30
COMPLETE SKELETAL SURVEY		03-535-30A
05-14-59 ANL X-RAY NO. R-132 LOC. ANL		03-535-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION SCORE 0		03-535-30C
PPF NONE.		03-535-30D

COMPLETE SKELETAL SURVEY

10-05-64 ANL X-RAY NO. R-132B LOC. ANL

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0

PPF NONE

03-535-31A

03-535-31B

03-535-31C

03-535-31D

CLINICAL LABORATORY FINDINGS

05-14-59 HG 13.0 HTC RBC 4.63

WBC 9200 DIFF. P 69 ST L 27 M 3 E 1 B

03-535-40

03-535-40A

03-535-40B

10-05-64 HG 14.3 HTC 43 RBC

WBC 10,500 DIFF. P 66 ST L 24 M 9 E 1 B

03-535-41A

03-535-41B

PATIENT 03-536

BORN 05-20-10

03-536-01
03-536-02
03-536-03
03-536-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

03-536-10

EXPOSURE

DIAL PAINTER 01

03-536-12

SOURCE RADIUM DIAL CO., OTTAWA, ILL., 6 TO 8 WEEKS DURING SUMMER 1925. PAINTED DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.

03-536-13
03-536-13A
03-536-13B
03-536-13*
03-536-13Z

ASSUMED WORK PERIOD 07-01-1925 TO 08-22-1925
15.11 YEARS OF AGE WHEN FIRST EMPLOYED.

FAMILY HISTORY

03-536-15
03-536-15A
03-536-15B

MARRIED 1928
HUSBAND

PARA 3
1903

GRAVIDA 4 (1 MISCARRIAGE)
L W

CHILDREN

FEMALE

1930

L W

03-536-16

MALE

1934

L W

03-536-16A

MALE

1944

L W

03-536-16B

MEDICAL HISTORY

03-536-20
03-536-20A
03-536-20B
03-536-20C

DUODENAL ULCER 1954. NO SURGERY. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR SLIGHT HYPERTENSION PAST FEW YEARS. TEETH--SEVERAL EXTRACTIONS, PRINCIPALLY MOLARS. (05-14-59)

GAMMA-RAY MEASUREMENTS

03-536-25
03-536-25A

05-14-59 RAB,RAC 0.011 UCI HGS 1 TILTING CHAIR CEM

COMPUTED TOTAL-BODY RADIUM

03-536-27
03-536-27A

05-14-59 0.011 UCI 0.035 UCI TOTAL 0.31

X-RAY EXAMINATION

03-536-30
03-536-30A
03-536-30B
03-536-30C
03-536-30D

PARTIAL SKELETAL SURVEY

05-14-59 ANL X-RAY NO. R-131 LOC. ANL

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0

PPF NONE.

CLINICAL LABORATORY FINDINGS

03-536-40
03-536-40A
03-536-40B

05-15-59 Hg 8.5 HTC RBC 3.76
WBC 7100 DIFF. P 77 ST L 20 M 3 E B

47X -X30 ESSENTIAL HYPERTENSION

03-536-67

651 -951 DUODENAL ULCER

03-536-67A

PATIENT 03-537	BORN 10-12-00	03-537-01
		03-537-02
		03-537-03
FEMALE		03-537-05
OTHER PERTINENT NOS.	AMBH	03-537-05A
SOURCE OF CASE	RESPONSE TO NEWSPAPER ARTICLE	03-537-10
EXPOSURE	LAB, FACTORY WORKER (02)	03-537-12
SOURCE	INGERSOLL WATCH CO., 37 S. WABASH, CHICAGO, ILL., ABOUT	03-537-13
	ONE YEAR, 1916-17. TIMED AND SET WATCHES, AND SORTED WATCHES.	03-537-13A
	NEVER PAINTED DIALS. ATE LUNCH IN ROOM WHERE DISCARDED WATCHES	03-537-13B
	WERE PILED.	03-537-13C
FAMILY HISTORY		03-537-15
MARRIED 1931	PARA 0 GRAVIDA 1 (1 MISCARRIAGE)	03-537-15A
MEDICAL HISTORY		03-537-20
	RECORD AVAILABLE FROM U OF CHICAGO CLINICS, DR. HERBOLSHEIMER,	03-537-20A
	UNIT NO.	03-537-20B
GAMMA-RAY MEASUREMENTS		03-537-25
05-15-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-537-25A
COMPUTED TOTAL-BODY RADIUM		03-537-27
05-15-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-537-27A
X-RAY EXAMINATION	NOT DONE	03-537-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-537-40
DATA REVISED 08-07-67		03-537-99

PATIENT 03-538	BORN 09-08-09	03-538-01
		03-538-02
		03-538-03
		03-538-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-538-10
EXPOSURE	DIAL PAINTER 01	03-538-12
SOURCE RADIUM DIAL CO., 3 MONTHS IN UNSTATED YEAR. OTHER EVIDENCE SUGGESTS THAT IT WAS PROBABLY IN MICOLE OR LATE 1920S SINCE SHE PAINTED CLOCKS WITH GLASS PENS.		03-538-13
		03-538-13A
		03-538-13B
FAMILY HISTORY	NOT ELICITED	03-538-15
MEDICAL HISTORY	NOT ELICITED	03-538-20
GAMMA-RAY MEASUREMENTS		03-538-25
09-29-59 RAB,RAC 0.019 UCI HGS 1 TILTING CHAIR CEM		03-538-25A
COMPUTED TOTAL-BODY RADIUM		03-538-27
09-29-59 0.019 UCI 0.061 UCI TOTAL 0.31		03-538-27A
X-RAY EXAMINATION	NOT DONE	03-538-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-538-40
DATA REVISED 05-15-68		03-538-99

PATIENT 03-539	BORN 07-04-00	03-539-01
		03-539-02
FEMALE		03-539-05
SOURCE OF CASE	SEARCH BY CEM	03-539-10
EXPOSURE	DIAL PAINTER 01	03-539-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APPROX. 6 MONTHS SOMETIME		03-539-13
BETWEEN 1922 AND 1925. PAINTED DIALS AND POINTED BRUSH IN MOUTH.		03-539-13A
ALTHOUGH CLOTHES GLOWED IN DARK, SHE NEVER PAINTED ANY PART OF		03-539-13B
HER BODY.		03-539-13C
ASSUMED WORK PERIOD 04-01-1923 TO 10-01-1923		03-539-13*
22.73 YEARS OF AGE WHEN FIRST EMPLOYED.		03-539-13Z
FAMILY HISTORY		03-539-15
NEVER MARRIED		03-539-15A
MEDICAL HISTORY		03-539-20
APPENDECTOMY AND CHOLECYSTECTOMY 1946. FELL AND FRACTURED LEFT		03-539-20A
HUMERUS AND DISLOCATED LEFT SHOULDER 1939. FELL AND FRACTURED		03-539-20B
RIGHT FOOT 1952. SUSTAINED SEVERE BLOW TO LEFT FOOT FROM		03-539-20C
FALLING OBJECT 1952. SEVERE BACKACHE FOR 6 WEEKS AUTUMN		03-539-20D
1958. ARTHRITIS SINCE 1947, CONSISTING OF MIGRATING DISCOMFORT		03-539-20E
ALL OVER BODY, CONDITION IMPROVED WITH SODIUM SALICYLATE THERAPY.		03-539-20F
DENTAL HISTORY--ALL TEETH EXTRACTED 1945 BECAUSE OF PYORRHEA.		03-539-20G
(05-21-59)		03-539-20H
GAMMA-RAY MEASUREMENTS		03-539-25
05-21-59 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-539-25A
COMPUTED TOTAL-BODY RADIUM		03-539-27
10-21-59 0.005 0.015 UCI TOTAL 0.31		03-539-27A
X-RAY EXAMINATION		03-539-30
FULL MOUTH FILMS		03-539-30A
02-12-41 LOC. DR. E.F. WENDEL		03-539-30B
NO CHANGES TYPICAL OF RADIUM DEPOSITION IN TEETH.		03-539-30C
FULL MOUTH FILMS		03-539-31A
10-20-48 LOC. DR. E.F. WENDEL		03-539-31B
NO CHANGES TYPICAL OF RADIUM DEPOSITION IN TEETH.		03-539-31C
PARTIAL SKELETAL SURVEY		03-539-32A
05-21-59 ANL X-RAY NO. R-134 LOC. ANL		03-539-32B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-539-32C
PPF NONE.		03-539-32D

CLINICAL LABORATORY FINDINGS

05-21-59 HG 13.4 HTC RBC 4.08
WBC 8700 DIFF. P 65 ST 1 L 26 M 7 E 1 B

23X -416 FRACTURE OF THE METATARSAL AND PHALANGES
230 -416 FRACTURE OF THE HUMERUS
661 -12 APPENDECTOMY
687 -12 CHOLECYSTECTOMY, COMPLETE

DATA REVISED 05-15-68

03-539-40
03-539-40A
03-539-40B

03-539-67
03-539-67A
03-539-67B
03-539-67C

03-539-99

PATIENT 03-540

BORN 04-10-05

FEMALE

OTHER PERTINENT NOS.

AMBH

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., OTTAWA, ILL., FROM 1923 TO JULY 1930, ABOUT 7 YEARS. PAINTED DIALS. POINTED BRUSH IN MOUTH. PAINTED HER FINGERNAILS, EYEBROWS, EYELASHES (NOT TEETH), WAS ONCE LAID OFF FOR 10 DAYS FOR PAINTING HERSELF. ACTUAL TERMINATION 04-30-30. ASSUMED WORK PERIOD 07-01-1923 TO 07-01-1930
18.22 YEARS OF AGE WHEN FIRST EMPLOYED.

FAMILY HISTORY

MARRIED 1926

PARA 1

GRAVIDA 2

HUSBAND

DECEASED 1950

MARRIED 1955

DIVORCED 1965

CHILDREN

MALE

1930

L W

MEDICAL HISTORY

SURGERY--HYSTERECTOMY 1953. HAS HAD ARTHRITIS SINCE 1942, MAINLY IN LEGS, MORE RECENTLY SINCE 1956 IN HANDS, HAS PAIN AND STIFFNESS IN KNEES, RIGHT ANKLE, BUT NO BACK TROUBLE. INQUIRY BY SYSTEMS--SOME DYSPNEA ON EXERTION, OTHERWISE NEGATIVE. TEETH--ALL EXTRACTED ABOUT 1951, EDENTULOUS, WEARS DOUBLE DENTURES. (05-21-59)

INTERVAL MEDICAL HISTORY REVEALS THAT PATIENT FELL FEB. 1961 FROM STEP, LANDED ON POOR LEFT LEG AND TORE MUSCLES OF LEFT ABDOMINAL WALL. HAS HAD PLEURISY LEFT ANTERIOR LOWER THORAX PAST 3 WEEKS, SUBSIDING. NO FRACTURES, BUT EXPERIENCES SWELLING, ESPECIALLY OF LEFT LOWER LEG, IN WARM WEATHER. HAS HAD PAINFUL DISCOMFORT IN LEFT HIP SINCE ABOUT 1942, STIFFNESS SINCE 1947. (09-27-62)

PATIENT FELL 09-28-63 AND SUSTAINED PATHOLOGICAL FRACTURE OF RIGHT LEG ABOVE KNEE. (09-28-63)

NO OTHER FRACTURES OR SERIOUS ILLNESSES SINCE PATH. FRACTURE 09-28-63. CHRONIC PAIN AND STIFFNESS IN LEFT HIP FOR 20 YEARS, BUT NOT GETTING WORSE. INQUIRY BY SYSTEMS NEGATIVE. (09-27-66)

03-540-01
03-540-02
03-540-03
03-540-04
03-540-05

03-540-05A

03-540-10

03-540-12

03-540-13
03-540-13A
03-540-13B
03-540-13C
03-540-13*
03-540-13Z

03-540-15
03-540-15A
03-540-15B
03-540-15C

03-540-16

03-540-20
03-540-20A
03-540-20B
03-540-20C
03-540-20D
03-540-20E
03-540-20F

03-540-21A
03-540-21B
03-540-21C
03-540-21D
03-540-21E
03-540-21F
03-540-21G

03-540-22A
03-540-22B

03-540-23A
03-540-23B
03-540-23C

GAMMA-RAY MEASUREMENTS						03-540-25
05-21-59	RAB,RAC	0.674 UCI	HGS 1	TILTING CHAIR	CEM	03-540-25A
09-27-62	RAB,RAC	0.610 UCI	HGS 1	TILTING CHAIR	CEM	03-540-25B
09-27-66	RAB,RAC	0.554 UCI	HGS 1	TILTING CHAIR	CEM	03-540-25C
09-27-66	RAB,RAC	0.628 UCI	HGS 1	7-CRYST-POS	CEM	03-540-25D
COMPUTED TOTAL-BODY RADIUM						03-540-27
05-21-59	0.674 UCI		2.200 UCI	TOTAL	0.31	03-540-27A
09-27-62	0.610 UCI		1.890 UCI	TOTAL	0.31	03-540-27B
09-27-66	0.554 UCI		1.789 UCI	TOTAL	0.31	03-540-27C
09-27-66	0.628 UCI		2.027 UCI	TOTAL	0.31	03-540-27D
X-RAY EXAMINATION						03-540-30
COMPLETE SKELETAL SURVEY						03-540-30A
05-21-59	ANL	X-RAY NO. R-133	LOC. ANL			03-540-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 29						03-540-30C
PPF INNUMERABLE AREAS OF BONE RESORPTION IN CALVARIUM, MULTIPLE						03-540-30D
AREAS OF BONE RESORPTION IN RIGHT CLAVICLE, RIGHT AND LEFT						03-540-30E
HUMERUS, RIGHT AND LEFT RADIUS AND ULNA. MULTIPLE AREAS OF						03-540-30F
PATCHY SCLEROSIS. MULTIPLE AREAS OF BONE RESORPTION HEAD OF						03-540-30G
RIGHT FEMUR, RIGHT TIBIA, TARSAL BONES, LEFT FEMUR, LEFT TIBIA						03-540-30H
AND FIBULA AND LEFT TARSALS. ASEPTIC NECROSIS OF HEAD OF LEFT						03-540-30I
FEMUR.						03-540-30J
COMPLETE SKELETAL SURVEY						03-540-31A
09-27-62	ANL	X-RAY NO. R-133B	LOC. ANL			03-540-31B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 34						03-540-31C
PPF PROGRESSION OF CHANGES TYPICAL OF RADIUM DEPOSITION INCLUD-						03-540-31D
ING ASEPTIC NECROSIS OF HEAD OF RIGHT FEMUR.						03-540-31E
SPECIAL VIEWS--SINUSES, MASTOIDS, AND LAMINAGRAMS						03-540-32A
07-02-64	U OF CHICAGO CLINICS	UNIT NO.	LOC. U OF C			03-540-32B
MULTIPLE DESTRUCTIVE AND SCLEROTIC LESIONS IN THE CALVARIUM.						03-540-32C
HYPOPLASTIC MASTOIDS WITH CHANGES IN THE RIGHT MASTOID.						03-540-32D
COMPLETE SKELETAL SURVEY						03-540-33A
09-27-66	ANL	X-RAY NO. R-133C	LOC. ANL			03-540-33B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 33						03-540-33C
PPF NO CHANGE FROM PREVIOUS EXAMINATIONS 1962, 1959, EXCEPT FOR						03-540-33D
HEALED PATHOLOGICAL FRACTURE RIGHT FEMUR SUSTAINED 1963.						03-540-33E
CLINICAL LABORATORY FINDINGS						03-540-40
05-29-59	HG 10.7	HTC	RBC 3.71			03-540-40A
WBC 4200	DIFF. P 46	ST	L 46	M 6	E 2 B	03-540-40B
09-27-62	HG 13.1	HTC	RBC 3.96			03-540-41A
WBC 5600	DIFF. P 56	ST	L 37	M 4	E 1 B 2	03-540-41B
09-27-66	HG 13.2	HTC 40	RBC			03-540-42A
WBC 5700	DIFF. P 50	ST 2	L 36	M 11	E B 1	03-540-42B
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT)					03-540-66
23523-416	FRACTURE OF THE LOWER THIRD OF THE FEMUR (RIGHT)					03-540-66A
782 -10	HYSTERECTOMY					03-540-67
DATA REVISED 11-14-68						03-540-99

PATIENT 03-541	BORN 05-19-13	03-541-01
		03-541-02
		03-541-03
FEMALE		03-541-05
SOURCE OF CASE	SEARCH BY CEM	03-541-10
EXPOSURE	DIAL PAINTER 01	03-541-12
SOURCE LUMINOUS PROCESSES INC., OTTAWA, ILL., 1936-1939, ABOUT 3 YEARS. PAINTED DIALS WITH GLASS BRUSHES, DID NOT POINT BRUSH IN MOUTH.		03-541-13
		03-541-13A
		03-541-13B
FAMILY HISTORY		03-541-15
MARRIED 1939	PARA 2	GRAVIDA 2
HUSBAND	1912	L W
		03-541-15A
		03-541-15B
CHILDREN	MALE	L W
	FEMALE	L W
		03-541-16
		03-541-16A
MEDICAL HISTORY		03-541-20
NO SERIOUS ILLNESSES, BUT STATES SHE IS ANEMIC. BOTH CHILDREN DELIVERED BY CAESARIAN SECTION. EXCISION OF MASSES FROM LEFT AND RIGHT BREASTS IN 1958, BOTH SAID TO BE BENIGN. INQUIRY BY SYSTEMS NEGATIVE. TEETH IN GOOD CONDITION EXCEPT FOR TWO EXTRACTED. (10-14-59)		03-541-20A
		03-541-20B
		03-541-20C
		03-541-20D
		03-541-20E
GAMMA-RAY MEASUREMENTS		03-541-25
10-14-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-541-25A
COMPUTED TOTAL-BODY RADIUM		03-541-27
10-14-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI 0.31		03-541-27A
X-RAY EXAMINATION	NOT DONE	03-541-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-541-40
190 -16 BIOPSY OF BREAST (BENIGN LESION)		03-541-67
DATA REVISED 08-08-67		03-541-99

PATIENT 03-542	BORN 03-02-04	03-542-01
		03-542-02
		03-542-03
FEMALE		03-542-05
SOURCE OF CASE	SEARCH BY CEM	03-542-10
SOURCE RADIUM DIAL CO., PERU, ILL., 3 MONTHS, SUMMER 1922. PAINTED		03-542-13
DIALS, POINTED BRUSH IN MOUTH, NEVER PAINTED ANY PART OF OWN BODY.		03-542-13A
ASSUMED WORK PERIOD 06-01-1922 TO 09-01-1922		03-542-13*
18.24 YEARS OF AGE WHEN FIRST EMPLOYED.		03-542-13Z
FAMILY HISTORY		03-542-15
MARRIED 1923, DIV. 1936 PARA 0 GRAVIDA 0		03-542-15A
MARRIED 1937, DIV. 1951		03-542-15B
MEDICAL HISTORY		03-542-20
APPENDECTOMY 1955. NO OTHER SERIOUS ILLNESSES EXCEPT FOR CHRONIC		03-542-20A
PAINFUL BACK 18 YEARS INVOLVING MIDBACK AND SHOULDERS, DIAGNOSIS		03-542-20B
OF ARTHRITIS. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. TEETH--		03-542-20C
SEVERAL EXTRACTED, WEARS PARTIAL DENTURES. (06-11-59)		03-542-20D
GAMMA-RAY MEASUREMENTS		03-542-25
06-11-59 RAB,RAC 0.009 UCI HGS 1 TILTING CHAIR CEM		03-542-25A
COMPUTED TOTAL-BODY RADIUM		03-542-27
06-11-59 0.009 UCI 0.030 UCI TOTAL 0.31		03-542-27A
X-RAY EXAMINATION		03-542-30
PARTIAL SKELETAL SURVEY		03-542-30A
06-11-59 ANL X-RAY NO. R-137 LOC. ANL		03-542-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-542-30C
PPF NONE.		03-542-30D
CLINICAL LABORATORY FINDINGS		03-542-40
06-11-59 HG 12.1 HTC RBC 3.89		03-542-40A
WBC 8700 DIFF. P 76 ST L 19 M 4 E 1 B		03-542-40B
661 -12 APPENDECTOMY		03-542-67
DATA REVISED 08-08-67		03-542-99

PATIENT 03-543	BORN 09-08-18	03-543-01
		03-543-02
		03-543-03
		03-543-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-543-10
EXPOSURE	DIAL PAINTER 01	03-543-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., APRIL 1946 TO MARCH 1948. PAINTED DIALS OVER 1 YEAR AND WEIGHED MATERIAL PART OF TIME. NEVER POINTED BRUSH IN HER MOUTH, BUT WAS USUALLY COVERED WITH LUMINOUS MATERIAL BY END OF DAY INCLUDING FINGERNAILS AND MOUTH.		03-543-13
		03-543-13A
		03-543-13B
		03-543-13C
		03-543-13D
FAMILY HISTORY		03-543-15
MARRIED 1938	PARA 1 GRAVIDA 1	03-543-15A
HUSBAND DECEASED 1952		03-543-15B
MARRIED 1954		03-543-15C
CHILDREN FEMALE 1939 L W		03-543-16
MEDICAL HISTORY		03-543-20
CAESARIAN SECTION 1939, EXPLORATORY LAPAROTOMY 1943. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR RECENT MILD DEAFNESS LEFT SIDE. DENTAL HISTORY--ALMOST ALL TEETH EXTRACTED. (06-11-59)		03-543-20A
		03-543-20B
		03-543-20C
		03-543-20D
GAMMA-RAY MEASUREMENTS		03-543-25
06-11-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-543-25A
COMPUTED TOTAL-BODY RADIUM		03-543-27
06-11-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-543-27A
X-RAY EXAMINATION	NOT DONE	03-543-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-543-40
060 -01 EXPLORATORY LAPAROTOMY		03-543-67

PATIENT 03-544	BORN 09-13-06	03-544-01
		03-544-02
		03-544-03
FEMALE		03-544-05
SOURCE OF CASE	SEARCH BY CEM	03-544-10
EXPOSURE	DIAL PAINTER 01	03-544-12
SOURCE RADIUM DIAL CO., PERU, ILL., 6 MONTHS FROM SPRING 1922 TO		03-544-13
SEPTEMBER 1922. PAINTED DIALS. POINTED BRUSH IN MOUTH.		03-544-13A
ASSUMED WORK PERIOD 03-01-1922 TO 09-01-1922		03-544-13*
15.46 YEARS OF AGE WHEN FIRST EMPLOYED.		03-544-13Z
FAMILY HISTORY		03-544-15
MARRIED	PARA 0 GRAVIDA 0	03-544-15A
HUSBAND	1907 L W	03-544-15B
MEDICAL HISTORY		03-544-20
SURGERY--THYROID DISEASE 1925, 1927. INTERMITTENT LIVER THERAPY		03-544-20A
FOR ANEMIA SINCE 1942. BLEEDING TENDENCY ESPECIALLY NOTICEABLE		03-544-20B
WITH DENTAL EXTRACTATIONS, CONDITION RELIEVED BY VITAMIN K THERAPY		03-544-20C
SEVERAL YEARS AGO. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR SEVERAL		03-544-20D
EPISODES OF DISLOCATION OF JAW DURING DENTAL PROCEDURES. DENTAL		03-544-20E
HISTORY--ALL TEETH EXTRACTED. (06-11-59)		03-544-20F
GAMMA-RAY MEASUREMENTS		03-544-25
06-11-59 RAB,RAC 0.001 UCI HGS 1 TILTING CHAIR CEM		03-544-25A
COMPUTED TOTAL-BODY RADIUM		03-544-27
06-11-59 0.001 UCI 0.005 UCI TOTAL 0.31		03-544-27A
X-RAY EXAMINATION		03-544-30
COMPLETE SKELETAL SURVEY		03-544-30A
06-11-59 ANL X-RAY NO. R-136 LOC. ANL		03-544-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-544-30C
PPF NONE.		03-544-30D
CLINICAL LABORATORY FINDINGS		03-544-40
06-11-59 HG 13.0 HTC RBC 3.98		03-544-40A
WBC 9000 DIFF. P 68 ST 1 L 30 M 1 E B		03-544-40B
810 -10 THYROIDECTOMY		03-544-67
DATA REVISED 08-09-67		03-544-99

PATIENT 03-545	BORN 03-15-98	03-545-01
		03-545-02
FEMALE		03-545-03
		03-545-05
SOURCE OF CASE	SEARCH BY CEM	03-545-10
EXPOSURE	DIAL PAINTER 01	03-545-12
SOURCE RADIUM DIAL CO., CHICAGO, ILL., 3 OR 4 YEARS, THEN AT PERU, ILL., ABOUT 6 MONTHS. CANNOT REMEMBER SPECIFIC DATES. PAINTED NUMERALS ON DIALS AND HANDS. POINTED BRUSH IN HER MOUTH OCCASIONALLY.		03-545-13
		03-545-13A
		03-545-13B
		03-545-13C
FAMILY HISTORY		03-545-15
MARRIED 1931	PARA 0 GRAVIDA 0	03-545-15A
HUSBAND	DECEASED 1956	03-545-15B
MEDICAL HISTORY		03-545-20
NO SURGERY. GALL BLADDER ATTACK AND NERVOUS BREAKDOWN 1948.		03-545-20A
DETAILED MEDICAL HISTORY NOT TAKEN. (06-12-59)		03-545-20B
GAMMA-RAY MEASUREMENTS		03-545-25
06-12-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-545-25A
COMPUTED TOTAL-BODY RADIUM		03-545-27
06-12-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-545-27A
X-RAY EXAMINATION	NOT DONE	03-545-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-545-40
DATA REVISED 08-09-67		03-545-99

PATIENT 03-546

BORN 07-22-03

03-546-01
03-546-02
03-546-03
03-546-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

03-546-10

EXPOSURE

DIAL PAINTER 01

03-546-12

SOURCE RADIUM DIAL CO., OTTAWA, ILL., AUTUMN 1924 TO AUTUMN 1925
1 YEAR (MORE LIKELY 1925 TO 1926). PRESUMES SHE POINTED BRUSH IN
MOUTH, NEVER PAINTED ANY PART OF HER BODY.
ASSUMED WORK PERIOD 10-01-1925 TO 10-01-1926
22.19 YEARS OF AGE WHEN FIRST EMPLOYED.

03-546-13
03-546-13A
03-546-13B
03-546-13*
03-546-13Z

FAMILY HISTORY

MARRIED 1927
HUSBAND

PARA 1

GRAVIDA 1
DECEASED 1958

03-546-15
03-546-15A
03-546-15B

CHILDREN

FEMALE

1930

L W

03-546-16

MEDICAL HISTORY

HYSTERECTOMY 1939. NO SERIOUS ILLNESSES EXCEPT FOR SEVERAL
EPISODES PNEUMONIA. INQUIRY BY SYSTEMS--NEGATIVE EXCEPT FOR
BILATERAL EARACHES CHILDHOOD. TEETH--COMPLETE EXTRACTION UPPER
TEETH 1949, TEETH LOWER JAW ONE EXTRACTED. (06-15-59)

03-546-20
03-546-20A
03-546-20B
03-546-20C
03-546-20D

GAMMA-RAY MEASUREMENTS

06-15-59 RAB,RAC 0.030 UCI HGS 1 TILTING CHAIR CEM

03-546-25
03-546-25A

COMPUTED TOTAL-BODY RADIUM

06-15-59 0.030 UCI 0.095 UCI TOTAL 0.31

03-546-27
03-546-27A

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

06-15-59 ANL X-RAY NO. R-138 LOC. ANL

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0

PPF NONE.

03-546-30
03-546-30A
03-546-30B
03-546-30C
03-546-30D

CLINICAL LABORATORY FINDINGS

06-15-59 HG 13.8 HTC RBC 4.38
WBC 9000 DIFF. P 55 ST L 59 M 4 E 2 B

03-546-40
03-546-40A
03-546-40B

361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE

782 -10 HYSTERECTOMY

03-546-67
03-546-67A

DATA REVISED 08-09-67

03-546-99

PATIENT	03-547	BORN	08-08-07	03-547-01
	DECEASED			03-547-02
				03-547-03
FEMALE		SOC.SEC.NO.		03-547-05
DECEASED	01-04-62			03-547-06
DEATH CERT.NO.		AUTOPSY	YES	03-547-07
INTERMENT		HOLY SEPULCHRE CEMETERY,	HAYWARD, CALIFORNIA	03-547-08
CAUSES OF DEATH	UREMIA,			03-547-09
	METASTASES FROM 2 ADENOCARCINOMAS OF RECTUM AND			03-547-09A
	SIGMOID COLON CAUSING OBSTRUCTION OF BOTH URETERS,			03-547-09B
	FAMILIAL HEREDITARY MULTIPLE POLYPOSIS OF ENTIRE			03-547-09C
	COLON WITH 3RD ADENOCARCINOMA IN ASCENDING COLON,			03-547-09D
	METASTASES, MULTIPLE, BILATERAL, LUNGS, ASYMTO-			03-547-09E
	MATIC PRIOR TO DEATH 6 TO 9 MONTHS,			03-547-09F
	ADENOCARCINOMA OF RIGHT BREAST REMOVED 1953			03-547-09G
	(DEATH CERTIFICATE)			03-547-09H
	METASTATIC ADENOCARCINOMA OF COLON INVOLVING			03-547-09I
	LUNGS, URETERS, ILIA, MESENTERIC AND PERIAORTIC LYMPH NODES,			03-547-09J
	CONTRIBUTING--BRONCHOPNEUMONIA AND AZOTEMIA AS			03-547-09K
	RESULT OF STENOSIS OF URETERS BY METASTASES (ACTUAL)			03-547-09L
SOURCE OF CASE		SEARCH BY CEM		03-547-10
LITERATURE CITATION				03-547-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-547-11A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-547-11B
EXPOSURE		DIAL PAINTER	01	03-547-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., JULY 1923 TO AUG. 1925 EXCEPT			03-547-13
	FOR 1 MONTH SEPT. 1924. PAINTED CLOCK DIALS. POINTED BRUSH IN			03-547-13A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-547-11B
	MCUTH. NEVER PAINTED OWN PERSON.			03-547-13B
	ASSUMED WORK PERIOD 07-01-1923 TO 08-01-1925			03-547-13*
	15.89 YEARS OF AGE WHEN FIRST EMPLOYED.			03-547-13Z
FAMILY HISTORY				03-547-15
MARRIED	1930	PARA 3	GRAVIDA 4 (1 MISCARRIAGE)	03-547-15A
CHILDREN	MALE	1931	L W	03-547-16
	MALE	1934	L W	03-547-16A
	FEMALE	1939	L W	03-547-16B
MEDICAL HISTORY				03-547-20
	LONG COMPLICATED MEDICAL HISTORY. RUPTURED APPENDIX AND PNEUMONIA			03-547-20A
	1924. PLEURISY WITH EFFUSION 1928, CONFINED TO BED LASALLE COUNTY			03-547-20B
	SANITARIUM 2 MO. SEVERAL EPISODES PNEUMONIA 1930S. ABDOMINAL			03-547-20C
	SURGERY PROB. INVOLVING OVARIECTOMY 1939. THREE LAPAROTOMIES			03-547-20D
	1950 FOR ADHESIONS, AGAIN BOWEL RESECTION, AGAIN LEFT			03-547-20E
	OPHOURECTOMY. RIGHT RADICAL MASTECTOMY FOLLOWED BY X-RAY THERAPY			03-547-20F
	SEPT. 1950. PNEUMONIA AND TUBERCULOSIS NOV. 1950 TREATED WITH PAS			03-547-20G
	AND INH. LATER PNEUMOPERITONEUM, AT HOME. FRACTURED THIRD AND			03-547-20H
	FIFTH RIBS SEVERAL YEARS LATER. RADICAL LOWER EXTREMITY VEIN			03-547-20I
	STRIPPING FOR VARICOSITIES 1957. PEPTIC ULCER HISTORY PRIOR TO			03-547-20J
	1952 TREATED SUCCESSFULLY BY DIET. SEVERAL TEETH EXTRACTED FROM			03-547-20K
	UPPER JAW, WEARS PARTIAL UPPER DENTURE. (06-26-59)			03-547-20L

SURGERY--HEREDITARY POLYPOSIS OF BOWEL AND/OR CARCINOMA OF
RECTUM 1960, AGAIN FOR CARCINOMA OF ASCENDING COLON 1961.
TERMINAL HOSPITALIZATION 12-07-61, PATIENT DIED 01-04-62.
(01-04-62, FROM PERSONAL PHYSICIAN OF PATIENT)

03-547-21A
03-547-21B
03-547-21C
03-547-21D

GAMMA-RAY MEASUREMENTS
06-26-59 RAB,RAC 0.006 UCI HGS 1 TILTING CHAIR CEM

03-547-25
03-547-25A

COMPUTED TOTAL-BODY RADIUM
06-26-59 0.006 UCI 0.019 UCI TOTAL 0.31

03-547-27
03-547-27A

X-RAY EXAMINATION
PARTIAL SKELETAL SURVEY
06-26-59 ANL X-RAY NO. R-139 LOC. ANL
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
PPF NONE.

03-547-30
03-547-30A
03-547-30B
03-547-30C
03-547-30D

CLINICAL LABORATORY FINDINGS
06-26-59 HG 8.8 HTC RBC 4.96
WBC 9800 P 68 ST 2 L 21 M 5 E 4 B

03-547-40
03-547-40A
03-547-40B

MALIGNANT TUMOR CARCINOMA OF COLON 1962

03-547-60

190 -14 RADICAL MASTECTOMY (RIGHT)
190 -8091 ADENOCARCINOMA OF THE BREAST (RIGHT)
229 -416 FRACTURE OF RIBS
360 -123 PULMONARY TUBERCULOSIS
361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE
651 -951 DUODENAL ULCER
660 -8091.0 ADENOCARCINOMA OF COLON, WITH METASTASES
661 -100.3 APPENDICITIS WITH PERFORATION
788 -10 UNILATERAL OOPHORECTOMY

03-547-67
03-547-67A
03-547-67B
03-547-67C
03-547-67D
03-547-67E
03-547-67F
03-547-67G
03-547-67H

DATA REVISED 10-14-68

03-547-99

PATIENT 03-548	BORN 08-18-06	03-548-01
		03-548-02
FEMALE		03-548-03
		03-548-05
SOURCE OF CASE	SEARCH BY CEM	03-548-10
EXPOSURE	DIAL PAINTER 01	03-548-12
SOURCE RADIUM DIAL CO., PERU, ILL., 1922, ABOUT 4 MONTHS. PAINTED		03-548-13
DIALS, POINTED BRUSH IN MOUTH.		03-548-13A
ASSUMED WORK PERIOD 06-01-1922 TO 10-01-1922		03-548-13*
15.78 YEARS OF AGE WHEN FIRST EMPLOYED.		03-548-13Z
FAMILY HISTORY		03-548-15
MARRIED 1928	PARA 1	03-548-15A
HUSBAND	1906 GRAVIDA 1	03-548-15B
	L, ILL BUT EMPLOYED	
CHILDREN	MALE	03-548-16
	L W	
MEDICAL HISTORY		03-548-20
NEGATIVE MEDICAL AND SURGICAL HISTORY EXCEPT FOR ANEMIA DIS-		03-548-20A
COVERED 10 YEARS AGO. EDENTULOUS AND WEARS DOUBLE DENTURES,		03-548-20B
TEETH EXTRACTED BECAUSE OF PYORRHEA. (10-15-59)		03-548-20C
GAMMA-RAY MEASUREMENTS		03-548-25
10-15-59 RAB,RAC 0.058 UCI HGS 1 TILTING CHAIR CEM		03-548-25A
COMPUTED TOTAL-BODY RADIUM		03-548-27
10-15-59 0.058 UCI 0.190 UCI TOTAL 0.31		03-548-27A
X-RAY EXAMINATION		03-548-30
COMPLETE SKELETAL SURVEY		03-548-30A
10-15-59 ANL X-RAY NO. R-175 LOC. ANL		03-548-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION SCORE 0		03-548-30C
PPF NEGATIVE EXCEPT FOR SOMEWHAT RAGGED APPEARANCE OF MEDULLA		03-548-30D
IN LONG BONES OF UPPER AND LOWER EXTREMITIES. OSTEOPOROSIS		03-548-30E
SEEN HERE IS CONSIDERED TO BE NORMAL FOR THIS AGE.		03-548-30F
CLINICAL LABORATORY FINDINGS		03-548-40
10-15-59 Hg 12.6 HTC RBC 4.15		03-548-40A
WBC 7000 DIFF. P 67 ST L 27 M 4 E 2 B		03-548-40B
DATA REVISED 08-09-67		03-548-99

PATIENT 03-549	BORN 05-29-10	03-549-01
		03-549-02
		03-549-03
		03-549-04
		03-549-04
		03-549-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-549-10
EXPOSURE	DIAL PAINTER 01	03-549-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SUMMER 1925 TO 1930, 5 YRS.		03-549-13
KIRK-RICH CO., CHICAGO, ILL., 1930 TO OCTOBER 1933, 3 YRS.		03-549-13A
MILLER NAMEPLATE CO., LOS ANGELES, CALIF., 2 WEEKS 1937.		03-549-13B
KIRK RICH CO., FEB. 1940 TO 1943. PAINTED DIALS, POINTED BRUSH		03-549-13C
IN MOUTH AT ALL COMPANIES. BECAUSE OF HABIT, POINTED BRUSH IN		03-549-13D
MOUTH AT LAST EMPLOYMENT DESPITE THREATS OF TERMINATION.		03-549-13E
ASSUMED WORK PERIOD 06-01-1925 TO 10-01-1933		03-549-13*
15.00 YEARS OF AGE WHEN FIRST EMPLOYED.		03-549-13Z
FAMILY HISTORY		03-549-15
MARRIED 1926 DIV. 1931 PARA 0 GRAVIDA 0		03-549-15A
MARRIED 1933 WID. 1940		03-549-15B
MARRIED 1942 PARA 4 GRAVIDA 6 (2 MISCARRIAGES)		03-549-15C
CHILDREN MALE 1934 L W		03-549-16
FEMALE 1938 L W		03-549-16A
FEMALE 1943 L W		03-549-16B
MALE 1946 L W		03-549-16C
MEDICAL HISTORY		03-549-20
NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE		03-549-20A
EXCEPT FOR HISTORY PERSISTENT ACHE IN MID-DORSAL REGION THORAX.		03-549-20B
3 UPPER TEETH EXTRACTED, 6 REMAINING LOWER JAW. (07-02-59)		03-549-20C
GAMMA-RAY MEASUREMENTS		03-549-25
COMPUTED TOTAL-BODY RADIUM		03-549-27
07-02-59 RAB,RAC 0.020 UCI HGS 1 TILTING CHAIR CEM		03-549-25A
07-02-59 0.020 UCI 0.061 UCI TOTAL 0.31		03-549-27A
X-RAY EXAMINATION		03-549-30
COMPLETE SKELETAL SURVEY		03-549-30A
07-02-59 ANL X-RAY NO. R-141 LOC. ANL		03-549-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-549-30C
PPF NONE.		03-549-30D
CLINICAL LABORATORY FINDINGS		03-549-40
07-02-59 HG 13.3 HTC RBC 3.89		03-549-40A
WBC 6500 DIFF. P 61 ST 1 L 30 M 3 E 5 B		03-549-40B
DATA REVISED 08-09-67		03-549-99

PATIENT 03-550	BORN 01-29-00	03-550-01
		03-550-02
		03-550-03
FEMALE		03-550-05
SOURCE OF CASE	SEARCH BY CEM	03-550-10
EXPOSURE	DIAL PAINTER 01	03-550-12
SOURCE COLD LITE MFG. CO., DENVER, COLORADO, JUNE 1917 TO DEC. 1918.		03-550-13
IN 1919, PATIENT WORKED IN LABORATORY OF RADIUM CO. OF COLORADO		03-550-13A
FOR ABOUT 6 MONTHS. AT FIRST PLACE OF EMPLOYMENT, PAINTED SMALL		03-550-13B
COMPASS AND LARGE BAROMETER DIALS, PLUS A FEW WATCH DIALS.		03-550-13C
IN SECOND PLACE OF EMPLOYMENT, DID CLEANUP WORK SUCH AS WATCH		03-550-13D
RETOUCHING, ETC. POINTED BRUSH IN HER MOUTH. NEVER PAINTED ANY		03-550-13E
PART OF HER BODY.		03-550-13F
ASSUMED WORK PERIOD 06-01-1917 TO 06-01-1919		03-550-13*
17.33 YEARS OF AGE WHEN FIRST EMPLOYED.		03-550-13Z
FAMILY HISTORY		03-550-15
MARRIED 1929	PARA 2 GRAVIDA 2	03-550-15A
HUSBAND	1899 L W	03-550-15B
CHILDREN	MALE 1931 L W	03-550-16
	FEMALE 1933 L W	03-550-16A
MEDICAL HISTORY		03-550-20
HEMORRHOIDECTOMY 1948. HYSTERECTOMY 1949. NO OTHER SURGERY OR		03-550-20A
SERIOUS ILLNESS. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--		03-550-20B
TWO TEETH EXTRACTED. (07-09-59)		03-550-20C
GAMMA-RAY MEASUREMENTS		03-550-25
07-09-59	RAB,RAC 0.004 UCI HGS 1 TILTING CHAIR CEM	03-550-25A
COMPUTED TOTAL-BODY RADIUM		03-550-27
07-09-59	0.004 UCI 0.013 UCI TOTAL 0.31	03-550-27A
X-RAY EXAMINATION		03-550-30
PARTIAL SKELETAL SURVEY		03-550-30A
07-09-59	ANL X-RAY NO. R-142 LOC. ANL	03-550-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1		03-550-30C
PPF QUESTIONABLE COARSENING OF TRABECULATION IN THE PROXIMAL		03-550-30D
THIRD OF THE RIGHT AND LEFT TIBIA.		03-550-30E
CLINICAL LABORATORY FINDINGS		03-550-40
07-09-59	HG 13.5 HTC RBC 4.46	03-550-40A
WBC 7600	DIFF. P 73 ST 1 L 23 M 2 E 1 B	03-550-40B
67X -11	HEMORRHOIDECTOMY	03-550-67
782 -10	HYSTERECTOMY	03-550-67A
DATA REVISED 08-09-67		03-550-99

PATIENT 03-551	BORN 01-03-03	03-551-01 03-551-02 03-551-04 03-551-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-551-05A
SOURCE OF CASE	REFERRED BY RJH	03-551-10
LITERATURE CITATION		03-551-11 03-551-11A
MILLER, ANL-6839 (1964) PP. 18-39.		
EXPOSURE	DIAL PAINTER 01	03-551-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL. FROM 1922 TO END OF 1926, AND ONE FULL YEAR IN 1928, ABOUT 6 YEARS TOTAL. PAINTED DIALS, ALL TYPES INCLUDING WATCHES, POINTED BRUSH IN MOUTH UNTIL GLASS PENS CAME INTO USE. NEVER PAINTED HER OWN PERSON.		03-551-13 03-551-13A 03-551-13B 03-551-13C 03-551-13*
ASSUMED WORK PERIOD 07-01-1922 TO 01-01-1929		03-551-13*
19.48 YEARS OF AGE WHEN FIRST EMPLOYED.		03-551-13Z
FAMILY HISTORY		03-551-15
MARRIED 1926, DIV. 1932 PARA 0 GRAVIDA C		03-551-15A
MEDICAL HISTORY		03-551-20
SURGERY--PATIENT SUSTAINED FRACTURE OF LEFT FEMUR WHILE WALKING OFF CURB, DEC. 1947, FIRST OPERATION FRACTURE DID NOT HEAL,		03-551-20A 03-551-20B
SECOND OPERATION PATIENT RECEIVED BONE GRAFT FROM HER RIGHT ILIAC CREST BUT FRACTURE STILL DID NOT HEAL, APRIL 1948,		03-551-20C 03-551-20D
THIRD OPERATION PATIENT WAS GIVEN BONE GRAFT FROM BONE BANK AND FRACTURE EVENTUALLY HEALED, AUG. 1948. PATIENT FELL AND		03-551-20E 03-551-20F
SUSTAINED A FRACTURE OF THE RIGHT MIDSHAFT FEMUR, PROBABLE SPONTANEOUS FRACTURE, PIN WAS PLACED IN ENTIRE SHAFT, MARCH 1953.		03-551-20G 03-551-20H
NO OTHER ILLNESSES OR INJURIES. INQUIRY BY SYSTEMS NEGATIVE.		03-551-20I
TEETH--ALL EXTRACTED, SOME HAD LOOSENED, PATIENT HAD NO INFECTION.		03-551-20J 03-551-20K
(08-04-59)		
PATIENT ADMITTED TO U OF CHICAGO CLINICS (09-10-59, UNIT NO.		03-551-21A
) FOR EXPLORATION OF QUESTIONABLE CARCINOMA OF LEFT MASTOID,		03-551-21B
BIOPSY OF MASTOID AIR CELLS AND SIMPLE MASTOIDECTOMY WAS PER-		03-551-21C
FORMED. NO TUMOR FOUND, LARGE CAVITY REPRESENTS RADIUM NECROSIS		03-551-21D
OF BONE RATHER THAN EPIDERMOID CARCINOMA, IMPRESSION--CHRONIC		03-551-21E
INFLAMMATION WITH THICKENING OF THE MUCOSA OF THE MASTOID CELLS,		03-551-21F
FOCAL AREAS OF DEGENERATION OF MASTOID BONE. (09-10-59)		03-551-21G
INTERVAL HISTORY NEGATIVE EXCEPT THAT PATIENT TIRES EASILY.		03-551-22A
IS EMPLOYED AND WORKS IN OFFICE EVERY DAY. NO OTHER SYMPTOMS.		03-551-22B
(08-19-63)		03-551-22C
INTERVAL HISTORY--PATIENT CONTINUES TO BE ACTIVE AND ONLY COM-		03-551-23A
PLAINT IS OF SEVERE TINNITUS IN BOTH EARS, MOST MARKEDLY ON THE		03-551-23B
LEFT WITH BILATERAL DECREASE IN AUDITORY ACUITY. MASTOID LAMINA-		03-551-23C
GRAPHY DONE 08-30-67 HAS DEMONSTRATED A MODERATE INCREASE IN THE		03-551-23D
DESTRUCTION OF THE WALLS OF THE MASTOID CELLULES ON THE RIGHT		03-551-23E
WITHOUT SUFFICIENT EVIDENCE OF TUMOR TO RECOMMEND EXPLORATION OF		03-551-23F
THE RIGHT MASTOID AT THIS TIME. (07-11-67)		03-551-23G

GAMMA-RAY MEASUREMENTS

09-13-56	RAB,RAC	0.372 UCI	HGS 1 ONE-METER ARC	CEM	03-551-25
08-04-59	RAB,RAC	0.412 UCI	HGS 1 TILTING CHAIR	CEM	03-551-25A
08-19-63	RAB,RAC	0.418 UCI	HGS 1 7-CRYST-POS	CEM	03-551-25B
08-17-64	RAB,RAC	0.350 UCI	HGS 1 TILTING CHAIR	CEM	03-551-25C
07-18-67	RAB,RAC	0.362 UCI	HGS 1 TILTING CHAIR	CEM	03-551-25D
					03-551-25E

COMPUTED TOTAL-BODY RADIUM

09-13-56	0.372 UCI	1.200 UCI TOTAL	0.31	03-551-27
08-04-59	0.412 UCI	1.330 UCI TOTAL	0.31	03-551-27A
08-19-63	0.418 UCI	1.348 UCI TOTAL	0.31	03-551-27B
08-17-64	0.350 UCI	1.129 UCI TOTAL	0.31	03-551-27C
07-18-67	0.362 UCI	1.166 UCI TOTAL	0.31	03-551-27D
				03-551-27E

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY 03-551-30

09-13-56 ANL X-RAY NO. R-17 LOC. ANL 03-551-30A

ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 39.5 03-551-30B

PPF MULTIPLE UP TO 8 MM SIZE AREAS OF BONE RESORPTION SCATTERED 03-551-30C

THROUGHOUT THE CALVARIUM. COARSENING OF TRABECULAR PATTERN 03-551-30D

THROUGHOUT VERTEBRAL BODIES WITH MARKED OSTEOPOROSIS OF THE VER- 03-551-30E

TEBRAL BODIES. MARKED CHANGE IN TRABECULAR PATTERN THROUGHOUT THE 03-551-30F

BONES OF PELVIS WITH MULTIPLE AREAS OF BONE RESORPTION IN THE 03-551-30G

REGION OF THE ISCHIAL TUBEROSITIES. MARKED BONE CONDENSATION OF 03-551-30H

THE SUPERIOR BORDERS OF THE ACETABULA. LOSS OF THE JOINT SPACE 03-551-30I

BILATERALLY. ASEPTIC NECROSIS OF HEADS OF BOTH FEMORA. OLD PATH- 03-551-30J

OLOGICAL FRACTURES OF BOTH FEMORA. SURGICAL REMOVAL OF LATERAL 03-551-30K

HALF OF WING OF RIGHT ILIUM. COARSENING OF TRABECULAR PATTERN OF 03-551-30L

SCAPULI. ASEPTIC NECROSIS OF THE HEADS OF BOTH HUMERI WITH SECOND- 03-551-30M

ARY LOSS OF SHOULDER JOINT SPACE BILATERALLY. MULTIPLE AREAS OF 03-551-30N

BONE RESORPTION THROUGHOUT BOTH HUMERI AND RADIUS AND ULNA BI- 03-551-30O

LATERALLY. MULTIPLE AREAS OF BONE SCLEROSIS AT SITES OF OLD DIS- 03-551-30P

TAL EPIPHYSEAL LINES OF THE TIBULAE AND FIBULAE BILATERALLY. 03-551-30Q

MULTIPLE AREAS OF BONE RESORPTION THROUGHOUT THE SHAFTS OF BOTH 03-551-30R

FEMURS AND BOTH TIBULAE AND FIBULAE. MARKED COARSENING OF THE 03-551-30S

TRABECULAR PATTERN WITH MULTIPLE AREAS OF BONE RESORPTION IN LEFT 03-551-30T

METATARSALS. ASEPTIC NECROSIS OF LEFT ASTRAGULUS AND TARSAL 03-551-30U

SCAPHOID. 03-551-30V

COMPLETE SKELETAL SURVEY 03-551-31A

08-04-59 ANL X-RAY NO. R-17B LOC. ANL 03-551-31B

ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. POSSIBLE CARCINOMA 03-551-31C

OF LEFT MASTOID. SCORE 51 03-551-31D

PPF EXTENSIVE MULTIPLE AREAS OF BONE RESORPTION THROUGHOUT ENTIRE 03-551-31E

SKELETON. DESTRUCTION OF CELLULARITY OF LEFT MASTOID. EXTENSIVE 03-551-31F

PATCHY SCLEROSIS OF DISTAL FEMURS, PROXIMAL TIBIAS AND FIBULAS, 03-551-31G

AND DISTAL LEFT TIBIA AND FIBULA. PATHOLOGICAL FRACTURES RIGHT 03-551-31H

AND LEFT FEMURS. ASEPTIC NECROSIS OF RIGHT AND LEFT SCAPULAS, 03-551-31I

RIGHT AND LEFT HUMERAL HEADS, RIGHT RADIAL HEAD, LEFT FEMORAL 03-551-31J

HEAD. 03-551-31K

SPECIAL VIEWS--SKULL AND MASTOIDS 03-551-32A

08-24-59 ANL X-RAY NO. R-17C LOC. ANL 03-551-32B

PROBABLE CARCINOMA OF LEFT MASTOID. 03-551-32C

PPF EXPLORATION OF LEFT MASTOID REVEALED NO TUMOR (09-10-59, 03-551-32D

U OF C CLINICS). LARGE CAVITY SHOWN ON FILM REVEALS DESTRUCTION 03-551-32E

OF BONY WALLS OF MASTOID AIR CELLS AS RESULT OF PRESENCE OF 03-551-32F

RADIUM, WHICH REPRESENTS RADIUM NECROSIS OF BONE RATHER THAN 03-551-32G

DESTRUCTION FROM EPIDERMAL CARCINOMA. 03-551-32H

SPECIAL VIEWS--MASTOIDS			03-551-33A
08-29-59	U OF CHICAGO CLINICS UNIT NO.	LOC. U OF C	03-551-33B
DESTRUCTIVE LESIONS IN CALVARIUM ARE TYPICAL OF CHRONIC RADIUM POISONING. CHANGES IN LEFT MASTOID ARE OF DESTRUCTIVE NATURE AND TYPICAL OF EPIDERMOID CARCINOMA, WHICH VERY FREQUENTLY DEVELOPS IN THIS SITE SECONDARY TO RADIUM POISONING. RIGHT MASTOID IS RELATIVELY UNINVOLVED, ALTHOUGH THERE IS A SUSPICIOUS AREA ON THE SUPERIOR POSTERIOR ASPECT.			03-551-33C
			03-551-33D
			03-551-33E
			03-551-33F
			03-551-33G
			03-551-33H
COMPLETE SKELETAL SURVEY			03-551-34A
07-17-61	ANL X-RAY NO. R-17D	LOC. ANL	03-551-34B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 48			03-551-34C
PPF ESSENTIALLY NO CHANGE SINCE 1959. POST-SURGICAL EXENTERATION LEFT MASTOID.			03-551-34D
			03-551-34E
COMPLETE SKELETAL SURVEY			03-551-35A
08-19-63	ANL X-RAY NO. R-17E	LOC. ANL	03-551-35B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 38			03-551-35C
PPF MARKED COARSENING OF THE TRABECULAR PATTERN OF THE RIGHT AND LEFT CLAVICLE, SCAPULA, AND HUMERUS, RIGHT AND LEFT RADIUS AND AND ULNA, PELVIS, RIGHT AND LEFT TIBIA AND FIBULA AND THE BONES OF THE FEET. OLD PATHOLOGICAL FRACTURES OF THE RIGHT AND LEFT FEMUR, MULTIPLE LARGE AREAS OF BONE RESORPTION IN THE CALVARIUM, RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA. ASEPTIC NECROSIS OF THE HEADS OF BOTH FEMORA. MULTIPLE AREAS OF BONE SCLEROSIS IN THE RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA.			03-551-35D
			03-551-35E
			03-551-35F
			03-551-35G
			03-551-35H
			03-551-35I
			03-551-35J
			03-551-35K
			03-551-35L
			03-551-35M
SPECIAL VIEWS--MASTOIDS, SINUSES, CHEST, LAMINAGRAMS			03-551-36A
07-22-64	U OF CHICAGO CLINICS UNIT NO.	LOC. U OF C	03-551-36B
NO ESSENTIAL CHANGE OVER LAST FILMS, AGAIN SHOWING SPOTTY DEMINERALIZATION OF THE CALVARIUM AND POST-SURGICAL CHANGES OF LEFT MASTOID, SOME MUCOSAL THICKENING OF BOTH MIDDLE EAR CAVITIES, SOME DEMINERALIZATION OF LONG PROCESS OF THE INCUS ON THE LEFT. LOSS OF TRABECULATION OF RIGHT MASTOID IS TYPICAL OF INCREASED RADIUM BURDEN.			03-551-36C
			03-551-36D
			03-551-36E
			03-551-36F
			03-551-36G
			03-551-36H
SPECIAL VIEWS--MASTOIDS, SINUSES, CHEST			03-551-37A
02-04-65	U OF CHICAGO CLINICS UNIT NO.	LOC. U OF C	03-551-37B
NO CHANGE IN APPEARANCE SINCE LAST EXAMINATION. ON RIGHT SIDE THERE IS DESTRUCTION OF BONY SEPTA BETWEEN THE MASTOID AIR CELLS. ON THE LEFT IN ADDITION TO LARGE OPERATIVE DEFECT THERE IS DESTRUCTION OF BONY SEPTA. NORMAL PARANASAL SINUSES. MULTIPLE DESTRUCTIVE LESIONS SCATTERED THROUGHOUT CALVARIUM SHOW NO CHANGE FROM PREVIOUS EXAMINATION. NORMAL CHEST. LEFT HUMERAL HEAD IS GROSSLY DISTORTED, PROBABLY AS RESULT OF ASEPTIC NECROSIS, AND THERE ARE MULTIPLE LOOSE BODIES WITHIN LEFT SHOULDER JOINT. RIGHT HUMERAL HEAD ALSO HAS SOME SCLEROTIC LESIONS.			03-551-37C
			03-551-37D
			03-551-37E
			03-551-37F
			03-551-37G
			03-551-37H
			03-551-37I
			03-551-37J
			03-551-37K
SPECIAL VIEWS--PELVIS, FEMUR			03-551-38A
02-04-65	U OF CHICAGO CLINICS UNIT NO.	LOC. U OF C	03-551-38B
THERE IS AN INTRAMEDULLARY ROD EXTENDING THROUGHOUT LENGTH OF RIGHT FEMUR. THERE IS AN OLD UNITED FRACTURE OF MIDSHAFT OF RIGHT FEMUR. EXTENSIVE CYSTIC LESIONS OF MEDULLARY SPACE, SCLEROTIC LESIONS IN DISTAL END, ASEPTIC NECROSIS OF RIGHT FEMORAL HEAD.			03-551-38C
			03-551-38D
			03-551-38E
			03-551-38F
			03-551-38G

SPECIAL VIEWS--MASTOIDS, SINUSES, LAMINAGRAPH OF RIGHT MASTOID
 02-06-65 U OF CHICAGO CLINICS UNIT NO. LOC. U OF C
 EXTENSIVE DESTRUCTION RIGHT MASTOID AREAS. PROBABLE MALIGNANT
 CHANGES IN RIGHT MASTOID AS EVIDENCED BY SOFT TISSUE MASS IN
 ADDITION TO DESTRUCTION OF BONE.

03-551-39A
 03-551-39B
 03-551-39C
 03-551-39D
 03-551-39E

CLINICAL LABORATORY FINDINGS

08-04-59	HG 13.9	HTC	RBC 4.26					03-551-40
WBC 9900	DIFF. P 70	ST 1	L 22	M 7	E	B		03-551-40A
								03-551-40B
1. 108-13-60	HG 14.	HTC 44	RBC					03-551-41A
WBC 11,500	DIFF. P 65	ST	L 27	M 7	E 0	B 1		03-551-41B
07-17-61	HG 13.7	HTC	RBC 4.22					03-551-42A
WBC 9000	DIFF. P 62	ST 1	L 32	M 4	E 1	B		03-551-42B
07-21-64	HG 13.9	HTC 43	RBC					03-551-43A
WBC 8500	DIFF. P 69	ST	L 24	M 6	E 1	B 0		03-551-43B
PLATELETS 235,400								03-551-43C
03-29-66	HG 14.7	HTC 41	RBC 4.7					03-551-44A
WBC 9600	DIFF. P 80	ST	L 15	M 5	E 0	B 0		03-551-44B
08-20-67	HG 13.7	HTC	RBC					03-551-45A
WBC 8600	DIFF. P 73	ST	L 22	M 5	E 0	B 0		03-551-45B
PLATELETS 308,000, RETICS 0.9 PERCENT								03-551-45C

SPECIMENS AVAILABLE

SURGICAL SPECIMEN	LOC. ACRH	RJH	03-551-50
FRAGMENTS OF BONE CHIPS FROM LEFT MASTOID		5 G	03-551-50A
			03-551-50B

X84 -13	SIMPLE MASTOIDECTOMY	03-551-66
2134 -4722.1	ASEPTIC NECROSIS OF THE MASTOID PORTION, TEMPORAL BONE	03-551-66A
2301 -4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE HUMERUS (RIGHT, LEFT)	03-551-66B
2392 -4722.1	ASEPTIC NECROSIS OF THE ASTRAGULUS (LEFT)	03-551-66C
2394 -4722.1	ASEPTIC NECROSIS OF THE TARSAL SCAPHOID (LEFT)	03-551-66D
23113-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE RADIUS (RIGHT)	03-551-66E
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (RIGHT, LEFT)	03-551-66F
23522-416	FRACTURE OF MIDDLE THIRD OF THE SHAFT OF THE FEMUR(RIGHT)	03-551-66G
23522-416	FRACTURE OF MIDDLE THIRD OF THE SHAFT OF THE FEMUR(LEFT)	03-551-66H
23522-543	FIXATION OF FRACTURE OF THE FEMUR WITH METAL PIN(RIGHT)	03-551-66I
23522-5162	AUTOGENOUS BONE GRAFT, FEMUR (LEFT)	03-551-66J
23522-5163	HETEROGENOUS BONE GRAFT, FEMUR (LEFT)	03-551-66K

ADDITIONAL INFORMATION--X-RAY EXAMINATION (CONTINUED)

COMPLETE SKELETAL SURVEY		03-551-91
07-18-67	ANL X-RAY NO. R-17F LOC. ANL	03-551-91A
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 41	03-551-91B
PPF MARKED COARSENING OF THE TRABECULAR PATTERN OF THE RIGHT AND		03-551-91C
LEFT CLAVICLE, SCAPULA, AND HUMERUS, RIGHT AND LEFT RADIUS AND		03-551-91D
AND ULNA, PELVIS, RIGHT AND LEFT TIBIA AND FIBULA AND THE BONES		03-551-91E
OF THE FEET. OLD PATHOLOGICAL FRACTURES OF THE RIGHT AND LEFT		03-551-91F
FEMUR, MULTIPLE LARGE AREAS OF BONE RESORPTION IN THE CALVARIUM,		03-551-91G
RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND		03-551-91H
LEFT TIBIA AND FIBULA. ASEPTIC NECROSIS OF THE HEADS OF BOTH		03-551-91I
FEMORA AND BOTH HUMERI. MULTIPLE AREAS OF BONE SCLEROSIS IN THE		03-551-91J
RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND		03-551-91K
LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA.		03-551-91L
		03-551-91M

SPECIAL VIEWS--LAMINAGRAPHS OF MASTOIDS 03-551-92A
 08-21-67 U OF CHICAGO CLINICS UNIT NO. LCC. U OF C 03-551-92B
 RIGHT MASTOID DEMONSTRATES PROGRESSIVE DESTRUCTION OF THE 03-551-92C
 CELLULES. IT IS DIFFICULT TO TELL WHETHER THIS IS DUE TO RADIA- 03-551-92D
 TION CHANGES OR TUMOR. 03-551-92E

SPECIAL VIEWS--MASTOID LAMINAGRAMS 03-551-92F
 10-23-68 U OF CHICAGO CLINICS UNIT NO. LCC. U OF C 03-551-92G
 REDEMONSTRATION OF POSTOPERATIVE CHANGES IN THE LEFT MASTOID. 03-551-92F
 THERE ARE CHANGES OF CHRONIC INFLAMMATORY DISEASE IN THE MIDDLE 03-551-92G
 EAR AND REMAINING PORTION OF THE MASTOID WITH DEMINERALIZATION 03-551-92H
 OF LONG PROCESS OF INCUS. REDEMONSTRATION OF DESTRUCTION OF TRA- 03-551-92I
 BECULAR PATTERN IN THE MIDPORTION OF RIGHT MASTOID. THERE HAS 03-551-92J
 BEEN NO INTERVAL CHANGE WHEN COMPARED WITH AN EXAMINATION IN 1967, 03-551-92K
 HOWEVER, WHEN COMPARED WITH EXAMINATION OF 1965 THERE HAS BEEN A 03-551-92L
 CHANGE IN THE APPEARANCE OF THE MASTOID. THE CHANGES IN THE MAS- 03-551-92M
 TOID ARE FELT TO BE CONSISTENT WITH RADIATION NECROSIS, HOWEVER, 03-551-92N
 CERTAINLY THE POSSIBILITY OF A NEOPLASM CANNOT BE COMPLETELY EX- 03-551-92O
 CLUCED. THERE ARE ALSO CHANGES OF CHRONIC INFLAMMATORY DISEASE IN 03-551-92P
 THE MIDDLE EAR WITH DEMINERALIZATION AND QUESTIONABLE DESTRUCTION 03-551-92Q
 OF LONG PROCESS OF THE INCUS. 03-551-92R

DATA REVISED 11-14-68

03-551-99

PATIENT 03-552	BORN 07-10-04	03-552-01
		03-552-02
		03-552-03
FEMALE		03-552-05
SOURCE OF CASE	SEARCH BY CEM	03-552-10
EXPOSURE	DIAL PAINTER 01	03-552-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., FEB. 1924 TO APRIL 1926.		03-552-13
PAINTED NUMERALS ON CLOCK FACES. POINTED BRUSH IN MOUTH FIRST		03-552-13A
YEAR, THEN CHANGED TO GLASS BRUSHES 1925. NEVER PAINTED ANY		03-552-13B
PART OF HER BODY.		03-552-13C
ASSUMED WORK PERIOD 02-01-1924 TO 03-01-1926		03-552-13*
19.55 YEARS OF AGE WHEN FIRST EMPLOYED.		03-552-13Z
FAMILY HISTORY		03-552-15
MARRIED 1931	PARA 0 GRAVIDA 1 (1 MISCARRIAGE)	03-552-15A
MEDICAL HISTORY		03-552-20
APPENDECTOMY 1919 WITH SUBSEQUENT APPENDICEAL ABSCESS AND RUP-		03-552-20A
TURE OF WOUND REQUIRING FOUR ADDITIONAL SURGICAL PROCEDURES		03-552-20B
BETWEEN 1919 AND 1921. HYSTERECTOMY 1947. HEMORRHOIDECTOMY 1957.		03-552-20C
NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--SINUS HEADACHES		03-552-20D
RELIEVED WHEN PATIENT MOVED FROM ILLINOIS TO NEW MEXICO, CHRONIC		03-552-20E
CONSTIPATION FOR MANY YEARS, FREQUENCY OF URINATION FOR MANY		03-552-20F
YEARS, ARTHRITIS IN RIGHT ELBOW AND SHOULDER AND PAINFUL DISCOM-		03-552-20G
FORT IN BACK AND PELVIS, ALL IMPROVED ON MOVING TO NEW MEXICO.		03-552-20H
DENTAL HISTORY--10 TEETH EXTRACTED. (10-14-59)		03-552-20I
GAMMA-RAY MEASUREMENTS		03-552-25
10-14-59 RAB,RAC C.050 UCI HGS 1 TILTING CHAIR CEM		03-552-25A
COMPUTED TOTAL-BODY RADIUM		03-552-27
10-14-59 0.050 UCI 0.162 UCI TOTAL 0.31		03-552-27A
X-RAY EXAMINATION		03-552-30
COMPLETE SKELETAL SURVEY		03-552-30A
10-14-59 ANL X-RAY NO. R-173 LOC. ANL		03-552-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-552-30C
PPF NONE.		03-552-30D
CLINICAL LABORATORY FINDINGS		03-552-40
10-14-59 HG 13.9 HTC RBC 4.20		03-552-40A
WBC 6100 DIFF. P 51 ST L 36 M 7 E 3 B 3		03-552-40B
67X -11 HEMORRHOIDECTOMY		03-552-67
661 -12 APPENDECTOMY		03-552-67A
661 -100.3 APPENDICITIS WITH PERFORATION		03-552-67B
782 -10 HYSTERECTOMY		03-552-67C

PATIENT 03-553	BORN 10-18-04	03-553-01
		03-553-02
		03-553-03
FEMALE		03-553-05
SOURCE OF CASE	SEARCH BY CEM	03-553-10
EXPOSURE	DIAL PAINTER 01	03-553-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 3 MONTHS, SUMMER 1922.		03-553-13
HOWEVER, PATIENT IS PRESENT ON 1924 PHOTOGRAPH AND MAY HAVE		03-553-13A
REMEMBERED THE DATE ERRONEOUSLY. PAINTED DIALS, POINTED BRUSH		03-553-13B
IN MOUTH, BUT NEVER PAINTED ANY PART OF HER BODY.		03-553-13C
ASSUMED WORK PERIOD 07-01-1924 TO 10-01-1924		03-553-13*
19.69 YEARS OF AGE WHEN FIRST EMPLOYED.		03-553-13Z
FAMILY HISTORY		03-553-15
MARRIED 1923 DIVORCED		03-553-15A
MARRIED 1928	PARA 0 GRAVIDA 10 (MULTIPLE MISCARR.)	03-553-15B
HUSBAND	DECEASED NOV. 1958	03-553-15C
MEDICAL HISTORY		03-553-20
NO SURGERY EXCEPT FOR D AND C 1938. NO ILLNESSES EXCEPT FOR		03-553-20A
SEVERE NOSEBLEED 1951. INQUIRY BY SYSTEMS NEGATIVE EXCEPT ONE		03-553-20B
EPISODE LOW BACK PAIN 1940. DENTAL HISTORY--THREE TEETH EXTRACTED.		03-553-20C
(07-13-59)		03-553-20D
GAMMA-RAY MEASUREMENTS		03-553-25
07-13-59 RAB,RAC C.008 UCI HGS 1 TILTING CHAIR CEM		03-553-25A
COMPUTED TOTAL-BODY RADIUM		03-553-27
07-13-59 0.008 UCI 0.026 UCI TOTAL 0.31		03-553-27A
X-RAY EXAMINATION		03-553-30
COMPLETE SKELETAL SURVEY		03-553-30A
07-13-59 ANL X-RAY NO. R-145 LOC. ANL		03-553-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-553-30C
PPF NONE.		03-553-30D
CLINICAL LABORATORY FINDINGS		03-553-40
07-13-59 HG 12.8 HTC RBC 4.16		03-553-40A
WBC 8700 DIFF. P 67 ST 3 L 23 M 6 E 1 B		03-553-40B
785 -104 DILATATION AND CURRETTAGE OF THE UTERUS		03-553-67

PATIENT 03-554	BORN 02-13-99	03-554-01
		03-554-02
		03-554-03
FEMALE		03-554-05
SOURCE OF CASE	SEARCH BY CEM	03-554-10
EXPOSURE	DIAL PAINTER 01	03-554-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.		03-554-13
ASSUMED WORK PERIOD 09-01-1924 TO 01-01-1933		03-554-13*
24.75 YEARS OF AGE WHEN FIRST EMPLOYED.		03-554-13Z
MEDICAL HISTORY	NOT ELICITED	03-554-20
GAMMA-RAY MEASUREMENTS	NOT DONE	03-554-25
BREATH MEASUREMENTS		03-554-26
08-18-61 EM-222 1.380 UCI	BREATH RADON FLASK HFL	03-554-26A
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-554-28
08-18-61 1.380 UCI 2.000 UCI TOTAL 0.69		03-554-28A
X-RAY EXAMINATION		03-554-30
PARTIAL SKELETAL SURVEY		03-554-30A
08-61 RYBURN KING HOSP., OTTAWA, ILL. LOC. ANL		03-554-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 19		03-554-30C
PPF AREAS OF BONE RESORPTION SKULL, RIGHT AND LEFT FEMURS.		03-554-30D
FRACTURE OF NECK OF RIGHT FEMUR, QUESTIONABLY PATHOLOGICAL.		03-554-30E
SCATTERED AREAS OF SCLEROSIS PETROUS PYRAMIDS OF TEMPORAL BONES,		03-554-30F
MASTOIDS, WINGS OF ILIA, ISCHIAL TUBEROSITIES, RIGHT AND LEFT		03-554-30G
HUMERUS, RIGHT AND LEFT FEMUR, AND RIGHT CALCANEUS. NARROWING		03-554-30H
AND FRACTURE OF TARSAL SCAPHOID. COARSENING OF TRABECULATION OF		03-554-30I
PELVIS, CLAVICLES, AND DISTAL TIBIA AND FIBULA. THICKENING OF		03-554-30J
CORTEX OF MID-SHAFT OF RIGHT AND LEFT FEMUR.		03-554-30K
CLINICAL LABORATORY FINDINGS	NOT DONE	03-554-40
23514-416 FRACTURE OF THE NECK OF THE FEMUR		03-554-66
DATA REVISED 11-06-67		03-554-99

PATIENT 03-555	BORN 01-20-13	03-555-01
		03-555-02
		03-555-03
		03-555-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-555-10
EXPOSURE	DIAL PAINTER 01	03-555-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., AUGUST 1927 TO 1929, PERIOD		03-555-13
OF 2 YEARS (ALTHOUGH THIS MAY HAVE BEEN FROM 1928 TO 1930		03-555-13A
ACCORDING TO ANOTHER PATIENT). ALSO WORKED 1 YEAR SUMMER 1934 TO		03-555-13B
SPRING 1935. PAINTED DIALS BY MACHINE DURING FIRST PERIOD OF		03-555-13C
EMPLOYMENT, PAINTED DIALS WITH GLASS PENCIL DURING SECOND. NEVER		03-555-13D
PAINTED WITH BRUSHES AND NEVER PUT ANY MATERIAL IN MOUTH. NEVER		03-555-13E
PAINTED ANY PART OF HER BODY, AND HANDS WERE THOROUGHLY WASHED		03-555-13F
BEFORE LEAVING PLANT.		03-555-13G
ASSUMED WORK PERIOD 08-01-1928 TO 08-01-1930		03-555-13*
15.52 YEARS OF AGE WHEN FIRST EMPLOYED.		03-555-13Z
FAMILY HISTORY		03-555-15
MARRIED 1934	PARA 2 GRAVIDA 2	03-555-15A
HUSBAND	1914 L W	03-555-15B
CHILDREN	MALE 1935 L W	03-555-16
	FEMALE 1941 L W	03-555-16A
MEDICAL HISTORY		03-555-20
HYSTERECTOMY 1948. NO OTHER SERIOUS DISEASE. INQUIRY BY SYSTEMS--		03-555-20A
SOME RECENT HEADACHES AND MILD HYPERTENSION, ALSO LOW BACKACHES.		03-555-20B
DENTAL HISTORY--7 TEETH EXTRACTED, OTHERS REPAIRED. (07-21-59)		03-555-20C
GAMMA-RAY MEASUREMENTS		03-555-25
07-21-59 RAB,RAC	0.004 UCI HGS 1 TILTING CHAIR CEM	03-555-25A
COMPUTED TOTAL-BODY RADIUM		03-555-27
07-21-59 0.004 UCI	0.011 UCI TOTAL 0.31	03-555-27A
X-RAY EXAMINATION		03-555-30
PARTIAL SKELETAL SURVEY		03-555-30A
07-21-59 ANL	X-RAY NO. R-148 LOC. ANL	03-555-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-555-30C
PPF NONE, EXCEPT FOR THICKENING OF MID PORTION OF CORTEX OF		03-555-30D
LEFT FEMUR.		03-555-30E
CLINICAL LABORATORY FINDINGS		03-555-40
07-21-59 HG 14.7 HTC	RBC 4.09	03-555-40A
WBC 7900 DIFF. P 61 ST	L 37 M 1 E 1 B	03-555-40B
47X -X30	ESSENTIAL HYPERTENSION	03-555-67
782 -10	HYSTERECTOMY	03-555-67A
DATA REVISED 08-10-67		03-555-99

PATIENT 03-556	BORN 09-25-11	03-556-01
		03-556-02
FEMALE		03-556-03
		03-556-05
SOURCE OF CASE	SEARCH BY CEM	03-556-10
EXPOSURE	DIAL PAINTER 01	03-556-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., AUG. 1928 TO EARLY SUMMER 1930. HALF-TIME LATTER 6 MONTHS 1930. OPERATED DIAL PAINTING MACHINE AND NEVER PAINTED DIALS BY HAND. BRUSH WAS POINTED BETWEEN WEB OF FINGERS.		03-556-13
ASSUMED WORK PERIOD 08-01-1928 TO 07-01-1930		03-556-13A
16.84 YEARS OF AGE WHEN FIRST EMPLOYED.		03-556-13B
		03-556-13C
		03-556-13*
		03-556-13Z
FAMILY HISTORY		03-556-15
MARRIED 1937	PARA 1 GRAVIDA 1	03-556-15A
HUSBAND	DEC. 11-58 AT AGE 42	03-556-15B
CHILDREN	MALE L W	03-556-16
MEDICAL HISTORY		03-556-20
HYSTERECTOMY 1951. CYSTITIS 1954 WITH SUBSEQUENT PROLONGED		03-556-20A
URTICARIAL REACTION TO PENICILLIN. OTHERWISE NO SERIOUS ILLNESS.		03-556-20B
INQUIRY BY SYSTEMS REVEALS OCCASIONAL HEADACHES AND BACKACHES.		03-556-20C
TEETH INTACT EXCEPT FOR TWO WISDOM TEETH EXTRACTED. (07-21-59)		03-556-20D
GAMMA-RAY MEASUREMENTS		03-556-25
07-21-59 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-556-25A
COMPUTED TOTAL-BODY RADIUM		03-556-27
07-21-59 0.002 UCI 0.007 UCI TOTAL 0.31		03-556-27A
X-RAY EXAMINATION		03-556-30
PARTIAL SKELETAL SURVEY		03-556-30A
07-21-59 ANL X-RAY NO. R-147 LOC. ANL		03-556-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-556-30C
PPF UNUSUALLY LARGE MASTOID AIR CELLS ON RIGHT SIDE,		03-556-30D
PROBABLY NORMAL.		03-556-30E
CLINICAL LABORATORY FINDINGS		03-556-40
07-21-59 HG 14.2 HTC RBC 4.27		03-556-40A
WBC 6600 DIFF. P 56 ST L 40 M 3 E 1 B		03-556-40B
782 -10 HYSTERECTOMY		03-556-67

PATIENT 03-557	BORN 05-23-10	03-557-01
		03-557-02
		03-557-03
FEMALE		03-557-05
SOURCE OF CASE	SEARCH BY CEM	03-557-10
EXPOSURE	DIAL PAINTER 01	03-557-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., LESS THAN 3 WEEKS, 1925.		03-557-13
PAINTED DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF		03-557-13A
HER BODY. PATIENT LEFT BECAUSE OF EXACTING NATURE OF WORK.		03-557-13B
FAMILY HISTORY		03-557-15
MARRIED 1926	PARA 1 GRAVIDA 2 (1 MISCARRIAGE)	03-557-15A
HUSBAND	1906 L W	03-557-15B
CHILDREN	MALE 1929 L W	03-557-16
MEDICAL HISTORY		03-557-20
PARTIAL HYSTERECTOMY 1939, ADDITIONAL PROCEDURES 1942 AND 1945.		03-557-20A
CHOLECYSTECTOMY 1949, TWO-STAGE SYMPATHECTOMY 1951. LATER SURGERY		03-557-20B
HELPED PATIENT ONLY 18 MONTHS, HYPERTENSION CONTINUES. ELEVATED		03-557-20C
BLOOD PRESSURE RECENTLY RESPONDED TO SERPASIL. NO OTHER SERIOUS		03-557-20D
DISEASE. INQUIRY BY SYSTEMS--ESSENTIALLY NEGATIVE EXCEPT FOR		03-557-20E
ACHING ELBOWS DURING PAST 6 YEARS. DENTAL HISTORY--PATIENT STILL		03-557-20F
HAS 20 TEETH, MANY NEED EXTRACTION. (07-22-59)		03-557-20G
GAMMA-RAY MEASUREMENTS		03-557-25
07-22-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-557-25A
COMPUTED TOTAL-BODY RADIUM		03-557-27
07-22-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-557-27A
X-RAY EXAMINATION	NOT DONE	03-557-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-557-40
47X -X30	ESSENTIAL HYPERTENSION	03-557-67
687 -12	CHOLECYSTECTOMY	03-557-67A
782 -13	HYSTERECTOMY, PARTIAL	03-557-67B
9961 -13	SPLANCHNICECTOMY	03-557-67C
DATA REVISED 08-10-67		03-557-99

PATIENT 03-558	BORN 12-06-04	03-558-01
		03-558-02
FEMALE		03-558-03
		03-558-05
SOURCE OF CASE	SEARCH BY CEM	03-558-10
EXPOSURE	DIAL PAINTER 01	03-558-12
SOURCE RADIUM DIAL CO., 3 MONTHS 1923. PAINTED DIALS AND POINTED BRUSH IN MOUTH. REMARKED THAT SHE SWALLOWED LARGE QUANTITIES OF MATERIAL. RECEIVED R.N. DEGREE IN 1932 AND LATER WORKED AT VARIETY OF HOSPITALS.		03-558-13
ASSUMED WORK PERIOD 06-01-1923 TO 09-01-1923		03-558-13A
18.48 YEARS OF AGE WHEN FIRST EMPLOYED.		03-558-13B
		03-558-13C
		03-558-13*
		03-558-13Z
FAMILY HISTORY		03-558-15
MARRIED 1946	PARA 0 GRAVIDA 0	03-558-15A
HUSBAND	1891 L W	03-558-15B
MEDICAL HISTORY		03-558-20
SURGERY--SUBMUCOUS RESECTION FOR NOSE BLEEDS DUE TO HEMANGIOMA, EARLY 1930S, APPENDECTOMY 1943, UNILATERAL OPHORECTOMY, HYSTERECTOMY, AND PARTIAL BOWEL RESECTION 1956. DIAGNOSIS OF ULCERATIVE COLITIS 1937. INQUIRY OF SYSTEMS--HISTORY OF PNEUMONIA SINCE CHILDHOOD, MARKED HYPERTENSION RECENTLY, ARTHRITIS OF KNEES SINCE 1954, BACKACHES PAST 6 MONTHS. DENTAL HISTORY--12 TEETH REMAIN, NEED EXTRACTION. (07-22-59)		03-558-20A
		03-558-20B
		03-558-20C
		03-558-20D
		03-558-20E
		03-558-20F
		03-558-20G
SURGERY--LARGE MASS OF LEFT BREAST SCHEDULED FOR 11-24-61. (INFORMATION FROM PATIENT 11-13-61)		03-558-21A
		03-558-21B
GAMMA-RAY MEASUREMENTS		03-558-25
07-22-59 RAB,RAC	0.036 UCI	03-558-25A
TL 208	0.004 UCI	03-558-25A
	HGS 1 TILTING CHAIR CEM	
COMPUTED TOTAL-BODY RADIUM		03-558-27
07-22-59 0.036 UCI	0.115 UCI TOTAL	03-558-27A
TL 208	0.004 UCI TOTAL	03-558-27A
	0.31	
	1.00	
X-RAY EXAMINATION		03-558-30
COMPLETE SKELETAL SURVEY		03-558-30A
07-22-59 ANL X-RAY NO. R-149 LOC. ANL		03-558-30B
MODERATE CHANGES TYPICAL OF DEPOSITION OF RADIUM. SCORE 15		03-558-30C
PPF AREAS OF BONE RESORPTION ARE PRESENT IN SKULL, MANDIBLE, RIGHT AND LEFT RADII, RIGHT AND LEFT FEMORA, RIGHT AND LEFT TIBIAE AND FIBULAE, AND METATARSAL BONES OF RIGHT FOOT.		03-558-30D
COARSENING OF TRABECULATION IS MARKED IN TIBIA AND FIBULA ON EACH SIDE. BOTH FEMORA DEMONSTRATE THICKENING OF CORTEX OF MID SHAFT.		03-558-30E
OLD TRAUMATIC FRACTURE OF SECOND LUMBAR VERTEBRA.		03-558-30F
		03-558-30G
		03-558-30H
		03-558-30I

CLINICAL LABORATORY FINDINGS

07-22-59 HG 12.2 HTC RBC 4.19
WBC 9300 DIFF. P 57 ST 1 L 31 M 6 E 5 B

03-558-40
03-558-40A
03-558-40B

47X -X30 ESSENTIAL HYPERTENSION
660 -951 ULCERATIVE COLITIS
661 -12 APPENDECTOMY
782 -10 HYSTERECTOMY
788 -12 BILATERAL OOPHORECTOMY

03-558-67
03-558-67A
03-558-67B
03-558-67C
03-558-67D

DATA REVISED 08-10-67

03-558-99

PATIENT 03-559	BORN 01-02-07	03-559-01
		03-559-02
		03-559-03
		03-559-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-559-10
EXPOSURE	DIAL PAINTER 01	03-559-12
SOURCE RADIUM DIAL CO., PERU, ILL., ABOUT 5 MONTHS FROM AUGUST TO		03-559-13
DECEMBER, 1922. PAINTED NUMERALS ON DIALS. POINTED BRUSH IN		03-559-13A
MOUTH, BUT STATED THAT SHE WIPED BRUSH BEFORE PLACING IN MOUTH.		03-559-13B
NEVER PAINTED ANY PART OF HER BODY.		03-559-13C
ASSUMED WORK PERIOD 08-01-1922 TO 01-01-1923		03-559-13*
15.57 YEARS OF AGE WHEN FIRST EMPLOYED.		03-559-13Z
FAMILY HISTORY		03-559-15
MARRIED 1927	PARA 2	GRAVIDA 2
HUSBAND	1897	L W
		03-559-15A
		03-559-15B
CHILDREN	MALE	1929
	MALE	1934
		L W
		L W
		03-559-16
		03-559-16A
MEDICAL HISTORY		03-559-20
HYSTERECTOMY 1956. NO SERIOUS ILLNESSES EXCEPT FOR HEMORRHOIDS,		03-559-20A
TREATED 1958. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--UPPER		03-559-20B
DENTURES FOR 15 YEARS, 7 TEETH LOWER JAW TO BE EXTRACTED.		03-559-20C
(10-15-59)		03-559-20D
GAMMA-RAY MEASUREMENTS		03-559-25
10-15-59 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-559-25A
COMPUTED TOTAL-BODY RADIUM		03-559-27
10-15-59 0.005 UCI 0.017 UCI TOTAL 0.31		03-559-27A
X-RAY EXAMINATION		03-559-30
PARTIAL SKELETAL SURVEY		03-559-30A
10-15-59 ANL X-RAY NO. R-176 LOC. ANL		03-559-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-559-30C
PPF NONE		03-559-30D
CLINICAL LABORATORY FINDINGS		03-559-40
10-15-59 HG 15.6 HTC RBC 4.68		03-559-40A
WBC 8800 DIFF. P 55 ST L 35 M 5 E 4 B 1		03-559-40B
67X -641 HEMORRHOIDS		03-559-67
782 -10 HYSTERECTOMY		03-559-67A

PATIENT 03-561	BORN 10-05-09	03-561-01
		03-561-02
		03-561-03
		03-561-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-561-10
EXPOSURE	DIAL PAINTER 01	03-561-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILL., 2 MONTHS SUMMER 1924, AGAIN	03-561-13
	FOR 2 MONTHS SUMMER 1925, THEN WORKED AT SAME PLACE JUNE 1926 TO	03-561-13A
	SUMMER 1932. DURING FIRST SUMMER 1924, PAINTED DIALS, POINTED	03-561-13B
	BRUSH IN MOUTH BUT DID NOT LIKE THIS PROCEDURE AND AVOIDED IT	03-561-13C
	AS MUCH AS POSSIBLE. DURING SECOND TWO MONTHS 1924 WEIGHED	03-561-13D
	MATERIALS. 1926 TO 1932 DID OFFICE WORK.	03-561-13E
	ASSUMED WORK PERIOD 07-01-1924 TO 09-01-1924	03-561-13*
	14.73 YEARS OF AGE WHEN FIRST EMPLOYED.	03-561-13Z
FAMILY HISTORY		03-561-15
MARRIED 1951	PARA 0 GRAVIDA 0	03-561-15A
HUSBAND	1920 L W	03-561-15B
MEDICAL HISTORY		03-561-20
	NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE	03-561-20A
	EXCEPT FOR MILD ARTHRITIS OF FINGERS FOR MANY YEARS. DENTAL	03-561-20B
	HISTORY--TEETH ALWAYS IN POOR CONDITION, 8 EXTRACTED. (07-31-59)	03-561-20C
GAMMA-RAY MEASUREMENTS		03-561-25
07-31-59 RAB,RAC	C.021 UCI HGS 1 TILTING CHAIR CEM	03-561-25A
COMPUTED TOTAL-BODY RADIUM		03-561-27
07-31-59 0.021 UCI	0.067 UCI TOTAL 0.31	03-561-27A
X-RAY EXAMINATION		03-561-30
PARTIAL SKELETAL SURVEY		03-561-30A
07-31-59 ANL X-RAY NO. R-151 LOC. ANL		03-561-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-561-30C
PPF NONE.		03-561-30D
CLINICAL LABORATORY FINDINGS		03-561-40
07-31-59 HG 13.4 HTC RBC 3.84		03-561-40A
WBC 6100 DIFF. P 61 ST L 23 M 4 E 2 B		03-561-40B
TOOTH MEASUREMENT		03-561-73
SAMPLE 4.00 TOOTH MOLAR		03-561-73A
TOTAL WT. 2.402 CALC.GMS.CA. 0.6726		03-561-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-561-73C
53.69 112.6 0.48 167.4 2.50		03-561-73D

PATIENT	03-562	BORN	08-11-09	03-562-01
				03-562-02
				03-562-03
				03-562-05
FEMALE				
SOURCE OF CASE	SEARCH BY CEM			03-562-10
EXPOSURE	DIAL PAINTER 01			03-562-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1927 SEVERAL WEEKS PART-TIME.				03-562-13
LUMINOUS PROCESSES, INC., OTTAWA, ILL. 1930-1936, WITH EXCEPTION				03-562-13A
OF 1 YEAR. PAINTED DIALS BY HAND AND MACHINE. DID NOT POINT				03-562-13B
BRUSH IN MOUTH.				03-562-13C
ASSUMED WORK PERIOD 01-01-1930 TO 01-01-1937				03-562-13*
20.38 YEARS OF AGE WHEN FIRST EMPLOYED.				03-562-13Z
FAMILY HISTORY				03-562-15
MARRIED 1934	PARA 2	GRAVIDA 2		03-562-15A
HUSBAND	1906	L W		03-562-15B
CHILDREN	FEMALE 1934	L W		03-562-16
	FEMALE 1940	L W		03-562-16A
MEDICAL HISTORY				03-562-20
SURGERY--OVARIECTOMY 1940, COMPLETE HYSTERECTOMY 1941, GALL				03-562-20A
BLADDER 1954, COMMON DUCT SURGERY 1957. HYPERTENSION SINCE 1934.				03-562-20B
CERVICAL AND LUMBAR DISCS DISEASE AND HAS BEEN SLEEPING IN				03-562-20C
TRACTION FOR 1 YEAR. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE.				03-562-20D
TEETH GOOD CONDITION EXCEPT FOR 1 WISDOM TOOTH EXTRACTED.				03-562-20E
(08-03-59)				03-562-20F
GAMMA-RAY MEASUREMENTS				03-562-25
08-03-59	RAB,RAC	C.003 UCI	HGS 1 TILTING CHAIR CEM	03-562-25A
COMPUTED TOTAL-BODY RADIUM				03-562-27
08-03-59	0.003 UCI	0.009 UCI TOTAL	0.31	03-562-27A
X-RAY EXAMINATION				03-562-30
PARTIAL SKELETAL SURVEY				03-562-30A
08-03-59	ANL	X-RAY NO. R-152	LOC. ANL	03-562-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.				03-562-30C
PPF NONE.				03-562-30D
CLINICAL LABORATORY FINDINGS				03-562-40
08-03-59	HG 15.6	HTC	RBC 4.65	03-562-40A
WBC 7600	DIFF. P 63	ST 2	L 27 M 5 E 3 B	03-562-40B
2511 -9X9	HERNIATION OF NUCLEUS PULPOSUS, UNKNOWN CAUSE			03-562-67
47X -X30	ESSENTIAL HYPERTENSION			03-562-67A
685 -01	EXPLORATION OF THE COMMON DUCT			03-562-67B
782 -12	HYSTERECTOMY, COMPLETE			03-562-67C
788 -12	BILATERAL OOPHORECTOMY			03-562-67D

PATIENT 03-563	BORN 01-02-09	03-563-01
		03-563-02
		03-563-03
FEMALE		03-563-05
SOURCE OF CASE	SEARCH BY CEM	03-563-10
EXPOSURE	DIAL PAINTER 01	03-563-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 2 OR 3 MONTHS 1924. PAINTED		03-563-13
DIALS WITH PEN AND USED BRUSH FOR OCCASIONAL RETOUCHING. PAINTED		03-563-13A
PARTS OF HER BODY SUCH AS FINGERNAILS AND EYEBROWS.		03-563-13B
ASSUMED WORK PERIOD 07-01-1924 TO 09-15-1924		03-563-13*
15.49 YEARS OF AGE WHEN FIRST EMPLOYED.		03-563-13Z
FAMILY HISTORY		03-563-15
MARRIED 1939	PARA 5	GRAVIDA 8 (3 MISCARRIAGES)
HUSBAND	1911	L W
		03-563-15A
		03-563-15B
CHILDREN	FEMALE 1940	L W
	MALE 1943	L W
	MALE 1949	L W
	FEMALE 1950	L W
	FEMALE 1953	L W
		03-563-16
		03-563-16A
		03-563-16B
		03-563-16C
		03-563-16D
MEDICAL HISTORY		03-563-20
TONSILLECTOMY IN CHILDHOOD AND APPENDECTOMY 1923, HYSTERECTOMY		03-563-20A
1954, LAPAROTOMY FOR REPAIR OF HYSTERECTOMY 1955, CHOLECYSTECTOMY		03-563-20B
1956. FRACTURED NOSE AS RESULT OF FALL AT AGE 8 YEARS. INQUIRY		03-563-20C
BY SYSTEMS NEGATIVE EXCEPT FOR SKIN ALLERGY TO CHLORPROMAZINE.		03-563-20D
DENTAL HISTORY--TEETH EXTRACTED 1942 BECAUSE OF PYORRHEA.		03-563-20E
(08-07-59)		03-563-20F
GAMMA-RAY MEASUREMENTS		03-563-25
08-07-59 RAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-563-25A
COMPUTED TOTAL-BODY RADIUM		03-563-27
08-07-59 0.005 UCI 0.015 UCI TOTAL 0.31		03-563-27A
X-RAY EXAMINATION		03-563-30
PARTIAL SKELETAL SURVEY		03-563-30A
08-07-59 ANL X-RAY NO. R-153 LOC. ANL		03-563-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-563-30C
PPF NONE.		03-563-30D
CLINICAL LABORATORY FINDINGS		03-563-40
08-07-59 HG 14.7 HTC RBC 4.58		03-563-40A
WBC 6200 DIFF. P 66 ST L 31 M 2 E 1 B		03-563-40B
634 -12 TONSILLECTOMY		03-563-67
661 -12 APPENDECTOMY		03-563-67A
687 -12 CHOLECYSTECTOMY		03-563-67B
782 -10 HYSTERECTOMY		03-563-67C

PATIENT 03-564	BORN 05-30-06	03-564-01
		03-564-02
		03-564-03
FEMALE		03-564-05
SOURCE OF CASE	SEARCH BY CEM	03-564-10
EXPOSURE	DIAL PAINTER 01	03-564-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 3 WEEKS SUMMER 1923. PAINTED DIALS. POINTED BRUSH IN MOUTH.		03-564-13
ASSUMED WORK PERIOD 07-01-1923 TO 07-22-1923		03-564-13A
17.08 YEARS OF AGE WHEN FIRST EMPLOYED.		03-564-13*
		03-564-13Z
FAMILY HISTORY		03-564-15
MARRIED 1933	PARA 3	GRAVIDA 5 (2 MISCARRIAGES)
HUSBAND	1907	L W, HYPERTENSION
		03-564-15A
		03-564-15B
CHILDREN	MALE 1935	L W
	FEMALE 1936	L W
	MALE 1938	L W
		03-564-16
		03-564-16A
		03-564-16B
MEDICAL HISTORY		03-564-20
APPENDECTOMY 1920. D AND C 1935. SUSPECTED HEART ATTACK 1942.		03-564-20A
BACKACHES SINCE FIRST CHILD BORN 1935. MIGRAINE HEADACHES SINCE CHILDHOOD. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--WEARS COMPLETE LOWER DENTURE, TEETH EXTRACTED 12 YEARS AGO, REMAINING 8 UPPER TEETH IN POOR REPAIR. (08-11-59)		03-564-20B
		03-564-20C
		03-564-20D
		03-564-20E
GAMMA-RAY MEASUREMENTS		03-564-25
08-11-59 RAB,RAC C.003 UCI HGS 1 TILTING CHAIR CEM		03-564-25A
COMPUTED TOTAL-BODY RADIUM		03-564-27
08-11-59 0.003 UCI 0.010 UCI TOTAL 0.31		03-564-27A
X-RAY EXAMINATION		03-564-30
PARTIAL SKELETAL SURVEY		03-564-30A
08-11-59 ANL X-RAY NO. R-154 LOC. ANL		03-564-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-564-30C
PPF NONE.		03-564-30D
CLINICAL LABORATORY FINDINGS		03-564-40
08-11-59 HG 14.3 HTC RBC 4.17		03-564-40A
WBC 9700 DIFF. P 53 ST L 40 M 6 E 1 B		03-564-40B
661 -12 APPENDECTOMY		03-564-67
785 -104 DILATATION AND CURRETTAGE CF THE UTERUS		03-564-67A
930 -X41 MIGRAINE		03-564-67B

PATIENT 03-565	BORN 11-30-13	03-565-01
		03-565-02
		03-565-03
		03-565-04
FEMALE		03-565-05
SOURCE OF CASE	SEARCH BY CEM	03-565-10
EXPOSURE	DIAL PAINTER 01	03-565-12
SOURCE	RADIUM DIAL CO., AND LUMINOUS PROCESSES, INC., OTTAWA, ILL.,	03-565-13
	1930 TO 1943, EXCEPT FOR 4 MONTHS EACH 1936 AND 1939. PAINTED	03-565-13A
	DIALS. CANNOT REMEMBER POINTING BRUSH IN MOUTH BUT MAY HAVE	03-565-13B
	OCCASIONALLY UNCONSCIOUSLY, ALTHOUGH PRACTICE WAS PROHIBITED BY	03-565-13C
	FIRM. NEVER PAINTED OWN BODY, NAVAL AIR STATION, SAND POINT,	03-565-13D
	SEATTLE, WASH., 6 MONTHS 1944, SCRAPED LUMINOUS MATERIAL FROM	03-565-13E
	OLD AIRPLANE INSTRUMENTS AND REPAINTED THEM WITH FRESH RADIUM	03-565-13F
	SOLUTION.	03-565-13G
	ASSUMED WORK PERIOD 07-01-1930 TO 07-01-1943	03-565-13*
	16.58 YEARS OF AGE WHEN FIRST EMPLOYED.	03-565-13Z
FAMILY HISTORY		03-565-15
MARRIED 1933	PARA 4 GRAVIDA 5	03-565-15A
MARRIED 1943		03-565-15B
HUSBAND	1908 L W	03-565-15C
CHILDREN	MALE 1936 L W	03-565-16
	MALE 1940 L W	03-565-16A
	FEMALE 1951 L W	03-565-16B
	FEMALE 1952 L W	03-565-16C
MEDICAL HISTORY		03-565-20
	APPENDECTOMY AGE 16, TUBAL PREGNANCY 1944. BILATERAL INGUINAL	03-565-20A
	HERNIORRHAPHY 1953, HEMORRHOIDECTOMY 1959. OTHERWISE NO SERIOUS	03-565-20B
	ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--8 TEETH	03-565-20C
	EXTRACTED, REMAINING TEETH GOOD CONCITION. (08-20-59)	03-565-20D
GAMMA-RAY MEASUREMENTS		03-565-25
08-20-59 RAB,RAC	0.006 UCI HGS 1 TILTING CHAIR CEM	03-565-25A
COMPUTED TOTAL-BODY RADIUM		03-565-27
08-20-59 0.006 UCI	0.020 UCI TOTAL 0.31	03-565-27A
X-RAY EXAMINATION		03-565-30
COMPLETE SKELETAL SURVEY		03-565-30A
08-20-59 ANL X-RAY NO. R-155 LOC. ANL		03-565-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 0	03-565-30C
PPF TINY BONE ISLAND PRESENT IN HEAD OF LEFT HUMERUS,		03-565-30D
PROBABLY IRRELEVANT.		03-565-30E

CLINICAL LABORATORY FINDINGS

08-20-59 HG 13.5 HTC RBC 4.16
WBC 7700 DIFF. P 72 ST 1 L 18 M 5 E 4 B

7X7 -789 TUBAL PREGNANCY
67X -11 HEMORRHOIDECTOMY
0601 -50 INGUINAL HERNIORRHAPHY (BILATERAL)
661 -12 APPENDECTOMY

DATA REVISED 08-10-67

03-565-40
03-565-40A
03-565-40B

03-565-67
03-565-67A
03-565-67B
03-565-67C

03-565-99

PATIENT 03-566	BORN 09-08-10	03-566-01
		03-566-02
		03-566-03
		03-566-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-566-10
EXPOSURE	DIAL PAINTER 01	03-566-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., AND LUMINOUS PROCESSES, INC.,		03-566-13
OTTAWA, ILL., SUMMER 1930 TO FEB. 1941. PAINTED DIALS BUT NEVER		03-566-13A
POINTED BRUSH IN MOUTH. CUT HER FINGER ONCE WITH RADIUM BRUSH.		03-566-13B
HER CLOTHES AND HAIR WOULD GLOW AT NIGHT.		03-566-13C
ASSUMED WORK PERIOD 07-01-1930 TO 02-01-1941		03-566-13*
19.80 YEARS OF AGE WHEN FIRST EMPLOYED.		03-566-13Z
FAMILY HISTORY		03-566-15
MARRIED 1932	PARA 2	03-566-15A
HUSBAND	1908 GRAVIDA 2	03-566-15B
	L W	
CHILDREN	MALE 1933	03-566-16
	MALE 1938	03-566-16A
	L W	
	L W	
MEDICAL HISTORY		03-566-20
TONSILLECTOMY 1922, MASTOID SURGERY 1923, APPENDECTOMY 1928,		03-566-20A
UTERINE SUSPENSION 1936, GALL BLADDER SURGERY 1939, HYSTERECTOMY		03-566-20B
1950. SUSTAINED INJURY OF HEAD AND LEFT SHOULDER IN AUTOMOBILE		03-566-20C
ACCIDENT 1941. HISTORY OF CORONARY OCCLUSION SEPT. 1953, AGAIN		03-566-20D
IN MARCH 1954, AND DECEMBER 1955. HOSPITALIZED FOR HEADACHES,		03-566-20E
NAUSEA, AND VOMITING 1951. ALSO HOSPITALIZED 1957 SEVERAL TIMES		03-566-20F
FOR ECZEMATOID DERMATITIS, FURUNCULOSIS, DIABETES MELLITUS,		03-566-20G
CEPHALALGIA, AND INFLUENZA. DENTAL HISTORY--ONLY 2 TEETH EXTRACT-		03-566-20H
ED, REMAINDER SAID TO BE IN GOOD CONDITION. (08-20-59)		03-566-20I
GAMMA-RAY MEASUREMENTS		03-566-25
08-20-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-566-25A
COMPUTED TOTAL-BODY RADIUM		03-566-27
08-20-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-566-27A
X-RAY EXAMINATION		03-566-30
PARTIAL SKELETAL SURVEY		03-566-30A
08-20-59 ANL X-RAY NO. R-156 LOC. ANL		03-566-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-566-30C
PPF NONE		03-566-30D
CLINICAL LABORATORY FINDINGS		03-566-40
08-20-59 HG 12.7 HTC RBC 4.38		03-566-40A
WBC 7700 DIFF. P 51 ST L 38 M 5 E 6 B		03-566-40B

X84	-13	SIMPLE MASTOIDECTOMY	03-566-67
430	-516.7	MYOCARDIAL INFARCTION	03-566-67A
634	-12	TONSILLECTOMY	03-566-67B
661	-12	APPENDLECTOMY	03-566-67C
687	-10	CHOLECYSTECTOMY	03-566-67D
782	-10	HYSTERECTOMY	03-566-67E
782	-56	UTERINE SUSPENSION	03-566-67F
870	-785	DIABETES MELLITUS	03-566-67G

PATIENT 03-567	BORN 01-20-00	03-567-01
		03-567-02
FEMALE		03-567-05
SOURCE OF CASE	SEARCH BY CEM	03-567-10
EXPOSURE	DIAL PAINTER 01	03-567-12
SOURCE RADIUM DIAL CO., PERU, ILL. AND OTTAWA, ILL. APPROX. 2 YRS.		03-567-13
1923-1924. PAINTED DIALS, POINTED BRUSH IN MOUTH. NEVER PAINTED		03-567-13A
ANY PART OF HER BODY.		03-567-13B
ASSUMED WORK PERIOD 09-01-1922 TO 09-01-1924		03-567-13*
22.60 YEARS OF AGE WHEN FIRST EMPLOYED.		03-567-13Z
FAMILY HISTORY		03-567-15
NOT MARRIED		03-567-15A
MEDICAL HISTORY		03-567-20
MULTIPLE SURGICAL PROCEDURES--RECTAL ABSCESS 1926, RIGHT		03-567-20A
OOPHORECTOMY 1926, KIDNEY SURGERY 1949, CHOLECYSTECTOMY 1954.		03-567-20B
NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--RECURRENT		03-567-20C
ABDOMINAL DISTRESS AFTER EATING, INTERMITTENT PAIN IN LEFT HIP		03-567-20D
PAST 6 MONTHS, LEFT FRONTAL SINUSITIS, EASY FATIGABILITY PAST		03-567-20E
FEW MONTHS, HISTORY OF LOW WBC. EDENTULOUS, ALL TEETH EXTRACTED,		03-567-20F
BADLY INFECTED PRIOR TO WORKING AT RADIUM DIAL CO. (08-24-59)		03-567-20G
GAMMA-RAY MEASUREMENTS		03-567-25
08-24-59 RAB,RAC 0.014 UCI HGS 1 TILTING CHAIR CEM		03-567-25A
COMPUTED TOTAL-BODY RADIUM		03-567-27
08-24-59 0.014 UCI 0.045 UCI TOTAL 0.31		03-567-27A
X-RAY EXAMINATION		03-567-30
COMPLETE SKELETAL SURVEY		03-567-30A
08-24-59 ANL X-RAY NO. R-157 LOC. ANL		03-567-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1		03-567-30C
PPF NEGATIVE EXCEPT FOR QUESTIONABLE COARSENING OF		03-567-30D
TRABECULAR PATTERN, THROUGH RIGHT AND LEFT TIBIA AND FIBULA.		03-567-30E
CLINICAL LABORATORY FINDINGS		03-567-40
08-24-59 HG 13.2 HTC RBC 3.91		03-567-40A
WBC 4800 DIFF. P 61 ST 4 L 28 M 5 E 2 B		03-567-40B
320 -100 SINUSITIS		03-567-67
687 -12 CHOLECYSTECTOMY		03-567-67A
669 -02 INCISION AND DRAINAGE OF PERIRECTAL ABSCESS		03-567-67B
788 -10 UNILATERAL OOPHORECTOMY		03-567-67C

PATIENT 03-568	BORN 06-29-05	03-568-01
		03-568-02
FEMALE		03-568-03
		03-568-05
SOURCE OF CASE	SEARCH BY CEM	03-568-10
EXPOSURE	DIAL PAINTER 01	03-568-12
SOURCE RADIUM DIAL CO., PERU, ILL., AND OTTAWA, ILL., SUMMER 1922 TO 1927, PERIOD OF 5 YEARS, ALSO 1 YEAR 1934. PAINTED DIALS. POINTED BRUSH IN HER MOUTH. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 07-01-1922 TO 07-01-1927 17.00 YEARS OF AGE WHEN FIRST EMPLOYED.		03-568-13
		03-568-13A
		03-568-13B
		03-568-13*
		03-568-13Z
FAMILY HISTORY		03-568-15
MARRIED 1927	PARA 5	GRAVIDA 5
HUSBAND	1902	L W
		03-568-15A
		03-568-15B
CHILDREN	FEMALE 1928	L W
	MALE 1929	L W
	FEMALE 1931	L W
	FEMALE 1933	L W
	MALE 1921	L W
		03-568-16
		03-568-16A
		03-568-16B
		03-568-16C
		03-568-16D
MEDICAL HISTORY		03-568-20
NO SURGERY OR SERIOUS ILLNESSES. GOOD HEALTH EXCEPT FOR 2 UNEXPLAINED EPISODES OF LOSS OF WEIGHT, FIRST 1952 AND SECOND 1957. INQUIRY BY SYSTEMS--CHRONIC COUGH SINCE AGE OF 17, ATTRIBUTED TO CIGARETTE SMOKING (10 PACKAGES PER WEEK), OTHERWISE NEGATIVE. DENTAL HISTORY--ALL TEETH EXTRACTED, PATIENT WEARS DOUBLE DENTURES. (08-25-59)		03-568-20A
		03-568-20B
		03-568-20C
		03-568-20D
		03-568-20E
		03-568-20F
GAMMA-RAY MEASUREMENTS		03-568-25
08-25-59 RAB,RAC C.037 UCI HGS 1 TILTING CHAIR CEM		03-568-25A
COMPUTED TOTAL-BODY RADIUM		03-568-27
08-25-59 0.037 UCI 0.120 UCI TOTAL 0.31		03-568-27A
X-RAY EXAMINATION		03-568-30
COMPLETE SKELETAL SURVEY		03-568-30A
08-25-59 ANL X-RAY NO. R-159 LOC. ANL		03-568-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 4.5		03-568-30C
PPF TWO AREAS OF BONE RESORPTION IN LEFT RADIUS, BONE RESORPTION ALSO SEEN IN LEFT TIBIA. COARSENING OF TRABECULATION IN RIGHT AND LEFT TIBIA.		03-568-30D
		03-568-30E
		03-568-30F
CLINICAL LABORATORY FINDINGS		03-568-40
08-25-59 HG 13.4 HTC RBC 4.44		03-568-40A
WBC14000 DIFF. P 64 ST 2 L 27 M 6 E 1 B		03-568-40B
DATA REVISED 09-27-67		03-568-99

PATIENT 03-569

BORN 11-07-01

03-569-01
03-569-02
03-569-03
03-569-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

03-569-10

SOURCE RADIUM DIAL CO., PERU AND OTTAWA, ILL., 1922 TO 1926,
TOTAL 4 YEARS. PAINTED HANDS OF CLOCKS ABOUT 2 YEARS. POINTED
BRUSH IN MOUTH. PAINTED HER FINGERNAILS.
ASSUMED WORK PERIOD 07-01-1922 TO 07-01-1926
20.64 YEARS OF AGE WHEN FIRST EMPLOYED.

03-569-13
03-569-13A
03-569-13B
03-569-13*
03-569-13Z

FAMILY HISTORY

MARRIED 1924
HUSBAND

PARA 0 GRAVIDA 0
1901 L W

03-569-15
03-569-15A
03-569-15B

MEDICAL HISTORY

APPENDECTOMY AND CHOLECYSTECTOMY 1924, TONSILLECTOMY 1939,
HYSTERECTOMY 1951. RINGING IN LEFT EAR SINCE 1941, WAS SEEN AT
U OF MICHIGAN CLINICS IN 1941 FOR THIS CONDITION. NO DIZZINESS
OR DEAFNESS. INQUIRY BY SYSTEMS--MIGRAINE HEADACHES TO 1951.
TEETH INTACT EXCEPT FOR 2 EXTRACTIONS. (08-25-59)

03-569-20
03-569-20A
03-569-20B
03-569-20C
03-569-20D
03-569-20E

GAMMA-RAY MEASUREMENTS

08-25-59 RAB,RAC 0.045 UCI HGS 1 TILTING CHAIR CEM

03-569-25
03-569-25A

COMPUTED TOTAL-BODY RADIUM

08-25-59 0.045 UCI 0.144 UCI TOTAL 0.31

03-569-27
03-569-27A

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

08-25-59 ANL X-RAY NO. R-158 LOC. ANL

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0
PPF NONE.

03-569-30
03-569-30A
03-569-30B
03-569-30C
03-569-30D

CLINICAL LABORATORY FINDINGS

08-25-59 HG 12.2 HTC RBC 4.09
WBC 8200 DIFF. P 65 ST L 24 M 11 E B

03-569-40
03-569-40A
03-569-40B

634 -12 TONSILLECTOMY
661 -12 APPENDECTOMY
687 -12 CHOLECYSTECTOMY, COMPLETE
782 -10 HYSTERECTOMY
930 -X41 MIGRAINE

03-569-67
03-569-67A
03-569-67B
03-569-67C
03-569-67D

PATIENT 03-570	BORN 12-19-08	03-570-01
		03-570-02
FEMALE		03-570-03
		03-570-05
SOURCE OF CASE	SEARCH BY CEM	03-570-10
EXPOSURE	DIAL PAINTER 01	03-570-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 9 MO. TO 1 YEAR, 1925.		03-570-13
PAINTED CLOCK FACES, SOMETIMES POINTED BRUSH IN MOUTH. NEVER		03-570-13A
PAINTED ANY PART OF HER BODY.		03-570-13B
ASSUMED WORK PERIOD 05-01-1925 TO 03-01-1926		03-570-13*
16.36 YEARS OF AGE WHEN FIRST EMPLOYED.		03-570-13Z
FAMILY HISTORY		03-570-15
MARRIED 1926	PARA 3	03-570-15A
HUSBAND	1905 GRAVIDA 3	03-570-15B
	L W	
CHILDREN	FEMALE 1926	03-570-16
	FEMALE 1932	03-570-16A
	FEMALE 1939	03-570-16B
	L W	
MEDICAL HISTORY		03-570-20
CAESARIAN SECTION WITH 3RD CHILD 1939, APPENDECTOMY AND		03-570-20A
HYSTERECTOMY 1954. INQUIRY BY SYSTEMS--EXCELLENT HEALTH, WORKED		03-570-20B
REGULARLY. HAS SOME STIFFNESS OF SHOULDERS AND THORACIC SPINE		03-570-20C
PAST 6 MONTHS. DENTAL HISTORY--6 TEETH EXTRACTED, REMAINDER IN		03-570-20D
GOOD CONDITION. (08-28-59)		03-570-20E
GAMMA-RAY MEASUREMENTS		03-570-25
08-28-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-570-25A
COMPUTED TOTAL-BODY RADIUM		03-570-27
08-28-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TCTAL 0.31		03-570-27A
X-RAY EXAMINATION		03-570-30
PARTIAL SKELETAL SURVEY		03-570-30A
08-28-59 ANL X-RAY NO. R-161 LOC. ANL		03-570-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-570-30C
PPF NONE.		03-570-30D
CLINICAL LABORATORY FINDINGS		03-570-40
08-28-59 HG 13.1 HTC RBC 4.48		03-570-40A
WBC 6200 DIFF. P 51 ST L 38 M 9 E 1 B 1		03-570-40B
661 -12 APPENDECTOMY		03-570-67
782 -10 HYSTERECTOMY		03-570-67A

PATIENT 03-571	BORN 07-18-09	03-571-01 03-571-02 03-571-03 03-571-05
FEMALE		
OTHER PERTINENT NOS.	AMBH	03-571-05A
SOURCE OF CASE	SEARCH BY CEM	03-571-10
LITERATURE CITATION		03-571-11 03-571-11A 03-571-11B 03-571-11C
MILLER, ANL-6839 (1964) PP. 18-39.		
MILLER, (IN) ASSESSMENT OF RADIOACTIVITY IN MAN, P.67, IAEA, VIENNA (1964).		
EXPOSURE	DIAL PAINTER 01	03-571-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., SUMMER 1924 UNTIL PLANT MOVED TO OTTAWA WHERE SHE WORKED ADDITIONAL 2 MONTHS, TOTAL ABOUT 1 YEAR. PAINTED NUMERALS ON DIALS WITH BRUSH AND GLASS PENCILS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF OWN BODY.		03-571-13 03-571-13A 03-571-13B 03-571-13C 03-571-13D 03-571-13E 03-571-13F 03-571-13G
ASSUMED WORK PERIOD 07-01-1925 TO 07-01-1926 15.95 YEARS OF AGE WHEN FIRST EMPLOYED.		
FAMILY HISTORY		03-571-15 03-571-15A 03-571-15B
MARRIED 1927	PARA 0 GRAVIDA 1 (1 SPON. ABORT.)	
HUSBAND	1907 L W	
MEDICAL HISTORY		03-571-20 03-571-20A 03-571-20B 03-571-20C 03-571-20D 03-571-20E
APPENDECTOMY AND RIGHT OOPHORECTOMY 1935, SURGERY LEFT HIP 1951 FOLLOWING LIMP THAT BEGAN 1950. MEDICAL HISTORY--FEVER AGE 6, NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--MENOPAUSE 1951, OTHERWISE NEGATIVE. DENTAL HISTORY--ABOUT HALF TEETH EXTRACTED. (08-28-59)		
INTERVAL HISTORY ESSENTIALLY NEGATIVE. DENTAL HISTORY--FURTHER EXTRACTIONS SCHEDULED. (10-05-62)		03-571-21A 03-571-21B
PATIENT HAD FAINTING SPELLS, STARTED 10-64. ANEMIA DISCOVERED 06-65 AND HAD TWO BLOOD TRANSFUSIONS. RECEIVED INJECTIONS EVERY WEEK FOR ONE YEAR BUT BLOOD COUNT DID NOT IMPROVE. NOW TAKING VITAMIN B12 AND LIVER INJECTIONS, ONE PER WEEK. STATED THAT LAST BLOOD COUNT 06-66 WAS SLIGHTLY BELOW NORMAL. NO FAINTING SINCE B12 AND LIVER INJECTIONS. PATIENT'S MOTHER (LW, AGE 89) STATES PATIENT HAS HAD ANEMIA ALL HER LIFE. PATIENT CONTINUES TO HAVE PAIN ALONG DORSA OF BOTH FEET, ESPECIALLY AT NIGHT AFTER STANDING ALL DAY. HAS PAIN IN ANKLES ALSO. CYST WAS REMOVED FROM RIGHT INDEX FINGER ABOUT 3 YEARS AGO, SAID TO HAVE BEEN ATTACHED TO UNDERLYING BONE. HAS ARTHRITIC PAINS IN KNEES AND FINGERS. (09-21-66)		03-571-22A 03-571-22B 03-571-22C 03-571-22D 03-571-22E 03-571-22F 03-571-22G 03-571-22H 03-571-22I 03-571-22J 03-571-22K 03-571-22L

GAMMA-RAY MEASUREMENTS

08-28-59	RAB,RAC	0.340 UCI	HGS 1 TILTING CHAIR	CEM	03-571-25
10-05-62	RAB,RAC	0.296 UCI	HGS 1 TILTING CHAIR	CEM	03-571-25A
10-05-62	RAB,RAC	0.288 UCI	HGS 1 7-CRYST-POS	CEM	03-571-25B
09-21-66	RAB,RAC	0.285 UCI	HGS 1 TILTING CHAIR	CEM	03-571-25C
09-21-66	RAB,RAC	0.344 UCI	HGS 1 7-CRYST-POS	CEM	03-571-25D

COMPUTED TOTAL-BODY RADIUM

08-28-59	0.340 UCI	1.100 UCI TOTAL	0.31	03-571-27
10-05-62	0.296 UCI	0.954 UCI TOTAL	0.31	03-571-27A
10-05-62	0.288 UCI	0.930 UCI TOTAL	0.31	03-571-27B
09-21-66	0.285 UCI	0.919 UCI TOTAL	0.31	03-571-27C
09-21-66	0.344 UCI	1.109 UCI TOTAL	0.31	03-571-27D

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY
08-28-59 ANL X-RAY NO. R-160 LOC. ANL
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 20
PPF AREAS OF BONE RESORPTION SEEN IN RIGHT AND LEFT HUMERUS,
RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT FEMUR, LEFT TIBIA,
RIGHT AND LEFT FIBULA. COMPLETE DESTRUCTION OF SUPERIOR ARTICULAR
SURFACE OF HEAD OF LEFT FEMUR WITH MARKED CONDENSATION AND
COMPRESSION OF HEAD. COARSENING OF TRABECULATION OF SKULL, RIGHT
AND LEFT CLAVICLE, FIRST LEFT METACARPAL, RIGHT FEMUR, AND LEFT
TIBIA. SCLEROSIS OF LEFT ACETABULUM.

COMPLETE SKELETAL SURVEY
10-05-62 ANL X-RAY NO. R-160B LOC. ANL
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 16
PPF AREAS OF BONE RESORPTION IN RIGHT CLAVICLE, RIGHT AND LEFT
HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, LEFT FEMUR, RIGHT AND
LEFT TIBIA AND FIBULA. DESTRUCTION OF HEAD OF LEFT FEMUR.
COARSENING OF TRABECULATION OF SKULL, LEFT CLAVICLE, AND RIGHT
FEMUR.

SPECIAL VIEWS, RIGHT ANKLE, MASTOIDS AND SINUSES
06-25-64 U. OF CHICAGO CLINICS UNIT NO. LOC. U OF C
OSTEOCHONDRITIS DISSECANS, RIGHT TALUS. MULTIPLE DESTRUCTIVE
LESIONS IN CALVARIUM CONSISTENT WITH INCREASED RADIUM BURDEN.
NORMAL PARANASAL SINUSES. MASTOIDS ARE HYPOPLASTIC AND PARTIALLY
SCLEROTIC, OTHERWISE NO ABNORMALITY SEEN.

COMPLETE SKELETAL SURVEY
09-21-66 ANL X-RAY NO. R-160C LOC. ANL
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 18
PPF MULTIPLE AREAS OF BONE RESORPTION, RIGHT AND LEFT HUMERUS,
RIGHT AND LEFT RADIUS AND ULNA, DESTRUCTION AT HEAD OF LEFT FEMUR,
OSTEOCHONDRITIS DISSECANS RIGHT TARSAL SCAPHOID, BONY RESORPTION
RIGHT AND LEFT TIBIA, FIBULA AND LEFT ASTRAGALUS AND LEFT TARSAL
SCAPHOID.

CLINICAL LABORATORY FINDINGS

08-28-59	HG 12.3	HTC	RBC 4.53		03-571-40
WBC 6500	DIFF. P 57	ST 1	L 31	M 8 E 3 B	03-571-40A
10-05-62	HG 11.9	HTC	RBC 3.99		03-571-40B
WBC 5300	DIFF. P 72	ST	L 22	M 5 E 1 B	03-571-41A
09-21-66	HG 13.0	HTC 41	RBC 4.01		03-571-41B
WBC 7150	DIFF. P 61	ST	L 32	M 6 E 1 B	03-571-42A

23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (LEFT)	03-571-66
2392 -4722.1	ASEPTIC NECROSIS OF THE ASTRAGALUS (RIGHT)	03-571-66A
2394 -4722.1	ASEPTIC NECROSIS OF THE TARSAL SCAPHOID (RIGHT)	03-571-66B

661	-12	APPENDECTOMY	03-571-67
788	-10	UNILATERAL OOPHORECTOMY	03-571-67A

TOOTH MEASUREMENT				03-571-73
SAMPLE 2.01		TOOTH INCISOR		03-571-73A
TOTAL WT. 0.7232		CALC.GMS.CA. 0.2025		03-571-73B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	03-571-73C
	98.59		486.9	03-571-73D
			RATIO-TOOTH/BODY	
			0.51	

SAMPLE 2.02		TOOTH PREMOLAR		03-571-74A
TOTAL WT. 0.9352		CALC.GMS.CA. 0.2619		03-571-74B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	03-571-74C
144.8	277.5	52	1059.7	03-571-74D
			RATIO-TOOTH/BODY	
			1.11	

DATA REVISED 11-06-67	03-571-99
-----------------------	-----------

PATIENT 03-572	BORN 01-26-06	03-572-01
		03-572-02
		03-572-03
FEMALE		03-572-05
SOURCE OF CASE	SEARCH BY CEM	03-572-10
EXPOSURE	DIAL PAINTER 01	03-572-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., JUNE 1924 TO JULY 1925.		03-572-13
(MORE LIKELY 1925 TO 1926.) PAINTED DIALS, POINTED BRUSH IN MOUTH		03-572-13A
FOR SHORT TIME, GLASS BRUSHES INTRODUCED SHORTLY AFTER PATIENT		03-572-13B
STARTED WORK, NEVER PAINTED ANY PART OF OWN BODY.		03-572-13C
ASSUMED WORK PERIOD 06-01-1925 TO 07-01-1926		03-572-13*
19.34 YEARS OF AGE WHEN FIRST EMPLOYED.		03-572-13Z
FAMILY HISTORY		03-572-15
MARRIED 1924	PARA 4 GRAVIDA 4	03-572-15A
CHILDREN	FEMALE 1926 L W	03-572-16
	MALE 1929 L W	03-572-16A
	MALE 1938 L W	03-572-16B
	MALE 1946 L W	03-572-16C
MEDICAL HISTORY		03-572-20
SURGERY--APPENDECTOMY AND HYSTERECTOMY 1952. NO OTHER SERIOUS		03-572-20A
ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR SOME CHRONIC		03-572-20B
LOW-GRADE ACHING DISCOMFORT IN RIGHT KNEE. DENTAL HISTORY--26		03-572-20C
TEETH REMAIN. (09-01-59)		03-572-20D
GAMMA-RAY MEASUREMENTS		03-572-25
09-01-59 RAB,RAC	0.026 UCI HGS 1 TILTING CHAIR CEM	03-572-25A
COMPUTED TOTAL-BODY RADIUM		03-572-27
09-01-59 0.026 UCI	0.086 UCI TOTAL 0.31	03-572-27A
X-RAY EXAMINATION		03-572-30
09-01-59 ANL	X-RAY NO. R-162 LOC. ANL	03-572-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3		03-572-30C
COMPLETE SKELETAL SURVEY		03-572-30A
PPF SCATTERED SMALL AREAS OF BONE RESORPTION IN LEFT RADIUS,		03-572-30D
RIGHT FIBULA, AND LEFT FIBULA. COARSENING OF TRABECULATION IN		03-572-30E
LEFT TIBIA.		03-572-30F
CLINICAL LABORATORY FINDINGS		03-572-40
09-01-59 HG 11.8 HTC	RBC 3.90	03-572-40A
WBC 6900 DIFF. P 55 ST 1	L 40 M 3 E 1 B	03-572-40B
661 -12 APPENDECTOMY		03-572-67
782 -10 HYSTERECTOMY		03-572-67A
DATA REVISED 09-27-67		03-572-99

PATIENT 03-573	BORN 08-20-00	03-573-01
		03-573-02
		03-573-03
		03-573-04
		03-573-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-573-10
EXPOSURE	DIAL PAINTER 01	03-573-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1 YEAR, SPRING 1925 UNTIL		03-573-13
SPRING 1926. POINTED BRUSH IN MOUTH PART OF TIME, GLASS PENCILS		03-573-13A
INTRODUCED SHORTLY AFTER START OF EMPLOYMENT. NEVER PAINTED ANY		03-573-13B
PART OF OWN PERSON.		03-573-13C
ASSUMED WORK PERIOD 04-01-1925 TO 04-01-1926		03-573-13*
24.61 YEARS OF AGE WHEN FIRST EMPLOYED.		03-573-13Z
FAMILY HISTORY		03-573-15
MARRIED 1921 DIV. 1939 PARA 0 GRAVIDA 3 (3 MISCARRIAGES)		03-573-15A
MARRIED 1944 PARA 0 GRAVIDA 0		03-573-15B
MEDICAL HISTORY		03-573-20
NO SURGERY. NO SERIOUS ILLNESSES EXCEPT FOR DIABETES MELLITUS,		03-573-20A
KNOWN SINCE 1954, CURRENTLY CONTROLLED BY ORAL MEDICATION.		03-573-20B
INQUIRY BY SYSTEMS ESSENTIALLY NEGATIVE EXCEPT FOR HEBERDEN'S		03-573-20C
NODES. TEETH--4 EXTRACTIONS. (09-01-59)		03-573-20D
GAMMA-RAY MEASUREMENTS		03-573-25
09-01-59 RAB,RAC C.009 UCI HGS 1 TILTING CHAIR CEM		03-573-25A
COMPUTED TOTAL-BODY RADIUM		03-573-27
09-01-59 0.009 UCI 0.028 UCI TOTAL 0.31		03-573-27A
X-RAY EXAMINATION		03-573-30
PARTIAL SKELETAL SURVEY		03-573-30A
09-01-59 ANL X-RAY NO. R-163 LOC. ANL		03-573-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-573-30C
PPF NONE.		03-573-30D
CLINICAL LABORATORY FINDINGS		03-573-40
09-01-59 HG 12.4 HTC RBC 4.22		03-573-40A
WBC 7800 DIFF. P 54 ST 1 L 38 M 5 E 2 B		03-573-40B
870 -785 DIABETES MELLITUS		03-573-67

PATIENT 03-574	BORN 09-08-04	03-574-01
		03-574-02
		03-574-03
		03-574-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-574-10
EXPOSURE	DIAL PAINTER 01	03-574-12
SOURCE ILLINOIS WATCH CO., SPRINGFIELD, ILL., 08-29-1920 TO 1932,		03-574-13
WITH EXCEPTION OF ABSENCE OF SEVERAL MONTHS 1931. WORKED AS		03-574-13A
INSPECTOR FOR 6 MONTHS, AT MENDING BROKEN DIALS FOR SEVERAL		03-574-13B
YEARS. ALSO WORKED AT TRANSFERRING DIALS INVOLVING USE OF		03-574-13C
RADIUM COMPOUNDS FOR 4 TO 5 YEARS. PUT BRUSH IN MOUTH, ONLY		03-574-13D
OCCASIONALLY SINCE SHE DID NOT REGULARLY PAINT DIALS. DID NOT		03-574-13E
PAINT ANY PART OF HER BODY.		03-574-13F
ASSUMED WORK PERIOD 08-29-1920 TO 08-29-1932		03-574-13*
15.96 YEARS OF AGE WHEN FIRST EMPLOYED.		03-574-13Z
FAMILY HISTORY		03-574-15
MARRIED 1930	PARA 5 GRAVIDA 6 (1 MISCARRIAGE)	03-574-15A
HUSBAND	1905 L W	03-574-15B
CHILDREN	FEMALE 1933 L W	03-574-16
	MALE 1934 L W	03-574-16A
	FEMALE 1939 L W	03-574-16B
	FEMALE 1942 L W	03-574-16C
	MALE 1947 L W	03-574-16D
MEDICAL HISTORY		03-574-20
NO SERIOUS ILLNESSES. NO SURGERY EXCEPT FOR EXCISION OF BENIGN		03-574-20A
SKIN TUMOR FROM LEFT LOWER LEG JANUARY 1959, TONSILLECTOMY 1927.		03-574-20B
INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR FAMILIAL MIGRAINE HEAD-		03-574-20C
ACHES SINCE EARLY ADULTHOOD. MOST OF TEETH EXTRACTED. (09-02-59)		03-574-20D
GAMMA-RAY MEASUREMENTS		03-574-25
09-02-59 RAB,RAC LESS THAN 0.0003 UCI HGS1 TILTING CHAIR CEM		03-574-25A
COMPUTED TOTAL-BODY RADIUM		03-574-27
09-02-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-574-27A
X-RAY EXAMINATION		03-574-30
PARTIAL SKELETAL SURVEY		03-574-30A
09-02-59	ANL X-RAY NO. R-164 LOC. ANL	03-574-30B
NEGATIVE FOR CHANGES DUE TO RADIUM DEPOSITION. SCORE 0		03-574-30C
PPF NONE.		03-574-30D
CLINICAL LABORATORY FINDINGS		03-574-40
09-02-59	HG 11.8 HTC RBC 3.92	03-574-40A
WBC 7300	DIFF. P 55 ST L 40 M 2 E 3 B	03-574-40B
634 -12	TONSILLECTOMY	03-574-67
930 -X41	MIGRAINE	03-574-67A

PATIENT 03-575	BORN 02-05-13	03-575-01
		03-575-02
		03-575-03
FEMALE		03-575-05
SOURCE OF CASE	SEARCH BY CEM	03-575-10
EXPOSURE	DIAL PAINTER 01	03-575-12
SOURCE ILLINOIS WATCH CO., SPRINGFIELD, ILL., FOR 1 YEAR BETWEEN 1931 AND 1932. PAINTED HANDS ON WATCHES AND, ALTHOUGH SHE WORKED WITH BRUSHES, SHE WAS WARNED NOT TO POINT BRUSHES IN HER MOUTH, HOWEVER, OCCASIONALLY SHE DID. NEVER PAINTED ANY PART OF HER BODY.		03-575-13
		03-575-13A
		03-575-13B
		03-575-13C
		03-575-13D
ASSUMED WORK PERIOD 07-01-1931 TO 07-01-1932		03-575-13*
18.39 YEARS OF AGE WHEN FIRST EMPLOYED.		03-575-13Z
FAMILY HISTORY		03-575-15
MARRIED 1946	PARA 3 GRAVIDA 3	03-575-15A
CHILDREN	MALE 1947 L W	03-575-16
	MALE 1948 L W	03-575-16A
	MALE DEC. AT 2 MONTHS	03-575-16B
MEDICAL HISTORY		03-575-20
NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE.		03-575-20A
DENTAL HISTORY--NONE EXTRACTED. (09-02-59)		03-575-20B
GAMMA-RAY MEASUREMENTS		03-575-25
09-02-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-575-25A
COMPUTED TOTAL-BODY RADIUM		03-575-27
09-02-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-575-27A
X-RAY EXAMINATION		03-575-30
PARTIAL SKELETAL SURVEY		03-575-30A
09-02-59 ANL X-RAY NO. R-165 LOC. ANL		03-575-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-575-30C
PPF NONE		03-575-30D
CLINICAL LABORATORY FINDINGS		03-575-40
09-02-59 HG 13.1 HTC RBC 3.92		03-575-40A
WBC 6700 DIFF. P 49 ST L 47 M 2 E 2 B		03-575-40B

PATIENT 03-576	BORN 02-27-09	03-576-01
		03-576-02
		03-576-03
		03-576-04
		03-576-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-576-10
EXPOSURE	DIAL PAINTER 01	03-576-12
SOURCE RADIUM DIAL CO., STREATOR, AND OTTAWA, ILL., SPRING 1925 TO 1927. PAINTED NUMERALS ON CLOCK DIALS. POINTED BRUSH IN MOUTH DURING EARLY PART OF EMPLOYMENT IN STREATOR. LATER SUPERVISOR INSTRUCTED EMPLOYEES NOT TO POINT BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER OWN PERSON.		03-576-13
ASSUMED WORK PERIOD 05-01-1925 TO 05-01-1927		03-576-13A
16.16 YEARS OF AGE WHEN FIRST EMPLOYED.		03-576-13B
		03-576-13C
		03-576-13D
		03-576-13*
		03-576-13Z
FAMILY HISTORY		03-576-15
MARRIED 1929, DIV. 1944 PARA 5 GRAVIDA 5		03-576-15A
MARRIED 1956		03-576-15B
CHILDREN		
FEMALE 1930	L W (SOME SHOULDER DIFFICULTY)	03-576-16
FEMALE 1934	L W (OSTEOGENIC SARCOMA, RESECTION RT TIBIA, 1952)	03-576-16A
		03-576-16B
FEMALE 1936	L W	03-576-16C
FEMALE 1938	L W	03-576-16D
MALE 1940	L W	03-576-16E
MEDICAL HISTORY		03-576-20
SURGERY--APPENDECTOMY AND SUSPENSION OF UTERUS 1943. FEVER AFTER FIRST PREGNANCY FOLLOWED BY RIGHT MASTITIS 1 MONTH LATER, PNEUMONIA ON TWO OCCASIONS, POLIOMYELITIS AT AGE 6 WITHOUT ANY RESIDUAL PARALYSIS. TONSILLECTOMY IN CHILDHOOD. INQUIRY BY SYSTEMS--FAMILIAL MIGRAINE HEADACHES, BRITTLE FINGERNAILS, HISTORY OF SPASTIC COLON. DENTAL HISTORY--ALL TEETH EXTRACTED BY AGE 33 BECAUSE OF NUMEROUS CAVITIES. (09-03-59)		03-576-20A
		03-576-20B
		03-576-20C
		03-576-20D
		03-576-20E
		03-576-20F
		03-576-20G
GAMMA-RAY MEASUREMENTS		03-576-25
09-03-59 RAB,RAC C.002 UCI HGS 1 TILTING CHAIR CEM		03-576-25A
COMPUTED TOTAL-BODY RADIUM		03-576-27
09-03-59 0.002 UCI 0.007 UCI TOTAL 0.31		03-576-27A
X-RAY EXAMINATION		03-576-30
PARTIAL SKELETAL SURVEY		03-576-30A
09-03-59 ANL X-RAY NO. R-166 LOC. ANL		03-576-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-576-30C
PPF NONE.		03-576-30D

CLINICAL LABORATORY FINDINGS

09-03-59 HG 13.8 HTC RBC 4.16
WBC 4700 DIFF. P 59 ST L 37 M 4 E B

03-576-40
03-576-40A
03-576-40B

361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE
634 -12 TONSILLECTOMY
661 -12 APPENDECTOMY
782 -56 UTERINE SUSPENSION
930 -X41 MIGRAINE
972 -171 POLIOMYELITIS, ACUTE ANTERIOR, NON PARALYTIC

03-576-67
03-576-67A
03-576-67B
03-576-67C
03-576-67D
03-576-67E

PATIENT 03-577	BORN 04-13-03	03-577-01
		03-577-02
		03-577-02
		03-577-03
		03-577-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-577-10
EXPOSURE	DIAL PAINTER 01	03-577-12
SOURCE RADIUM DIAL CO., PERU AND OTTAWA, ILL., SUMMER 1921 TO		03-577-13
SUMMER 1923, CONTINUOUS EMPLOYMENT 2 YEARS. PAINTED DIALS.		03-577-13A
POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-577-13B
LATER WORKED AT DEARBORN GLASS CO., CHICAGO, 1942 TO 1946.		03-577-13C
PAINTED RADIUM ON AIRPLANE AND SUBMARINE INSTRUMENTS BUT DID NOT		03-577-13D
POINT BRUSH IN MOUTH.		03-577-13E
ASSUMED WORK PERIOD 07-01-1921 TO 07-01-1923		03-577-13*
18.21 YEARS OF AGE WHEN FIRST EMPLOYED.		03-577-13Z
FAMILY HISTORY		03-577-15
MARRIED 1923, DIV. 1925 PARA 0 GRAVIDA 3 (3 MISCARRIAGES)		03-577-15A
MARRIED 1944		03-577-15B
HUSBAND DEC. MARCH 1958		03-577-15C
MEDICAL HISTORY		03-577-20
SURGERY--APPENDECTOMY 1921, RIGHT OOPHORECTOMY 1929, REPAIR OF		03-577-20A
CHIP IN RIGHT ELBOW 1946, AND CHOLECYSTECTOMY 1947. BROKE 2		03-577-20B
VERTEBRAE T5 AND T7 IN FALL ON ICE FEB. 1958. MYOCARDITIS AND		03-577-20C
PERICARDITIS APRIL 1954, HAS HAD RHEUMATOID ARTHRITIS SINCE THEN.		03-577-20D
INQUIRY BY SYSTEMS--MIGRAINE HEADACHES PAST 20 YEARS, AND CHRONIC		03-577-20E
BRONCHITIS. DENTAL HISTORY--ALL TEETH EXTRACTED DURING PERIOD		03-577-20F
FROM 1923 TO 1943, WHEN FINAL 14 WERE REMOVED. (09-09-59)		03-577-20G
GAMMA-RAY MEASUREMENTS		03-577-25
09-09-59 RAB,RAC 0.025 UCI HGS 1 TILTING CHAIR CEM		03-577-25A
COMPUTED TOTAL-BODY RADIUM		03-577-27
09-09-59 0.025 UCI 0.081 UCI TOTAL 0.31		03-577-27A
X-RAY EXAMINATION		03-577-30
COMPLETE SKELETAL SURVEY		03-577-30A
09-09-59 ANL X-RAY NO. R-167 LOC. ANL		03-577-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 4		03-577-30C
PPF COARSENING OF TRABECULATION PRESENT IN LEFT AND RIGHT RADIUS		03-577-30D
AND ULNA AS WELL AS LEFT AND RIGHT TIBIA AND FIBULA. COMPRESSION		03-577-30E
FRACTURES OF T7 AND L4 ARE NOTED.		03-577-30F
CLINICAL LABORATORY FINDINGS		03-577-40
09-09-59 HG 13.5 HTC RBC 4.25		03-577-40A
WBC 14,400 DIFF. P 65 ST 4 L 29 M 2 E B		03-577-40B

222	-416	FRACTURE OF THE THORACIC SPINE	03-577-67
240	-952	ARTHRITIS, RHEUMATOID, MULTIPLE	03-577-67A
420	-930	PERICARDITIS, ACUTE, BENIGN	03-577-67B
430	-930	MYOCARDITIS, ACUTE, ISOLATED, DUE TO UNKNOWN CAUSE	03-577-67C
661	-12	APPENDECTOMY	03-577-67D
687	-12	CHOLECYSTECTOMY	03-577-67E
788	-10	UNILATERAL OOPHORECTOMY	03-577-67F
930	-X41	MIGRAINE	03-577-67G

DATA REVISED 09-27-67

03-577-99

PATIENT 03-578	BORN 04-20-09	03-578-01
		03-578-02
FEMALE		03-578-03
		03-578-05
SOURCE OF CASE	SEARCH BY CEM	03-578-10
EXPOSURE	DIAL PAINTER 01	03-578-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 6 TO 8 MONTHS 1925. PAINTED DIALS, POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-578-13
ASSUMED WORK PERIOD 05-01-1925 TO 12-01-1925		03-578-13A
16.02 YEARS OF AGE WHEN FIRST EMPLOYED.		03-578-13*
		03-578-13Z
FAMILY HISTORY		03-578-15
MARRIED 1932	PARA 0 GRAVIDA 0	03-578-15A
HUSBAND	1901 L W	03-578-15B
MEDICAL HISTORY		03-578-20
MINOR RECTAL SURGERY 1956, NO OTHER SERIOUS PROCEDURES. MILD ANEMIA PAST FEW YEARS, NO OTHER ILLNESSES. INQUIRY BY SYSTEMS--		03-578-20A
EARLIER HISTORY MIGRAINE HEADACHES, NONE RECENTLY. RECENT LOW-GRADE PAIN LEFT FIRST METATARSAL BONE. DENTAL HISTORY--2 WISDOM		03-578-20B
TEETH EXTRACTED. (09-09-59)		03-578-20C
		03-578-20D
		03-578-20E
GAMMA-RAY MEASUREMENTS		03-578-25
09-09-59 KAB,RAC 0.005 UCI HGS 1 TILTING CHAIR CEM		03-578-25A
COMPUTED TOTAL-BODY RADIUM		03-578-27
09-09-59 0.005 UCI 0.017 UCI TOTAL 0.31		03-578-27A
X-RAY EXAMINATION		03-578-30
PARTIAL SKELETAL SURVEY		03-578-30A
09-09-59 ANL X-RAY NO. R-168 LOC. ANL		03-578-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-578-30C
PPF NONE.		03-578-30D
CLINICAL LABORATORY FINDINGS		03-578-40
09-09-59 HG 13.5 HTC RBC 3.94		03-578-40A
WBC 7200 DIFF. P 51 ST L 42 M 6 E 1 B		03-578-40B
930 -X41 MIGRAINE		03-578-67

PATIENT 03-579	BORN 03-31-05	03-579-01
		03-579-02
		03-579-03
		03-579-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-579-10
EXPOSURE	DIAL PAINTER	03-579-12
SOURCE RADIUM DIAL CO., PERU, ILL., JUNE TO SEPT. 1922, 3 MONTHS.		03-579-13
PAINTED DIALS. POINTED BRUSH IN MOUTH, NEVER PAINTED ANY PART		03-579-13A
OF HER OWN BODY.		03-579-13B
ASSUMED WORK PERIOD 06-01-1922 TO 09-01-1922		03-579-13*
17.16 YEARS OF AGE WHEN FIRST EMPLOYED.		03-579-13Z
FAMILY HISTORY		03-579-15
MARRIED 1926	PARA 2 GRAVIDA 2	03-579-15A
CHILDREN	MALE 1928 L W	03-579-16
	FEMALE 1932 L W (DIABETES SINCE AGE 25)	03-579-16A
MEDICAL HISTORY		03-579-20
SURGERY--APPENDECTOMY 1927, CHOLECYSTECTOMY 1930, TONSILLECTOMY		03-579-20A
1932, DUODENAL ULCER SURGERY 1937, BOWEL OBSTRUCTION SURGERY		03-579-20B
1944, HEMORRHOIDECTOMY 1945, HYSTERECTOMY 1946, VAGOTOMY 1949.		03-579-20C
PATIENT STATES SHE HAD RUPTURED DIAPHRAGM 1958, BUT NO SURGERY		03-579-20D
WAS PERFORMED; ALSO HAD HEART ATTACK IN ASSOCIATION WITH THIS		03-579-20E
CONDITION. FRACTURE OF RIGHT FOOT AFTER FALL IN 1956. SEVERAL		03-579-20F
EPISODES PANCREATITIS PAST FEW YEARS AND COLITIS MANY YEARS.		03-579-20G
HEADACHES FOLLOWING CONCUSSION 1944 SUSTAINED IN AUTO ACCIDENT.		03-579-20H
DENTAL HISTORY--COMPLETE UPPER AND PARTIAL LOWER DENTURES, ONLY		03-579-20I
LOWER FRONT TEETH REMAIN. (09-09-59)		03-579-20J
GAMMA-RAY MEASUREMENTS		03-579-25
09-09-59 RAB,RAC 0.009 UCI HGS 1 TILTING CHAIR CEM		03-579-25A
COMPUTED TOTAL-BODY RADIUM		03-579-27
09-09-59 0.009 UCI 0.030 UCI TOTAL 0.31		03-579-27A
X-RAY EXAMINATION		03-579-30
PARTIAL SKELETAL SURVEY		03-579-30A
09-09-59 ANL X-RAY NO. R-169 LOC. ANL		03-579-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-579-30C
PPF NONE.		03-579-30D
CLINICAL LABORATORY FINDINGS		03-579-40
09-09-59 HG 13.0 HTC RBC 3.72		03-579-40A
WBC 7300 DIFF. P 32 ST 2 L 48 M 5 E 12 B 1		03-579-40B

67X -11 HEMORRHOIDECTOMY
634 -12 TONSILLECTOMY
651 -951 DUODENAL ULCER
661 -12 APPENDECTOMY
687 -12 CHOLECYSTECTOMY
690 -190 ACUTE PANCREATITIS
782 -10 HYSTERECTOMY
968 -06 VAGOTOMY

03-579-67
03-579-67A
03-579-67B
03-579-67C
03-579-67D
03-579-67E
03-579-67F
03-579-67G

DATA REVISED 09-27-67

03-579-99

PATIENT 03-580	BORN 02-22-04	03-580-01
		03-580-02
		03-580-03
FEMALE		03-580-05
SOURCE OF CASE	SEARCH BY CEM	03-580-10
EXPOSURE	DIAL PAINTER 01	03-580-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1 MONTH, AUTUMN 1923.		03-580-13
TRIED TO PAINT DIALS AND POINTED BRUSH IN HER MOUTH BUT APPARENT-		03-580-13A
LY WAS UNSUCCESSFUL AT THIS TYPE OF EMPLOYMENT. NEVER PAINTED ANY		03-580-13B
PART OF HER BODY.		03-580-13C
ASSUMED WORK PERIOD 08-01-1923 TO 09-01-1923		03-580-13*
19.43 YEARS OF AGE WHEN FIRST EMPLOYED.		03-580-13Z
FAMILY HISTORY		03-580-15
MARRIED 1926	PARA 0 GRAVIDA 0	03-580-15A
MEDICAL HISTORY		03-580-20
NO SURGERY AND NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS IS		03-580-20A
COMPLETELY NEGATIVE. DENTAL HISTORY--7 TEETH EXTRACTED FROM LOWER		03-580-20B
JAW AND 3 FROM UPPER JAW, NOW WEARS PARTIAL LOWER DENTURE.		03-580-20C
(09-10-59)		03-580-20D
GAMMA-RAY MEASUREMENTS		03-580-25
09-10-59 RAB,RAC C.0007 UCI HGS 1 TILTING CHAIR CEM		03-580-25A
COMPUTED TOTAL-BODY RADIUM		03-580-27
09-10-59 0.0007 UCI 0.002 UCI TOTAL 0.31		03-580-27A
X-RAY EXAMINATION		03-580-30
PARTIAL SKELETAL SURVEY		03-580-30A
09-10-59 ANL X-RAY NO. R-170 LOC. ANL		03-580-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-580-30C
PPF NONE.		03-580-30D
CLINICAL LABORATORY FINDINGS		03-580-40
09-10-59 HG 13.9 HTC RBC 4.75		03-580-40A
WBC 7400 DIFF. P 67 ST L 19 M 12 E 2 B		03-580-40B
DATA REVISED 09-27-67		03-580-99

PATIENT 03-581	BORN 06-08-04	03-581-01
		03-581-02
		03-581-03
		03-581-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-581-10
EXPOSURE	DIAL PAINTER 01	03-581-12
SOURCE RADIUM DIAL CO., PERU, ILL., 2 TO 3 MONTHS ABOUT 1922.		03-581-13
PAINTED NUMERALS ON CLOCK FACES, POINTED BRUSH IN MOUTH. NEVER		03-581-13A
PAINTED ANY PART OF HER BODY.		03-581-13B
ASSUMED WORK PERIOD 06-01-1922 TO 08-15-1922		03-581-13*
17.97 YEARS OF AGE WHEN FIRST EMPLOYED.		03-581-13Z
FAMILY HISTORY		03-581-15
MARRIED 1926	PARA 1 GRAVIDA 1	03-581-15A
CHILDREN	FEMALE 1929 L W	03-581-16
MEDICAL HISTORY		03-581-20
NO SURGERY OTHER THAN D AND C 1937. TAKES ORAL MEDICATION DAILY		03-581-20A
FOR THYROID DEFICIENCY. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE.		03-581-20B
DENTAL HISTORY--1 TOOTH EXTRACTED, OTHERWISE TEETH GOOD		03-581-20C
CONDITION. (09-10-59)		03-581-20D
LETTER FROM DR. WILLIAM C. BUCHBINDER,		03-581-21A
03-15-60 STATED PATIENT HAS SEVERE HYPOTHYROIDISM.		03-581-21B
GAMMA-RAY MEASUREMENTS		03-581-25
09-10-59 RAB,RAC C.004 UCI HGS 1 TILTING CHAIR CEM		03-581-25A
COMPUTED TOTAL-BODY RADIUM		03-581-27
09-10-59 0.004 UCI 0.013 UCI TOTAL 0.31		03-581-27A
X-RAY EXAMINATION		03-581-30
PARTIAL SKELETAL SURVEY		03-581-30A
09-10-59 ANL X-RAY NO. R-171 LOC. ANL		03-581-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-581-30C
PPF NONE.		03-581-30D
CLINICAL LABORATORY FINDINGS		03-581-40
09-10-59 HG 13.6 HTC RBC 4.34		03-581-40A
WBC 8100 DIFF. P 48 ST L 44 M 6 E 2 B		03-581-40B
785 -104 DILATATION AND CURRETTAGE OF THE UTERUS		03-581-67
810 -7722 HYPOTHYROIDISM		03-581-67A
DATA REVISED 09-27-67		03-581-99

PATIENT 03-583	BORN 09-13-93	03-583-01
DECEASED		03-583-02
MALE		03-583-05
DECEASED 02-04-62		03-583-06
DEATH CERT. NO.	AUTOPSY NONE	03-583-07
INTERMENT ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS		03-583-08
CAUSES OF DEATH	ACUTE MYOCARDIAL FAILURE	03-583-09
	MASSIVE AORTIC ANEURYSM, CARDIOVASCULAR DISEASE	03-583-09A
SOURCE OF CASE	SEARCH BY CEM	03-583-10
EXPOSURE	SUPERVISOR, RADIUM DIAL PLANT	03-583-12
SOURCE SUPERVISOR, LUMINOUS PROCESSES, INC., OTTAWA, ILLINOIS		03-583-13
GAMMA-RAY MEASUREMENTS		03-583-25
10-59	FIELD MEASUREMENT	03-583-25A
COMPUTED TOTAL-BODY RADIUM		03-583-27
10-59	0.050 UCI TOTAL	03-583-27A
DATA REVISED 10-02-67		03-583-99

PATIENT 03-584	BORN 05-20-05	03-584-01
DECEASED		03-584-02
		03-584-03
FEMALE		03-584-05
OTHER PERTINENT NOS.	PRES.-ST. LUKE'S	03-584-05A
	PRES.-ST. LUKE'S AUTOPSY	03-584-05B
DECEASED 08-25-59		03-584-06
DEATH CERT. NO.	AUTOPSY YES	03-584-07
INTERMENT	ARLINGTON CEMETERY, ELMHURST, ILLINOIS	03-584-08
CAUSES OF DEATH	OSTEOGENIC SARCOMA DUE TO RADIUM SALTS (DEATH CERT.)	03-584-09
	OSTEOGENIC SARCOMA, RIGHT PELVIS (ACTUAL)	03-584-09A
SOURCE OF CASE	SEARCH BY CEM	03-584-10
LITERATURE CITATION		03-584-11
DAVIS, ET AL, ARCHIVES OF SURGERY 86,190 (FEB. 1963).		03-584-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-584-11B
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-584-11C
EXPOSURE	DIAL PAINTER 01	03-584-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.	03-584-13
MEDICAL HISTORY		03-584-20
PATIENT FIRST ADMITTED TO PRESBYTERIAN-ST. LUKE'S HOSPITAL ON		03-584-20A
03-08-58 BECAUSE SHE HAD DISCOVERED A LUMP IN THE RIGHT SIDE OF		03-584-20B
HER NECK APPROXIMATELY 6 MONTHS PRIOR. SHE HAD HAD		03-584-20C
SEVERE ARTHRITIS IN BOTH HIPS PREDOMINANTLY ON THE RIGHT WITH		03-584-20D
LIMITATION OF MOTION BECAUSE OF PAIN. THE REMAINDER OF HER		03-584-20E
HISTORY WAS UNREMARKABLE. EXAMINATION REVEALED A SOFT 3-CM SIZE		03-584-20F
MASS IN THE RIGHT LOBE OF THE THYROID. IN ADDITION IT WAS SUSPECT-		03-584-20G
ED THAT A MASS WAS PALPABLE IN THE REGION AND UNDERNEATH A PREV-		03-584-20H
IOUS APPENDECTOMY SCAR. RADIOGRAPHIC EXAMINATION OF THE SKELETON		03-584-20I
REVEALED MULTIPLE AREAS WHICH WERE CONSIDERED TO BE METASTASES IN		03-584-20J
BOTH HUMERI, THE LEFT SCAPULA, WITH A MARKED AREA OF DESTRUCTION		03-584-20K
IN THE PELVIC BONES AND UPPER ENDS OF BOTH FEMURS. BECAUSE OF THE		03-584-20L
POSSIBILITY THAT THE BONE LESIONS WERE METASTATIC FROM A THYROID		03-584-20M
CARCINOMA A FOLLOWUP PARTIAL THYROIDECTOMY AND BIOPSY OF THE		03-584-20N
ILIAC CREST WERE CARRIED OUT ON THE 8TH HOSPITAL DAY. THE THYROID		03-584-20O
GLAND NODULE WAS REPORTED AS A BENIGN ADENOMA AND THE ILIAC CREST		03-584-20P
BIOPSY DEMONSTRATED OSTEOSCLEROSIS WITH CALCIFICATION OF ABNORMAL		03-584-20Q
OSTEOID TISSUE OBLITERATING THE NARROW SPACE. PELVIC EXAMINATION		03-584-20R
UNDER ANESTHESIA DEMONSTRATED A VERY LARGE HARD MASS FILLING THE		03-584-20S
RIGHT SIDE OF THE PELVIS. THE PATIENT AGAIN ENTERED THE HOSPITAL		03-584-20T
ON 04-08-58 AT WHICH TIME EXPLORATORY LAPARATOMY DEMONSTRATED A		03-584-20U
LARGE MASS ARISING FROM THE RIGHT ILIUM. HISTOLOGIC EXAMINATION		03-584-20V
DEMONSTRATED THIS TO BE AN OSTEOGENIC SARCOMA. PATIENT RECEIVED		03-584-20W
A COURSE OF RADIATION THERAPY TO THE TUMOR BUT DIED ON 08-25-59		03-584-20X
OF WIDESPREAD METASTATIC DISEASE.		03-584-20Y

GAMMA-RAY MEASUREMENTS		03-584-25
08-25-59	FIELD MEASUREMENT AFTER DEATH CEM	03-584-25A
COMPUTED TOTAL-BODY RADIUM		03-584-27
08-25-59	6.00 UCI TOTAL	03-584-27A
X-RAY EXAMINATION		03-584-30
03-58	PRES.-ST. LUKE'S HOSP., CHICAGO, ILL.	03-584-30B
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.	03-584-30C
	PPF RADIOGRAPHS DONE AT PRES.-ST. LUKE'S HOSP. HAVE BEEN SIGNED	03-584-30D
	OUT FROM THEIR FILES AND ARE MISSING. HOWEVER, EXAMINATION OF THE	03-584-30E
	ILLUSTRATIONS IN THE ARTICLE BY DAVIS, ET AL REVEALS ASEPTIC	03-584-30F
	NECROSIS OF THE HEAD OF THE RIGHT AND LEFT HUMERUS AND HEAD OF	03-584-30G
	OF THE RIGHT AND LEFT FEMUR. THERE ARE MULTIPLE LARGE AREAS OF	03-584-30H
	BONE SCLEROSIS PRESENT IN THE HEADS OF BOTH HUMERI AND IN THE	03-584-30I
	REGION OF THE GREATER TROCHANTER AND NECK OF BOTH FEMORA.	03-584-30J
	ALSO MARKED OSTEOPOROSIS OF THE LUMBAR VERTEBRAL BODIES WITH	03-584-30K
	A COMPRESSION FRACTURE PROBABLY RELATED TO THE PRESENCE OF THE	03-584-30L
	RADIUM IN THE SECOND LUMBAR VERTEBRA. ADVANCED CHANGES ON THE	03-584-30M
	BASIS OF ASEPTIC NECROSIS OF THE HEADS OF BOTH HUMERI, FEMORA AND	03-584-30N
	OF THE SECOND LUMBAR VERTEBRA.	03-584-30O
CLINICAL LABORATORY FINDINGS		03-584-40
03-08-58		03-584-40A
WBC 17,900		03-584-40B
08-18-59	HG 9.4	03-584-41A
SPECIMENS AVAILABLE		03-584-50
FROM AUTOPSY		03-584-50A
2 RIBS	RJH	03-584-50B
SHAFT OF FEMUR	30 GMS.	03-584-50C
TIBIA	62	03-584-50D
LUMBAR VERTEBRAL BODY	12	03-584-50E
PORTION OF SKULL	133	03-584-50F
	7.5	
MALIGNANT TUMOR	OSTEOGENIC SARCOMA, RIGHT PELVIS 1958	03-584-60
22X1 -876F	OSTEOGENIC SARCOMA OF THE ILIUM (RIGHT)	03-584-66
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (RIGHT, LEFT)	03-584-66A
AUTOPSY REPORT AT ANL		03-584-70
DATA REVISED 05-15-68		03-584-99

PATIENT 03-585	BORN 02-12-94	03-585-01
		03-585-02
		03-585-03
FEMALE		03-585-05
SOURCE OF CASE	SEARCH BY CEM	03-585-10
EXPOSURE	DIAL PAINTER 01	03-585-12
SOURCE RADIUM DIAL CO., KINZIE AVE., THEN SAME COMPANY WHEN IT		03-585-13
MOVED TO LAKE ST., CHICAGO, ILL. SUBSEQUENTLY, RADIUM DIAL CO.,		03-585-13A
PERU AND OTTAWA, ILL. CONTINUOUS PERIOD OF EMPLOYMENT FROM 1918		03-585-13B
TO JUNE 1923. PAINTED DIALS. POINTED BRUSH IN HER MOUTH,		03-585-13C
ESPECIALLY WHEN CORRECTING REJECTS. NEVER PAINTED ANY PART OF		03-585-13D
HER BODY.		03-585-13E
ASSUMED WORK PERIOD 06-01-1918 TO 06-01-1923		03-585-13*
24.29 YEARS OF AGE WHEN FIRST EMPLOYED.		03-585-13Z
FAMILY HISTORY		03-585-15
MARRIED 1923	PARA 2	GRAVIDA 2
HUSBAND		DECEASED 1958
		03-585-15A
		03-585-15B
CHILDREN	MALE	1926
	MALE	1932
		L W
		L W
		03-585-16A
		03-585-16B
MEDICAL HISTORY		03-585-20
APPENDECTOMY 1910, TONSILLECTOMY 1920, CAESARIAN SECTIONS 1926		03-585-20A
AND 1932, ABDOMINAL SURGERY 1952. SUSTAINED FRACTURED RIB SOME		03-585-20B
YEARS AGO FROM FALL ON ICE. PANCREATITIS 1956, TREATED MEDICALLY.		03-585-20C
PEPTIC ULCER AND GASTRIC HEMORRHAGE 1948. INQUIRY BY SYSTEMS--		03-585-20D
WEARS BRACE FOR LOW BACK DIFFICULTY THAT OCCURRED AFTER AUTO		03-585-20E
ACCIDENT. DENTAL HISTORY--WEARS COMPLETE LOWER AND PARTIAL UPPER		03-585-20F
DENTURE, MOST OF TEETH EXTRACTED 1939 BECAUSE OF ABCESES.		03-585-20G
REMAINING TEETH DUE FOR EARLY EXTRACTION. (10-20-59)		03-585-20H
FRACTURE OF RIGHT TOE, RESULT OF STUBBED TOE. FRACTURE OF TAIL-		03-585-21A
BONE AFTER FALLING FROM CHAIR. NO SLRGERY OR SERIOUS ILLNESS.		03-585-21B
INQUIRY BY SYSTEMS REVEALS OCCASIONAL PLUGGING OF LEFT EAR, NO		03-585-21C
PAIN. HAS ACHING PAIN IN LEFT MAXILLARY ANTRUM. RECOVERED		03-585-21D
SPONTANEOUSLY FROM MILD DYSPHAGIA WITH UPPER ABDOMINAL DISTRESS.		03-585-21E
WEARS DOUBLE CENTURES. (11-03-66)		03-585-21F
GAMMA-RAY MEASUREMENTS		03-585-25
10-20-59 RAB,RAC 0.035 UCI HGS 1 TILTING CHAIR CEM		03-585-25A
11-03-66 RAB,RAC 0.024 UCI HGS 1 TILTING CHAIR CEM		03-585-25B
COMPUTED TOTAL-BODY RADIUM		03-585-27
10-20-59 0.035 UCI	0.113 UCI TOTAL	0.31
11-03-66 0.024 UCI	0.074 UCI TOTAL	0.31
		03-585-27A
		03-585-27B

X-RAY EXAMINATION					03-585-30
COMPLETE SKELETAL SURVEY					03-585-30A
10-20-59	ANL	X-RAY NO. R-177	LOC. ANL		03-585-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0					03-585-30C
PPF NONE.					03-585-30D
COMPLETE SKELETAL SURVEY					03-585-31A
11-03-66	ANL	X-RAY NO. R-177B	LOC. ANL		03-585-31B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2					03-585-31C
PPF SLIGHT COARSENING OF TRABECULATION OF RIGHT AND LEFT RADIUS,					03-585-31D
ULNA AND TIBIA.					03-585-31E
CLINICAL LABORATORY FINDINGS					03-585-40
10-20-59	HG 14.4	HTC	RBC 4.21		03-585-40A
WBC 9200	DIFF. P 58	ST	L 33 M 5 E 4 B		03-585-40B
11-03-66 HG 13.5 HTC RBC 4.21					03-585-41A
WBC 8800	DIFF. P 30	ST 22	L 42 M 5 E 1 B		03-585-41B
23X -416	FRACTURE OF THE METATARSAL AND PHALANGES				03-585-67
222 -416	FRACTURE OF THE THORACIC SPINE				03-585-67A
225 -416	FRACTURE OF THE COCCYX				03-585-67B
634 -12	TONSILLECTOMY				03-585-67C
651 -951	DUODENAL ULCER				03-585-67D
661 -12	APPENDECTOMY				03-585-67E
690 -190	ACUTE PANCREATITIS				03-585-67F
TOOTH MEASUREMENT					03-585-73
SAMPLE 11.01		TOOTH CANINE			03-585-73A
TOTAL WT. 1.2613		CALC.GMS.CA. 0.3532			03-585-73B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-585-73C
25.40	48.41	52	137.1	1.37	03-585-73D
SAMPLE 11.02		TOOTH INCISOR			03-585-74A
TOTAL WT. 0.6238		CALC.GMS.CA. 0.1747			03-585-74B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-585-74C
	16.74		95.8	0.96	03-585-74D
SAMPLE 11.03		TOOTH CANINE			03-585-75A
TOTAL WT.		CALC.GMS.CA.			03-585-75B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-585-75C
23.4	39.85	59	129.4	1.29	03-585-75D
SAMPLE 11.04		TOOTH CANINE			03-585-76A
TOTAL WT. 1.1127		CALC.GMS.CA. 0.3116			03-585-76B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-585-76C
29.6	45.95	64	147.5	1.47	03-585-76D
SAMPLE 11.05		TOOTH CANINE			03-585-77A
TOTAL WT. 1.1652		CALC.GMS.CA. 0.3263			03-585-77B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-585-77C
48.0	52.7	91	161.7	1.62	03-585-77D
SAMPLE 11.06		TOOTH MOLAR			03-585-78A
TOTAL WT. 2.2514		CALC.GMS.CA. 0.6304			03-585-78B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	RATIO-TOOTH/BODY	03-585-78C
58.0	78.5	74	124.4	1.244	03-585-78D

SAMPLE 11.07

TOOTH MOLAR

TOTAL WT. 2.1197

CALC.GMS.CA. 0.5935

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

104.6

149.9

70

252.6

2.526

03-585-79A

03-585-79B

03-585-79C

03-585-79D

DATA REVISED 09-27-67

03-585-99

PATIENT 03-586	BORN 12-08-08	03-586-01
DECEASED		03-586-02
		03-586-02A
		03-586-03
FEMALE		03-586-05
OTHER PERTINENT NOS.	AMBH	03-586-05A
DECEASED 02-24-68		03-586-06
DEATH CERT. NO.		03-586-07
CAUSES OF DEATH	CARCINOMA OF BREAST WITH METASTASES	03-586-09
SOURCE OF CASE	SEARCH BY CEM	03-586-10
LITERATURE CITATION		03-586-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-586-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-586-11B
RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-586-11C
EXPOSURE	DIAL PAINTER 01	03-586-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., AND SUBSEQUENTLY, OTTAWA,		03-586-13
ILL., PERIOD STARTING SEVERAL MONTHS BEFORE PLANT MOVED FROM		03-586-13A
STREATOR TO OTTAWA, AND CONTINUING UNTIL AUGUST 1927. PAINTED		03-586-13B
DIALS, DOES NOT REMEMBER POINTING BRUSH IN MOUTH. NEVER PAINTED		03-586-13C
ANY PART OF HER BODY.		03-586-13D
ASSUMED WORK PERIOD 01-01-1926 TO 08-01-1927		03-586-13*
17.06 YEARS OF AGE WHEN FIRST EMPLOYED.		03-586-13Z
FAMILY HISTORY		03-586-15
MARRIED 1927	PARA 1 GRAVIDA 1	03-586-15A
HUSBAND	1904 DEC. 01-29-61	03-586-15B
CHILDREN	FEMALE 1929 L W	03-586-16
MEDICAL HISTORY		03-586-20
NO SERIOUS ILLNESSES AND NO SURGERY. INQUIRY BY SYSTEMS NEGATIVE.		03-586-20A
DENTAL HISTORY--FOUR TEETH EXTRACTED, REMAINDER SAID TO BE IN		03-586-20B
GOOD CONDITION. (10-20-59)		03-586-20C
INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR HYPERTENSION. PATIENT		03-586-21A
LOST 94 POUNDS BY DIET SINCE 1961. TEETH IN SAME CONDITION.		03-586-21B
(02-04-64)		03-586-21C
IN 06-67 THE PATIENT'S PHYSICIAN, DR. P. AMICO,		03-586-22A
REFERRED THE PATIENT TO OUR GROUP BECAUSE OF PAIN IN THE REGION		03-586-22B
OF THE LEFT HIP. RADIOGRAPHY DONE BY HIM HAD DEMONSTRATED A DES-		03-586-22C
TRUCTIVE LESION INVOLVING THE ACETABULAR REGION OF THE LEFT ILIUM.		03-586-22D
THE PATIENT ENTERED THE U OF CHICAGO HOSPITALS ON 06-09-67 WHERE		03-586-22E
RADIOGRAPHY DEMONSTRATED MULTIPLE DISCRETE LYTIC LESIONS IN THE		03-586-22F
LOWER RIBS AND PELVIS AND DESTRUCTION AND COLLAPSE OF THE VER-		03-586-22G
TEBRAL BODIES OF T11 THROUGH L1 WITH DESTRUCTION OF THE PEDICLES		03-586-22H
OF THESE VERTEBRAE. IN VIEW OF THE DESTRUCTION OF THE PEDICLES,		03-586-22I

METASTASIS, PARTICULARLY FROM BREAST CARCINOMA, WAS STRONGLY CON- 03-586-22J
SIDERED. EXAMINATION OF THE BREASTS DEMONSTRATED A SMALL FIRM 03-586-22K
NODULE IN THE LEFT BREAST. BIOPSY AROUND THE LEFT ACETABULUM 03-586-22L
WAS DONE AND FROZEN SECTIONS REVEALED EPITHELIAL CELLS CONSISTENT 03-586-22M
WITH METASTATIC DISEASE. NEEDLE BIOPSY OF THE BREAST LESION 03-586-22N
DEMONSTRATED CELLS CONSISTENT WITH A DIAGNOSIS OF ADENOCARCINOMA 03-586-22O
OF THE BREAST. IN VIEW OF THE WIDESPREAD METASTATIC BREAST CANCER 03-586-22P
IT WAS FELT THAT THIS WOULD BEST BE TREATED BY ADMINISTERING 03-586-22Q
DELALUTIN, 500 MG, PLUS DELESTROGEN, 40 MG, INTRAMUSCULARLY ONCE 03-586-22R
WEEKLY. THIS WAS CONTINUED UNTIL SEPTEMBER 1967 AT THE U OF 03-586-22S
CHICAGO CLINICS. AT THIS TIME THE PATIENT DEVELOPED A SEVERE 03-586-22T
THROMBOPHLEBITIS OF THE SUPERFICIAL AND DEEP VEINS OF THE LEFT 03-586-22U
THIGH AND LEG AND SHE RETURNED TO THE CARE OF DR. AMICO. THE PA- 03-586-22V
TIENT DIED ON 02-24-68 OF WHAT APPEARED TO BE BRAIN METASTASIS 03-586-22W
FROM THE BREAST CARCINOMA. (10-68) 03-586-22X

GAMMA-RAY MEASUREMENTS

10-20-59	RAB,RAC	0.394 UCI	HGS 1 TILTING CHAIR	CEM	03-586-25
02-04-64	RAB,RAC	0.306 UCI	HGS 1 TILTING CHAIR	CEM	03-586-25A
02-04-64	RAB,RAC	0.313 UCI	HGS 1 7-CRYST-POS	CEM	03-586-25B
06-06-67	RAB,RAC	0.277 UCI	HGS 1 TILTING CHAIR	CEM	03-586-25C
06-06-67	RAB,RAC	0.279 UCI	HGS 1 7-CRYST-POS	CEM	03-586-25D
					03-586-25E

COMPUTED TOTAL-BODY RADIUM

10-20-59	0.394 UCI	1.270 UCI TOTAL	0.31	03-586-27
02-04-64	0.306 UCI	0.986 UCI TOTAL	0.31	03-586-27A
02-04-64	0.313 UCI	1.010 UCI TOTAL	0.31	03-586-27B
06-06-67	0.277 UCI	0.893 UCI TOTAL	0.31	03-586-27C
06-06-67	0.279 UCI	0.900 UCI TOTAL	0.31	03-586-27D
				03-586-27E

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY 03-586-30
02-04-64 ANL X-RAY NO. R-234 LOC. ANL 03-586-30A
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 10 03-586-30B
PPF MULTIPLE AREAS OF BONE RESORPTION RIGHT HUMERUS, RIGHT AND 03-586-30C
LEFT RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA. PATCHY 03-586-30D
SCLEROSIS RIGHT RADIUS AND ULNA, AND LEFT RADIUS. 03-586-30E
03-586-30F

COMPLETE SKELETAL SURVEY 03-586-31A
06-06-67 ANL X-RAY NO. R-234B LOC. ANL 03-586-31B
MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 20 03-586-31C
PPF AREAS OF BONE RESORPTION IN SKULL, RIGHT AND LEFT HUMERUS, 03-586-31D
LEFT CLAVICLE, RIGHT AND LEFT RADIUS AND ULNA, RIGHT AND LEFT 03-586-31E
FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, AND LEFT TARSAL SCAPHOID. 03-586-31F
PATCHY BONE SCLEROSIS IN DISTAL RIGHT AND LEFT RADIUS AND ULNA. 03-586-31G
THICKENING OF CORTEX OF MID RIGHT AND LEFT FEMUR. DESTRUCTIVE 03-586-31H
LESION OF LEFT ILIUM, AND MARKED DESTRUCTION OF TWELFTH THORACIC 03-586-31I
VERTEBRAL BODY, BOTH PROBABLY METASTATIC FROM CARCINOMA OF LEFT 03-586-31J
BREAST. 03-586-31K

CLINICAL LABORATORY FINDINGS

10-20-59	HG 12.7	HTC	RBC 4.46		03-586-40
WBC 11,800 DIFF.	P 82	ST	L 15 M 2 E 1 B		03-586-40A
					03-586-40B
02-04-64	HG 13.2	HTC 44	RBC 4.10		03-586-41A
WBC 10,200 DIFF.	P 74	ST	L 21 M 4 E 1 B		03-586-41B
06-28-67	HG 3.5	HTC	RBC		03-586-42A
WBC 10,300 DIFF.	P 77	ST	L 20 M 2 E 1 B 0		03-586-42B

OTHER ANALYSES:

06-24-67 SERUM CALCIUM 9.5 MG PERCENT, SERUM PHOSPHATASE 4.5
MG PERCENT, TOTAL PROTEINS 5.7 GM PERCENT

03-586-55
03-586-55A
03-586-55B

MALIGNANT TUMOR CARCINOMA OF BREAST

03-586-60

22X1 -8091I METASTATIC CARCINOMA OF THE ILIUM

03-586-67

47X -X30 ESSENTIAL HYPERTENSION

03-586-67A

190 -8091 ADENOCARCINOMA OF THE BREAST

03-586-67B

DATA REVISED 10-09-68

03-586-99

PATIENT 03-587	BORN 09-24-06	03-587-01
		03-587-02
		03-587-03
FEMALE		03-587-05
SOURCE OF CASE	SEARCH BY CEM	03-587-10
EXPOSURE	DIAL PAINTER 01	03-587-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 9 MONTHS BETWEEN JULY 1925		03-587-13
AND MARCH 1926. PAINTED DIALS. POINTED BRUSH IN MOUTH. PAINTED		03-587-13A
PICTURES ON HER KNEES WITH LUMINOUS MATERIAL.		03-587-13B
ASSUMED WORK PERIOD 07-01-1925 TO 03-01-1926		03-587-13*
18.76 YEARS OF AGE WHEN FIRST EMPLOYED.		03-587-13Z
FAMILY HISTORY		03-587-15
MARRIED 1927	PARA 1 GRAVIDA 1	03-587-15A
HUSBAND	1903 L W	03-587-15B
CHILDREN	FEMALE 1934 L W (PREMATURE)	03-587-16
MEDICAL HISTORY		03-587-20
TONSILLECTOMY 1936, STONE REMOVED FROM LEFT KIDNEY 1936. RECTAL		03-587-20A
POLYPS AND HEMORRHOIDS REMOVED 1948. LESION ON LEFT LOWER EYELID		03-587-20B
REMOVED SEVERAL TIMES 1945 AND 1946, SAID TO HAVE BEEN BENIGN.		03-587-20C
BRIGHT'S DISEASE AND DROPSY AGE 7. INQUIRY BY SYSTEMS--OCCASIONAL		03-587-20D
TENSION HEADACHES, TACHYCARDIA FOR MANY YEARS, INTERMITTENT		03-587-20E
SWELLING OF RIGHT ANKLE, SPOT ON ONE LUNG, INTERMITTENT KIDNEY		03-587-20F
INFECTION, AND CHRONIC LOW BACKACHES FOR MANY YEARS. ALSO HAS		03-587-20G
PAIN IN ELBOW AT MEDIAL EPICONDYLES. DENTAL HISTORY--LOWER TEETH		03-587-20H
EXTRACTED 1953, UPPER TEETH 1955, WEARS COMPLETE DENTURES.		03-587-20I
(10-28-59)		03-587-20J
GAMMA-RAY MEASUREMENTS		03-587-25
10-28-59 RAB,RAC C.004 UCI HGS 1 TILTING CHAIR CEM		03-587-25A
COMPUTED TOTAL-BODY RADIUM		03-587-27
10-28-59 0.004 UCI 0.013 UCI TOTAL CEM		03-587-27A
X-RAY EXAMINATION		03-587-30
PARTIAL SKELETAL SURVEY		03-587-30A
10-28-59 ANL X-RAY NO. R-178 LOC. ANL		03-587-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-587-30C
PPF BONE ISLAND IN ONE FEMUR, PROBABLY NOT RELATED TO RADIUM.		03-587-30D
CLINICAL LABORATORY FINDINGS		03-587-40
10-28-59 HG 14.5 HTC RBC 4.52		03-587-40A
WBC 7000 DIFF. P 52 ST L 41 M 6 E 1 B		03-587-40B
67X -11 HEMORRHOIDECTOMY		03-587-67
634 -12 TONSILLECTOMY		03-587-67A
712 -100 ACUTE GLOMERULONEPHRITIS		03-587-67B
722 -615 CALCULUS IN THE PELVIS OF THE KIDNEY		03-587-67C

PATIENT 03-588	BORN 09-16-01	03-588-01
		03-588-02
		03-588-03
FEMALE		03-588-05
SOURCE OF CASE	SEARCH BY CEM	03-588-10
LITERATURE CITATION		03-588-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-588-11A
EXPOSURE	DIAL PAINTER 01	03-588-12
SOURCE RADIUM DIAL CO., PERU AND OTTAWA, ILLINOIS, FROM LATE 1922		03-588-13
TO 1927, TOTAL ABOUT 4-1/2 YEARS. PAINTED NUMERALS ON CLOCK FACES.		03-588-13A
POINTED BRUSH IN HER MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-588-13B
ASSUMED WORK PERIOD 10-01-1922 TO 03-01-1927		03-588-13*
21.03 YEARS OF AGE WHEN FIRST EMPLOYED.		03-588-13Z
FAMILY HISTORY		03-588-15
MARRIED 1925	PARA 3 GRAVIDA 4 (1 MISC.)	03-588-15A
CHILDREN	FEMALE 1926 DECEASED 1956	03-588-16
	MALE 1932 L W	03-588-16A
	FEMALE 1933 L W	03-588-16B
MEDICAL HISTORY		03-588-20
RECTAL SURGERY 1955. NO OTHER SERIOUS ILLNESSES. INQUIRY BY		03-588-20A
SYSTEMS NEGATIVE. DENTAL HISTORY--PATIENT IS EDENTULOUS AS RESULT		03-588-20B
OF GRADUAL LOSS OF TEETH. (11-11-59)		03-588-20C
INTERVAL HISTORY REVEALS REMOVAL OF CATARACTS OF LEFT EYE 1960.		03-588-21A
(12-06-62)		03-588-21B
GAMMA-RAY MEASUREMENTS		03-588-25
11-11-59 RAB,RAC 0.138 UCI HGS 1 TILTING CHAIR CEM		03-588-25A
12-06-62 RAB,RAC 0.111 UCI HGS 1 TILTING CHAIR CEM		03-588-25B
12-06-62 RAB,RAC 0.098 UCI HGS 1 7-CRYSTAL-PCS CEM		03-588-25C
COMPUTED TOTAL-BODY RADIUM		03-588-27
11-11-59 0.138 UCI 0.445 UCI TOTAL 0.31		03-588-27A
12-06-62 0.111 UCI 0.343 UCI TOTAL 0.31		03-588-27B
12-06-62 0.098 UCI 0.316 UCI TOTAL 0.31		03-588-27C
X-RAY EXAMINATION		03-588-30
COMPLETE SKELETAL SURVEY		03-588-30A
11-11-59 ANL X-RAY NO. R-179 LOC. ANL		03-588-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 6		03-588-30C
PPF AREAS OF BONE RESORPTION IN SKULL, MANDIBLE, RIGHT AND		03-588-30D
LEFT RADIUS, LEFT ULNA. AREA OF BONE SCLEROSIS IN HEAD OF LEFT		03-588-30E
HUMERUS. QUESTIONABLE CHANGES IN CERVICAL SPINE THAT MAY BE		03-588-30F
SECONDARY TO INTERVERTEBRAL DISC DISEASE.		03-588-30G

COMPLETE SKELETAL SURVEY

12-06-62 ANL X-RAY NO. R-1798 LOC. ANL
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 15
PPF SLIGHT INCREASE IN NUMBER AND SEVERITY OF PREVIOUS LESIONS
WITH THE APPEARANCE OF BONE RESORPTION IN FEMORA, TIBIAE AND
FIBULAE.

03-588-31A
03-588-31B
03-588-31C
03-588-31D
03-588-31E
03-588-31F

CLINICAL LABORATORY FINDINGS

11-11-59 HG 8.5 HTC RBC 3.63
WBC 10,000 DIFF. P 37 ST L 55 M 6 E 1 B 1

03-588-40
03-588-40A
03-588-40B

12-06-62 HG 8.8 HTC RBC 3.92
WBC 9200 DIFF. P 53 ST L 36 M 8 E 3 B

03-588-41A
03-588-41B

DATA REVISED 12-17-68

03-588-99

PATIENT 03-589	BORN 11-15-06	03-589-01
		03-589-02
		03-589-03
FEMALE		03-589-05
SOURCE OF CASE	SEARCH BY CEM	03-589-10
EXPOSURE	DIAL PAINTER 01	03-589-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., FOR 5 MONTHS, APRIL TO AUG. 1924. PAINTED CLOCK FACES. POINTED BRUSH IN HER MOUTH BUT NEVER PAINTED ANY PART OF HER BODY.		03-589-13
ASSUMED WORK PERIOD 03-01-1924 TO 08-01-1924		03-589-13A
17.28 YEARS OF AGE WHEN FIRST EMPLOYED.		03-589-13B
		03-589-13*
		03-589-13Z
FAMILY HISTORY		03-589-15
MARRIED 1924	PARA 3 GRAVIDA 4 (1 MISCARRIAGE)	03-589-15A
CHILDREN		
FEMALE 1925	L W	03-589-16
FEMALE 1927	L W	03-589-16A
FEMALE 1935	L W	03-589-16B
MEDICAL HISTORY		03-589-20
TONSILLECTOMY IN CHILDHOOD, APPENDECTOMY 1936. SUSTAINED FRACTURE OF LEFT RING FINGER 1959 IN CAR-DOOR ACCIDENT. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--OCCASIONAL OCCIPITAL HEADACHE AND OBESITY, OTHERWISE NEGATIVE. DENTAL HISTORY--ALL TEETH EXTRACTED. (11-23-59)		03-589-20A
		03-589-20B
		03-589-20C
		03-589-20D
		03-589-20E
GAMMA-RAY MEASUREMENTS		03-589-25
11-11-59 RAB,RAC 0.024 UCI HGS 1 TILTING CHAIR CEM		03-589-25A
COMPUTED TOTAL-BODY RADIUM		03-589-27
11-11-59 0.024 UCI 0.077 UCI TOTAL 0.31		03-589-27A
X-RAY EXAMINATION		03-589-30
COMPLETE SKELETAL SURVEY		03-589-30A
11-23-59 ANL X-RAY NO. R-186 LOC. ANL		03-589-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-589-30C
PPF NONE.		03-589-30D
CLINICAL LABORATORY FINDINGS		03-589-40
11-23-59 HG 14.4 HTC RBC 4.62		03-589-40A
WBC 9900 DIFF. P 50 ST L 43 M 6 E 1 B		03-589-40B
634 -12 TONSILLECTOMY		03-589-67
661 -12 APPENDECTOMY		03-589-67A
2349 -416 FRACTURE OF PHALANX OF THE RING FINGER		03-589-67B

PATIENT 03-590	BORN 12-13-00	03-590-01
		03-590-02
		03-590-03
FEMALE		03-590-04
		03-590-05
SOURCE OF CASE	SEARCH BY CEM	03-590-10
EXPOSURE	DIAL PAINTER 01	03-590-12
SOURCE RADIUM DIAL CO., PERU, ILL., 6 MONTHS 1922, ENDING NOV.		03-590-13
PAINTED DIALS, POINTED BRUSH IN MOUTH BUT NEVER PAINTED ANY PART		03-590-13A
OF HER BODY.		03-590-13B
ASSUMED WORK PERIOD 05-01-1922 TO 11-01-1922		03-590-13*
21.37 YEARS OF AGE WHEN FIRST EMPLOYED.		03-590-13Z
FAMILY HISTORY		03-590-15
MARRIED 1920, DIV. 1922	PARA 1 GRAVIDA 1	03-590-15A
MARRIED 1923	PARA 2 GRAVIDA 2	03-590-15B
CHILDREN	FEMALE DEC. AGE 3, AUTO ACCIDENT	03-590-16
	MALE 1924 L W	03-590-16A
	FEMALE 1931 L W	03-590-16B
MEDICAL HISTORY		03-590-20
NO SURGERY AND NO SERIOUS ILLNESSES. HOSPITALIZED ONCE FOR		03-590-20A
EXTRACTION OF TEETH 1955. INQUIRY BY SYSTEMS ESSENTIALLY		03-590-20B
NEGATIVE. (03-10-65)		03-590-20C
GAMMA-RAY MEASUREMENTS		03-590-25
11-19-59	RAB,RAC 0.039 UCI HGS 1 TILTING CHAIR CEM	03-590-25A
03-10-65	RAB,RAC 0.027 UCI HGS 1 TILTING CHAIR CEM	03-590-25B
03-10-65	RAB,RAC 0.032 UCI HGS 1 7-CRYSTAL-PCS CEM	03-590-25C
COMPUTED TOTAL-BODY RADIUM		03-590-27
11-19-59	0.039 UCI 0.126 UCI TOTAL 0.31	03-590-27A
03-10-65	0.027 UCI 0.087 UCI TOTAL 0.31	03-590-27B
03-10-65	0.032 UCI 0.104 UCI TOTAL 0.31	03-590-27C
X-RAY EXAMINATION		03-590-30
COMPLETE SKELETAL SURVEY		03-590-30A
11-19-59	ANL X-RAY NO. R-182 LOC. ANL	03-590-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-590-30C
PPF AGGRAVATED CORTICAL PERIOSTEAL HYPEROSTOSIS IN THE PROXI-		03-590-30D
MAL PORTION OF BOTH RIGHT AND LEFT FEMUR. PROBABLY NON-MALIGNANT		03-590-30E
AND PROBABLY NOT RELATED TO RADIUM DEPOSITION.		03-590-30F

COMPLETE SKELETAL SURVEY

03-10-65	ANL	X-RAY NO. R-1828	LOC. ANL	03-590-31A
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1				03-590-31B
PPF CORTICAL CHANGES IN PROXIMAL RIGHT AND LEFT FEMUR CONSISTENT				03-590-31C
WITH PAROSTEAL OSTEOSARCOMA, OR OSTEIOD OSTEOMA, OR JUXTACOR-				03-590-31D
TICAL OSTEOSARCOMA.				03-590-31E
				03-590-31F

CLINICAL LABORATORY FINDINGS

11-19-59	HG 12.1	HTC	RBC 3.87	03-590-40
WBC 11,800	DIFF. P 74	ST	L 19 M 6 E 1 B	03-590-40A
				03-590-40B

03-10-65	HG 13.3	HTC 40	RBC	03-590-41A
WBC 8100	DIFF. P 63	ST 3	L 22 M 8 E 3 B 1	03-590-41B

23514-876A	PAROSTEAL OSTEOMA OF NECK OF FEMUR (RIGHT, LEFT)	03-590-67
------------	--	-----------

PATIENT 03-591	BORN 08-14-07	03-591-01
		03-591-02
		03-591-03
		03-591-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-591-10
EXPOSURE	DIAL PAINTER 01	03-591-12
SOURCE RADIUM DIAL CO., AND LUMINOUS PROCESSES, INC., OTTAWA, ILL.,		03-591-13
1926 TO PRESENT. PAINTED DIALS FIRST YEAR, INSPECTOR THEREAFTER,		03-591-13A
SUPERVISOR 1931. MAY HAVE POINTED BRUSH IN MOUTH OCCASIONALLY.		03-591-13B
USE OF GLASS PENS 1926. NEVER PAINTED ANY PART OF BODY.		03-591-13C
ASSUMED WORK PERIOD 01-02-1926 TO 11-18-1959		03-591-13*
18.38 YEARS OF AGE WHEN FIRST EMPLOYED.		03-591-13Z
FAMILY HISTORY		03-591-15
MARRIED 1937	PARA 0 GRAVIDA 0	03-591-15A
MEDICAL HISTORY		03-591-20
SURGERY--APPENDECTOMY 1917, TONSILLECTOMY 1947, HOSPITALIZED 1944		03-591-20A
FURUNCULOSIS AND 1955 FOR INVESTIGATION OF STOMACH DISTRESS.		03-591-20B
INQUIRY BY SYSTEMS--DEAFNESS IN RIGHT EAR AS SEQUELA TO SCARLET		03-591-20C
FEVER IN CHILDHOOD. HISTORY OF INFECTED MASTOIDS. MILD ARTHRITIS		03-591-20D
OF KNEES AND HIPS PAST 10 YEARS. DENTAL HISTORY--2 TEETH		03-591-20E
EXTRACTED. (11-19-59)		03-591-20F
GAMMA-RAY MEASUREMENTS		03-591-25
11-19-59 RAB,RAC C.009 UCI HGS 1 TILTING CHAIR CEM		03-591-25A
COMPUTED TOTAL-BODY RADIUM		03-591-27
11-19-59 0.009 UCI 0.029 UCI TOTAL 0.31		03-591-27A
X-RAY EXAMINATION		03-591-30
FULL DENTAL RADIOGRAPHS		03-591-30A
08-03-53 LOC. DR. E. F. WENDEL		03-591-30B
FULL DENTAL RADIOGRAPHS DEMONSTRATE NO CHANGES TYPICAL OF RADIUM.		03-591-30C
PPF NONE.		03-591-30D
COMPLETE SKELETAL SURVEY		03-591-31A
11-19-59 ANL X-RAY NO. R-181 LOC. ANL		03-591-31B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1		03-591-31C
PPF ONE 8 MM SIZE AREA OF BONE RESORPTION IN THE CORTEX OF		03-591-31D
RIGHT RADIUS.		03-591-31E
CLINICAL LABORATORY FINDINGS		03-591-40
11-19-59 HG 12.4 HTC RBC 3.97		03-591-40A
WBC 7300 DIFF. P 48 ST L 44 M 6 E 1 B 1		03-591-40B
010 -102 SCARLET FEVER		03-591-67
X84 -100 MASTOIDITIS, ACUTE		03-591-67A
634 -12 TONSILLECTOMY		03-591-67B
661 -12 APPENDECTOMY		03-591-67C
DATA REVISED 09-27-67		03-591-99

PATIENT 03-592	BORN 10-15-05	03-592-01
		03-592-02
		03-592-03
FEMALE		03-592-05
SOURCE OF CASE	SEARCH BY CEM	03-592-10
EXPOSURE	DIAL PAINTER 01	03-592-12
SOURCE RADIUM DIAL CO., PERU, ILL., ABOUT JANUARY-MAY, 1922.		03-592-13
PAINTED DIALS. POINTED BRUSH IN MOUTH WHEN PAINTING SMALL CLOCKS		03-592-13A
BUT NOT LARGE CLOCKS. PAINTED OWN FINGERNAILS.		03-592-13B
ASSUMED WORK PERIOD 01-02-1922 TO 05-01-1922		03-592-13*
16.21 YEARS OF AGE WHEN FIRST EMPLOYED.		03-592-13Z
FAMILY HISTORY		03-592-15
MARRIED 1923	PARA 2	GRAVIDA 3 (1 MISCARRIAGE)
HUSBAND	1902	L W
		03-592-15A
		03-592-15B
CHILDREN	MALE 1925	L W (KIDNEY DISEASE)
	FEMALE 1948	L W
		03-592-16
		03-592-16A
MEDICAL HISTORY		03-592-20
D AND C FOR HYPERMENORRHEA 1953. RENAL COLIC 1934. NO OTHER		03-592-20A
SERIOUS ILLNESSES. NO FRACTURES. INQUIRY BY SYSTEMS--SOME		03-592-20B
ARTHRITIC INVOLVEMENT OF FINGERS. TEETH--CAVITIES BEGAN 2 OR 3		03-592-20C
YEARS AFTER LEAVING JOB AT RADIUM DIAL CO. NUMEROUS TEETH		03-592-20D
EXTRACTED, WEARS FULL UPPER AND PARTIAL LOWER DENTURE, REMAINING		03-592-20E
LOWER TEETH SCHEDULED FOR EARLY EXTRACTION. (11-20-59)		03-592-20F
SURGERY--REPAIR OF UMBILICAL HERNIA, CHOLECYSTECTOMY, APPENDEC-		03-592-21A
TOMY, 04-64. NO SERIOUS ILLNESS OR FRACTURES. INQUIRY BY SYSTEMS		03-592-21B
REVEALS DYSPNEA WHEN CLIMBING STAIRS, WEIGHT GAIN SINCE SURGERY,		03-592-21C
TREATED MEDICALLY FOR HIGH BLOOD PRESSURE, OCCASIONAL ARTHRITIS		03-592-21D
OF NECK, FINGERS, RIGHT KNEE. TEETH--ONLY LOWER FRONT TEETH		03-592-21E
REMAIN. (10-12-66)		03-592-21F
GAMMA-RAY MEASUREMENTS		03-592-25
11-20-59 RAB,RAC 0.061 UCI HGS 1 TILTING CHAIR CEM		03-592-25A
10-12-66 RAB,RAC 0.042 UCI HGS 1 TILTING CHAIR CEM		03-592-25B
10-12-66 RAB,RAC 0.096 UCI HGS 1 7-CRYST-POS CEM		03-592-25C
COMPUTED TOTAL-BODY RADIUM		03-592-27
11-20-59 0.061 UCI 0.197 UCI TOTAL 0.31		03-592-27A
10-12-66 0.042 UCI 0.136 UCI TOTAL 0.31		03-592-27B
10-12-66 0.096 UCI 0.123 UCI TOTAL 0.31		03-592-27C

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

11-20-59 ANL X-RAY NO. R-183 LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.
 PPF NONE.

SCORE 0

03-592-30
 03-592-30A
 03-592-30B
 03-592-30C
 03-592-30D

COMPLETE SKELETAL SURVEY

10-12-66 ANL X-RAY NO. R-183B LOC. ANL
 NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.
 PPF NONE.

SCORE 0

03-592-31A
 03-592-31B
 03-592-31C
 03-592-31D

CLINICAL LABORATORY FINDINGS

11-20-59 HG 12.5 HTC RBC 4.33
 WBC 9700 DIFF. P 65 ST L 32 M 2 E 1 B

03-592-40
 03-592-40A
 03-592-40B

10-12-66 HG 13.2 HTC 42 RBC 4.43
 WBC 8900 DIFF. P 52 ST L 45 M 2 E 1 B

03-592-41A
 03-592-41B

044 -50 UMBILICAL HERNIORRHAPHY
 47X -X30 ESSENTIAL HYPERTENSION
 661 -12 APPENDECTOMY
 687 -12 CHOLECYSTECTOMY
 785 -104 DILATATION AND CURRETTAGE OF THE UTERUS

03-592-67
 03-592-67A
 03-592-67B
 03-592-67C
 03-592-67D

DATA REVISED 11-14-68

03-592-99

PATIENT 03-593	BORN 02-08-05	03-593-01
		03-593-02
		03-593-03
		03-593-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-593-10
EXPOSURE	DIAL PAINTER 01	03-593-12
SOURCE RADIUM DIAL CO., PERU, ILL., 2 SUMMER MONTHS BUT COULD NOT REMEMBER YEAR. PAINTED DIALS FOR SEVERAL WEEKS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 07-01-1922 TO 09-01-1922 17.38 YEARS OF AGE WHEN FIRST EMPLOYED.		03-593-13 03-593-13A 03-593-13B 03-593-13* 03-593-13Z
FAMILY HISTORY		03-593-15
MARRIED 1929	PARA 1 GRAVIDA 4 (3 MISCARRIAGES)	3-593-15A
HUSBAND	DEC. 1940, ACUTE LEUKEMIA	03-593-15B
CHILDREN FEMALE 1940 L W		03-593-16
MEDICAL HISTORY		03-593-20
TONSILLECTOMY 1944. TWO D AND C 1938 AND 1940. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS REVEALS SINUS HEADACHES PAST 5 YEARS, OTHERWISE NEGATIVE. DENTAL HISTORY--PATIENT WEARS TWO PARTIAL DENTURES, 6 TEETH EXTRACTED. (11-20-59)		03-593-20A 03-593-20B 03-593-20C 03-593-20D
GAMMA-RAY MEASUREMENTS		03-593-25
11-20-59 RAB,RAC C.005 UCI HGS 1 TILTING CHAIR CEM		03-593-25A
COMPUTED TOTAL-BODY RADIUM		03-593-27
11-20-59 0.005 UCI 0.017 UCI TOTAL 0.31		03-593-27A
X-RAY EXAMINATION		03-593-30
PARTIAL SKELETAL SURVEY		03-593-30A
11-20-59 ANL X-RAY NO. R-184 ANL		03-593-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-593-30C
PPF SMALL MULTILOCULATED CYST IN HEAD OF RIGHT HUMERUS, PROBABLY UNRELATED TO RADIUM.		03-593-30D 03-593-30E
CLINICAL LABORATORY FINDINGS		03-593-40
11-20-59 HG 13.2 HTC RBC 4.40		03-593-40A
WBC 8000 DIFF. P 69 ST L 27 M 4 E B		03-593-40B
634 -12 TONSILLECTOMY		03-593-67
785 -104 DILATATION AND CURRETTAGE OF THE UTERUS		03-593-67A
DATA REVISED 09-27-67		03-593-99

PATIENT 03-594	BORN 07-18-05	03-594-01
		03-594-02
		03-594-03
FEMALE		03-594-05
SOURCE OF CASE	SEARCH BY CEM	03-594-10
EXPOSURE	DIAL PAINTER 01	03-594-12
SOURCE RADIUM DIAL CO., PERU, ILL., JULY 1922 TO AUTUMN 1922.		03-594-13A
RADIUM DIAL CO., OTTAWA, ILL., AUTUMN 1922 TO JULY 1923.		03-594-13B
PAINTED NUMERALS ON DIALS. POINTED BRUSH IN MOUTH OCCASIONALLY.		03-594-13C
NEVER PAINTED ANY PART OF HER BODY.		03-594-13D
ASSUMED WORK PERIOD 07-01-1922 TO 07-01-1923		03-594-13*
16.95 YEARS OF AGE WHEN FIRST EMPLOYED.		03-594-13Z
FAMILY HISTORY		03-594-15
MARRIED 1929	PARA 2	GRAVIDA 2
HUSBAND	1901	L W
		03-594-15A
		03-594-15B
CHILDREN	FEMALE	1931
	FEMALE	1932
		L W
		L W
		03-594-16
		03-594-16A
MEDICAL HISTORY		03-594-20
PATIENT HAD PNEUMONIA WITH EMPYEMA 1926, RECURRENT PNEUMONIA		03-594-20A
TWICE IN SUCCEEDING 25 YEARS. NO SURGERY. RIGHT ANKLE FRACTURED		03-594-20B
1955. INQUIRY BY SYSTEMS REVEALS SINUS HEADACHES, OCCASIONAL		03-594-20C
DIPLOPIA BECAUSE OF MUSCLE DIFFICULTIES IN FOCUSING EYES,		03-594-20D
CHRONIC COUGH, AND HISTORY OF ASTHMA, RELIEVED BY STEROID THERAPY.		03-594-20E
RECENT HISTORY OF COLITIS. SEVERE ARTHRITIS OF HANDS AND RIGHT		03-594-20F
FOOT PROGRESSIVE SINCE 1931. MOST OF TEETH LOST BECAUSE OF CHIP-		03-594-20G
PING AND CRUMBLING, WEARS FULL UPPER AND PARTIAL LOWER		03-594-20H
DENTURE. TAKING STEROIDS AT TIME OF 1959 RADIOGRAPHY. (11-21-59)		03-594-20I
GAMMA-RAY MEASUREMENTS		03-594-25
11-21-59 RAB,RAC C.013 UCI HGS 1 TILTING CHAIR CEM		03-594-25A
COMPUTED TOTAL-BODY RADIUM		03-594-27
11-21-59 0.013 UCI 0.041 UCI TOTAL 0.31		03-594-27A
X-RAY EXAMINATION		03-594-30
COMPLETE SKELETAL SURVEY		03-594-30A
11-21-59 ANL X-RAY NO. R-185 LOC. ANL		03-594-30B
MILD CHANGES TYPICAL OF DEPOSITION OF RADIUM. SCORE 13		03-594-30C
PPF MARKED COARSENING OF TRABECULAR PATTERN AND MULTIPLE AREAS		03-594-30D
OF BONE RESORPTION ARE SEEN THROUGHOUT THE RADIUS AND ULNA OF		03-594-30E
BOTH UPPER EXTREMITIES. SIMILAR CHANGES ARE SEEN IN LONG BONES		03-594-30F
OF LOWER EXTREMITIES. MARKED CHANGES TYPICAL OF DEGENERATIVE		03-594-30G
ARTHRITIS ARE SEEN IN HANDS, WRISTS, ANKLES AND FEET.		03-594-30H

CLINICAL LABORATORY FINDINGS

NOT DONE

03-594-40

350 -390 ASTHMA
23723-416 FRACTURE OF DISTAL THIRD OF THE TIBIA
23823-416 FRACTURE OF DISTAL THIRD OF THE FIBULA

03-594-67
03-594-67A
03-594-67B

DATA REVISED 09-27-67

03-594-99

PATIENT 03-595	BORN 09-16-02	03-595-01
		03-595-02
		03-595-03
FEMALE		03-595-05
SOURCE OF CASE	SEARCH BY CEM	03-595-10
EXPOSURE	DIAL PAINTER 01	03-595-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 8 MONTHS TO 1 YEAR, 1923.		03-595-13
(MORE LIKELY 1928, IN CITY DIRECTORY). PAINTED CLOCK DIALS,		03-595-13A
POINTED BRUSH IN MOUTH. NEVER PAINTED HER OWN PERSON.		03-595-13B
ASSUMED WORK PERIOD 02-01-1928 TO 12-01-1928		03-595-13*
25.37 YEARS OF AGE WHEN FIRST EMPLOYED.		03-595-13Z
FAMILY HISTORY		03-595-15
MARRIED 10-27-30	PARA 3	03-595-15A
HUSBAND	1902 GRAVIDA 3	03-595-15B
	L W, HEART DISEASE	
CHILDREN	MALE 1940	03-595-16
	FEMALE 1942	03-595-16A
	FEMALE 1944	03-595-16B
MEDICAL HISTORY		03-595-20
PARTIAL HYSTERECTOMY 1958. NO FRACTURES, NO SERIOUS ILLNESSES.		03-595-20A
INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR PRESENCE OF LOW BACK-		03-595-20B
ACHES SINCE AGE 20. TEETH GRADUALLY LOST OVER YEARS, 10 TEETH		03-595-20C
REMAINING LOWER JAW, WEARS UPPER FULL DENTURE. (11-23-59)		03-595-20D
GAMMA-RAY MEASUREMENTS		03-595-25
11-23-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-595-25A
COMPUTED TOTAL-BODY RADIUM		03-595-27
11-23-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-595-27A
X-RAY EXAMINATION		03-595-30
COMPLETE SKELETAL SURVEY		03-595-30A
11-23-59 ANL X-RAY NO. R-187 LOC. ANL		03-595-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 0	03-595-30C
PPF NONE.		03-595-30D
CLINICAL LABORATORY FINDINGS		03-595-40
11-23-59 HG 13.9 HTC RBC 4.07		03-595-40A
WBC 5400 DIFF. P 64 ST 1 L 32 M 2 E 1 B		03-595-40B
782 -13 HYSTERECTOMY, PARTIAL		03-595-67
DATA REVISED 09-27-67		03-595-99

PATIENT 03-596	BORN 10-31-04	03-596-01
		03-596-02
		03-596-04
FEMALE		03-596-05
SOURCE OF CASE	SEARCH BY CEM	03-596-10
EXPOSURE	DIAL PAINTER	03-596-12
SOURCE RADIUM DIAL CO., PERU, ILL., 2 MONTHS EITHER 1922 OR 1923.		03-596-13
AFTER TRAINING PERIOD OF 6 WEEKS, PATIENT DID PIECE WORK WITH		03-596-13A
RADIUM ABOUT 2 WEEKS, THEN TERMINATED. POINTED BRUSH IN MOUTH		03-596-13B
BUT STATED THAT SHE HAD AN AVERSION TO THIS. NEVER PAINTED ANY		03-596-13C
PART OF HER BODY.		03-596-13D
ASSUMED WORK PERIOD 07-01-1922 TO 09-01-1922		03-596-13*
17.66 YEARS OF AGE WHEN FIRST EMPLOYED.		03-596-13Z
FAMILY HISTORY		03-596-15
MARRIED 1925, DIV. 1936 PARA 0 GRAVIDA 0		03-596-15A
MEDICAL HISTORY		03-596-20
TONSILLECTOMY 1919, APPENDECTOMY 1923, HYSTERECTOMY 1948.		03-596-20A
NO SERIOUS ILLNESSES. FRACTURE OF ANKLE CHILDHOOD. INQUIRY BY		03-596-20B
SYSTEMS NEGATIVE. DENTAL HISTORY--UPPER TEETH EXTRACTED ABOUT		03-596-20C
FIVE YEARS AGO BUT LOWER TEETH INTACT. (11-25-59)		03-596-20D
(INFORMATION OBTAINED 10-09-59 FROM C.J. LUNDY) BENIGN CYSTIC		03-596-21A
FIBROADENOMA NOTED IN RIGHT BREAST. SUMMARY OF LAB FINDINGS FROM		03-596-21B
1947 TO 1959 PROVIDED BY DR. LUNDY.		03-596-21C
GAMMA-RAY MEASUREMENTS		03-596-25
11-25-59 RAB,RAC C.003 UCI HGS 1 TILTING CHAIR CEM		03-596-25A
COMPUTED TOTAL-BODY RADIUM		03-596-27
11-25-59 0.003 UCI 0.009 UCI TOTAL 0.31		03-596-27A
X-RAY EXAMINATION		03-596-30
PARTIAL SKELETAL SURVEY		03-596-30A
11-25-59 ANL X-RAY NO. R-188 LOC. ANL		03-596-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-596-30C
PPF NONE.		03-596-30D
CLINICAL LABORATORY FINDINGS		03-596-40
11-25-59 HG 13.5 HTC RBC 4.81		03-596-40A
WBC 7300 DIFF. P 67 ST L 27 M 3 E 2 B 1		03-596-40B
190 -11 LOCAL EXCISION OF BREAST LESION (CYST)		03-596-67
634 -12 TONSILLECTOMY		03-596-67A
661 -12 APPENDECTOMY		03-596-67B
782 -12 HYSTERECTOMY		03-596-67C

PATIENT 03-597	BORN 11-10-03	03-597-01
		03-597-02
		03-597-03
		03-597-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-597-10
EXPOSURE	DIAL PAINTER 01	03-597-12
SCURCE RADIUM DIAL CO., STREATOR, AND OTTAWA, ILL., SUBSEQUENTLY LUMINOUS PROCESSES, INC., OTTAWA, ILL. TOTAL PERIOD WORKED 4-1/2 YEARS TO NOV. 1, 1929. PAINTED DIALS, WEIGHED MATERIAL AND INSPECTED AT STREATOR. DIAL OR HAND PAINTER AT OTTAWA. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER OWN BODY. ASSUMED WORK PERIOD C5-01-1925 TO 11-01-1929 21.47 YEARS OF AGE WHEN FIRST EMPLOYED.		03-597-13 03-597-13A 03-597-13B 03-597-13C 03-597-13D 03-597-13* 03-597-13Z
FAMILY HISTORY		03-597-15
MARRIED 1929	PARA 0 GRAVIDA 0	03-597-15A
HUSBAND DEC. 1949		03-597-15B
MEDICAL HISTORY		03-597-20
NO SURGERY EXCEPT FOR TONSILLECTOMY AGE 7, AGAIN 19. NO HISTORY TRAUMA. NO SERIOUS ILLNESSES SINCE CHILDHOOD. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR DEFECTIVE HEARING RIGHT EAR AS RESULT OF SCARLET FEVER AGE 13. TEETH--MANY EXTRACTIONS, WEARS PARTIAL UPPER AND LOWER DENTURES. (12-01-59)		03-597-20A 03-597-20B 03-597-20C 03-597-20D 03-597-20E
GAMMA-RAY MEASUREMENTS		03-597-25
12-01-59 RAB,RAC C.048 UCI HGS 1 TILTING CHAIR CEM		03-597-25A
BREATH MEASUREMENTS		03-597-26
06-18-63 EM-222 0.082 UCI RADON BREATH HELMET HFL		03-597-26B
COMPUTED TOTAL-BODY RADIUM		03-597-27
12-01-59 0.048 UCI 0.154 UCI TOTAL 0.31		03-597-27A
TOTAL-BCDY RADIUM COMPUTED FROM BREATH RADON		03-597-28
06-18-63 0.082 UCI 0.119 UCI TOTAL 0.69		03-597-28A
X-RAY EXAMINATION		03-597-30
COMPLETE SKELETAL SURVEY		03-597-30A
12-01-59 ANL X-RAY NO. R-190 LOC. ANL		03-597-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-597-30C
PPF BONE ISLANDS SEEN IN RIGHT SCAPULA, HEAD OF LEFT HUMERUS, AND PROXIMAL RIGHT TIBIA, PROBABLY UNRELATED TO RADIUM.		03-597-30D 03-597-30E
CLINICAL LABORATORY FINDINGS		03-597-40
12-01-59 HG 13.5 HTC RBC 4.65		03-597-40A
WBC 9000 DIFF. P 61 ST L 21 M 7 E 1 B		03-597-40B
010 -102 SCARLET FEVER		03-597-67
634 -12 TONSILLECTOMY		03-597-67A
DATA REVISED 11-14-68		03-597-99

PATIENT 03-598	BORN 06-13-91	03-598-01
		03-598-02
MALE		03-598-05
SOURCE OF CASE	SEARCH BY CEM	03-598-10
EXPOSURE	NIGHT WATCHMAN, JANITOR	03-598-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 4 WEEKS 1933 OR 1934.		03-598-13
WORKED AS NIGHT WATCHMAN AND JANITOR, NEVER HANDLED ANY LUMINOUS MATERIAL.		03-598-13A
		03-598-13B
ASSUMED WORK PERIOD 07-01-1933 TO 07-01-1934		03-598-13*
42.04 YEARS OF AGE WHEN FIRST EMPLOYED.		03-598-13Z
FAMILY HISTORY		03-598-15
MARRIED 1925 WIFE DEC. 1935		03-598-15A
MEDICAL HISTORY		03-598-20
SURGICAL REPAIR OF SEVERED TENDONS OF LEFT WRIST 1945 AND OF THUMB 1948. APPENDECTOMY 1919. FRACTURE OF RIGHT BIG TOE 1939.		03-598-20A
MEDICAL HISTORY OTHERWISE NEGATIVE AS IS INQUIRY BY SYSTEMS.		03-598-20B
ALL TEETH EXTRACTED BY 1950. (12-01-59)		03-598-20C
		03-598-20D
GAMMA-RAY MEASUREMENTS		03-598-25
12-01-59 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR. CEM		03-598-25A
COMPUTED TOTAL-BODY RADIUM		03-598-27
12-01-59 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-598-27A
X-RAY EXAMINATION		03-598-30
PARTIAL SKELETAL SURVEY		03-598-30A
12-01-59 ANL X-RAY NO. R-189 LOC. ANL		03-598-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-598-30C
PPF NONE.		03-598-30D
DENTAL FILMS		03-598-31A
05-09-51 LOC. DR. W.P. DAUGHERTY		03-598-31B
NEGATIVE FOR CHANGES TYPICAL OF DEPOSITION OF RADIUM IN SKELETON AND TEETH.		03-598-31C
		03-598-31D
CLINICAL LABORATORY FINDINGS		03-598-40
12-01-59 HG 11.6 HTC RBC 3.79		03-598-40A
WBC 7000 DIFF. P 68 ST L 25 M 5 E 2 B		03-598-40B
23X1 -416 FRACTURE OF PHALANGES OF FIRST TOE		03-598-67
661 -12 APPENDECTOMY		03-598-67A

PATIENT 03-599	BORN 07-21-06	03-599-01
		03-599-02
		03-599-03
FEMALE		03-599-05
SOURCE OF CASE	SEARCH BY CEM	03-599-10
EXPOSURE	DIAL PAINTER 01	03-599-12
SOURCE RADIUM DIAL CO., PERU, ILL., 1922, MAX. 6 MONTHS. PAINTED		03-599-13
NUMERALS ON DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED		03-599-13A
OWN PERSON.		03-599-13B
ASSUMED WORK PERIOD 03-01-1922 TO 09-01-1922		03-599-13*
15.60 YEARS OF AGE WHEN FIRST EMPLOYED.		03-599-13Z
FAMILY HISTORY		03-599-15
MARRIED 1935	PARA 2	GRAVIDA 2
HUSBAND	1908	L W
		03-599-15A
		03-599-15B
CHILDREN	FEMALE 1936	L W
	FEMALE 1941	L W
		03-599-16
		03-599-16A
MEDICAL HISTORY		03-599-20
SURGERY--HYSTERECTOMY AND APPENDECTOMY 1949, EXCISION OF CYST		03-599-20A
FROM RIGHT BREAST 1951, EXCISION OF BASAL CELL CA. OF FACE 1954.		03-599-20B
NO SERIOUS MEDICAL ILLNESSES, NO FRACTURES. COMPLAINS OF BACK-		03-599-20C
ACHES SINCE FIRST PREGNANCY 1939. MCLARS ALL EXTRACTED. (12-03-59)		03-599-20D
GAMMA-RAY MEASUREMENTS		03-599-25
12-03-59 RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM		03-599-25A
COMPUTED TOTAL-BODY RADIUM		03-599-27
12-03-59 0.003 UCI 0.009 UCI TOTAL 0.31		03-599-27A
X-RAY EXAMINATION		03-599-30
PARTIAL SKELETAL SURVEY		03-599-30A
12-03-59 ANL X-RAY NO. R-191 LOC. ANL		03-599-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-599-30C
PPF NONE.		03-599-30D
CLINICAL LABORATORY FINDINGS		03-599-40
12-03-59 HG 12.5 HTC RBC 4.10		03-599-40A
WBC 5200 DIFF. P 53 ST 0 L 41 M 4 E 1 B 1		03-599-40B
MALIGNANT TUMOR BASAL CELL CANCER OF FACE 1954		03-599-60
131 -812 BASAL CELL CARCINOMA OF THE SKIN OF THE FACE		03-599-67
190 -11 LOCAL EXCISION OF BREAST LESION (CYST)		03-599-67A
661 -12 APPENDECTOMY		03-599-67B
782 -10 HYSTERECTOMY		03-599-67C

PATIENT 03-600	BORN 03-30-02	03-600-01
		03-600-02
		03-600-02A
		03-600-03
FEMALE		03-600-05
SOURCE OF CASE	SEARCH BY CEM	03-600-10
EXPOSURE	DIAL PAINTER 01	03-600-12
SOURCE ELGIN NATIONAL WATCH CO., ELGIN, ILL., FROM MARCH 1926 UNTIL		03-600-13
MARCH 1945, EXCEPT FOR PERIOD OF UNEMPLOYMENT FROM 1930 TO 1934,		03-600-13A
TOTAL WORK-PERIOD 15 YEARS. FITTED DIALS AND HANDS BUT NEVER		03-600-13B
PAINTED DIALS. OCCASIONALLY, SHE HAD TO MANIPULATE THE HANDS		03-600-13C
OF CLOCKS AND WATCHES AND TO SCRAPE OFF EXCESS PAINT, OCCASION-		03-600-13D
ALLY MOISTENED THE SCREWDRIVER IN HER MOUTH, BUT THIS PRACTICE		03-600-13E
WAS STOPPED IN 1929.		03-600-13F
ASSUMED WORK PERIOD 03-01-1926 TO 03-01-1945		03-600-13*
23.91 YEARS OF AGE WHEN FIRST EMPLOYED.		03-600-13Z
FAMILY HISTORY		03-600-15
MARRIED 1925	PARA 0 GRAVIDA 0	03-600-15A
HUSBAND DECEASED 1959		03-600-15B
MEDICAL HISTORY		03-600-20
SURGICAL REMOVAL OF PART OF FOREIGN BODY (NEEDLE) IN LOWER BACK		03-600-20A
WITH SUBSEQUENT PERITONITIS AND APPENDICITIS, IN 1923. SOURCE OF		03-600-20B
NEEDLE NOT KNOWN. PART OF ANOTHER NEEDLE FOUND UNDER LEFT		03-600-20C
CLAVICLE IN 1935 AND REMOVED. PERSISTENT BACK DISCOMFORT SINCE		03-600-20D
1936. SEVERE AUTO ACCIDENT IN DEC. 1947, WITH FRACTURED RIBS,		03-600-20E
PELVIS, LEFT WRIST, AND 2 CERVICAL VERTEBRAE, RESIDUAL LOSS OF		03-600-20F
BLADDER CONTROL. ADDITIONAL INJURY TO SPINE IN 1958 WHILE LIFT-		03-600-20G
ING INVALID HUSBAND. RESIDUAL DIFFICULTIES WITH WALKING AND		03-600-20H
REQUIRES SUPPORT OR AID, USES SPINE TRACTION FOR RELIEF OF PAIN.		03-600-20I
INQUIRY BY SYSTEMS IS FILLED WITH MULTIPLE COMPLAINTS OF PAINS		03-600-20J
AND ACHES IN HEAD, EAR, THROAT, CHEST, AND SIDE, AND COMPLAINTS		03-600-20K
OF PAINFUL PARESTHESIAS OF LEFT LOWER LEG. DENTAL HISTORY--		03-600-20L
PATIENT HAS BEEN EDENTULOUS SINCE 1940.		03-600-20M
GAMMA-RAY MEASUREMENTS		03-600-25
02-24-60 RAC,RAC LESS THAN 0.0003 LCI HGS 1 TILTING CHAIR CEM		03-600-25A
COMPUTED TOTAL-BODY RADIUM		03-600-27
02-24-60 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-600-27A

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

02-25-60 ANL

X-RAY NO. R-193

LOC. ANL

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.

SCORE 0

PPF AREA OF INCREASED DENSITY IN HEAD OF RIGHT HUMERUS, PROBABLY UNRELATED TO RADIUM.

03-600-30
03-600-30A
03-600-30B
03-600-30C
03-600-30D
03-600-30E

CLINICAL LABORATORY FINDINGS

02-25-60

HG 12.6

HTC

RBC 4.33

WBC 5000

DIFF. P 50

ST

L 45

M 3

E 2

B

03-600-40
03-600-40A
03-600-40B

22X -416 FRACTURE OF THE PELVIS

03-600-67

221 -416 FRACTURE OF THE CERVICAL VERTEBRAE

03-600-67A

229 -416 FRACTURE OF RIBS

03-600-67B

23123-416 FRACTURE OF THE DISTAL THIRD OF THE RADIUS

03-600-67C

23223-416 FRACTURE OF THE DISTAL THIRD OF THE ULNA

03-600-67D

DATA REVISED 09-27-67

03-600-99

PATIENT 03-601	BORN 04-21-93	03-601-01
		03-601-02
FEMALE		03-601-05
SOURCE OF CASE	SEARCH BY CEM	03-601-10
EXPOSURE	DIAL PAINTER	03-601-12
SOURCE ELGIN NATIONAL WATCH CO., ELGIN, ILL., FROM 1925 TO 1932.		03-601-13
APPLIED DRY RADIUM POWDER TO FRESHLY PAINTED WATCH DIALS. WORKED		03-601-13A
IN DIAL ROOM FOR 5 YEARS AND WAS THEN TRANSFERRED TO WORK IN		03-601-13B
TIMING ROOM.		03-601-13C
FAMILY HISTORY	NOT ELICITED	03-601-15
MEDICAL HISTORY	NOT ELICITED	03-601-20
GAMMA-RAY MEASUREMENTS		03-601-25
05-24-60 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-601-25A
COMPUTED TOTAL-BODY RADIUM		03-601-27
05-24-60 0.002 UCI 0.006 UCI TOTAL 0.31		03-601-27A
X-RAY EXAMINATION	NOT DONE	03-601-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-601-40
DATA REVISED 10-02-67		03-601-99

PATIENT 03-602	BORN 01-09-99	03-602-01
		03-602-02
		03-602-03
		03-602-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-602-10
EXPOSURE	DIAL PAINTER 01	03-602-12
SOURCE	ELGIN NATIONAL WATCH CO., ELGIN, ILL., 2 YEARS, FROM 1925 TO 1926. PAINTED DIALS WITH ONE-HALF OF BANKER'S PEN.	03-602-13
		03-602-13A
FAMILY HISTORY	NOT ELICITED	03-602-15
MEDICAL HISTORY	NOT ELICITED	03-602-20
GAMMA-RAY MEASUREMENTS		03-602-25
05-24-60 RAB,RAC 0.001 UCI HGS 1 TILTING CHAIR CEM		03-602-25A
COMPUTED TOTAL-BODY RADIUM		03-602-27
05-24-60 0.001 UCI 0.003 UCI TOTAL 0.31		03-602-27A
X-RAY EXAMINATION	NOT DONE	03-602-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-602-40
DATA REVISED 09-27-67		03-602-99

PATIENT 03-603	BORN 11-30-88	03-603-01
FEMALE		03-603-02
		03-603-05
SOURCE OF CASE	SEARCH BY CEM	03-603-10
EXPOSURE	DIAL PAINTER 01	03-603-12
SOURCE ELGIN NATIONAL WATCH CO., ELGIN, ILL., FROM 1924 TO 1934.		03-603-13
ASSEMBLED DIALS AND HANDS, ALSO WORKED IN TIMING DEPARTMENT.		03-603-13A
FAMILY HISTORY	NOT ELICITED	03-603-15
MEDICAL HISTORY	NOT ELICITED	03-603-20
GAMMA-RAY MEASUREMENTS		03-603-25
05-25-60 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-603-25A
COMPUTED TOTAL-BODY RADIUM		03-603-27
05-25-60 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-603-27A
X-RAY EXAMINATION	NOT DONE	03-603-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-603-40
DATA REVISED 09-27-67		03-603-99

PATIENT 03-604	BORN 01-15-99	03-604-01
		03-604-02
FEMALE		03-604-03
		03-604-05
SOURCE OF CASE	SEARCH BY CEM	03-604-10
EXPOSURE	DIAL PAINTER 01	03-604-12
SOURCE ELGIN NATIONAL WATCH CO., ELGIN, ILLINOIS, FROM 1916 TO 1924,		03-604-13
AND AGAIN FROM 1926 TO 1928, DATES APPROXIMATE. PAINTED DIALS		03-604-13A
WITH RADIUM WITH HALF PEN POINT, PUT PEN IN MOUTH. NEVER PAINTED		03-604-13B
ANY PART OF HER BODY.		03-604-13C
ASSUMED WORK PERIOD 07-01-1916 TO 07-01-1924		03-604-13*
17.45 YEARS OF AGE WHEN FIRST EMPLOYED.		03-604-13Z
FAMILY HISTORY		03-604-15
MARRIED 1924	PARA 1 GRAVIDA 1	03-604-15A
MARRIED 1933		03-604-15B
MEDICAL HISTORY		03-604-20
NO FRACTURES, NO SERIOUS DISEASES, NO SURGERY, EXCEPT FOR MINOR		03-604-20A
PROCEDURES INVOLVING REMOVALS OF CYSTS FROM SCALP, 12-59. INQUIRY		03-604-20B
BY SYSTEMS IS NEGATIVE. DENTAL HISTORY--PARTIAL UPPER AND LOWER		03-604-20C
DENTURES. (06-07-60)		03-604-20D
GAMMA-RAY MEASUREMENTS		03-604-25
06-06-60	RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM	03-604-25A
COMPUTED TOTAL-BODY RADIUM		03-604-27
06-06-60	0.003 UCI 0.010 UCI TOTAL 0.31	03-604-27A
X-RAY EXAMINATION		03-604-30
PARTIAL SKELETAL SURVEY		03-604-30A
06-06-60	ANL X-RAY NO. R-199 LOC. ANL	03-604-30B
QUESTIONABLY MINIMAL CHANGES TYPICAL OF RADIUM DEP. SCORE 1		03-604-30C
PPF SEVERAL SMALL AREAS OF BONE RESORPTION SCATTERED THROUGHOUT		03-604-30D
THE SKULL.		03-604-30E
CLINICAL LABORATORY FINDINGS		03-604-40
06-06-60	HG 13.4 HTC RBC 4.54	03-604-40A
WBC 8000	DIFF. P 65 ST L 33 M 2 E B	03-604-40B

PATIENT 03-605	BORN 04-08-00	03-605-01
		03-605-02
FEMALE		03-605-05
SOURCE OF CASE	SEARCH BY CEM	03-605-10
EXPOSURE	DIAL PAINTER 01	03-605-12
SOURCE ELGIN NATIONAL WATCH CO., ELGIN, ILL., FROM 1918 TO 1925.		03-605-13
WORK WITH RADIUM STARTED ABOUT 1923, TOTAL ABOUT 2 YEARS.		03-605-13A
PAINTED RADIUM DIALS WITH PENS, DUSTED DRY RADIUM ON DIAL WITH		03-605-13B
BRUSH. NEVER PUT PEN OR OTHER EQUIPMENT IN HER MOUTH. STATED		03-605-13C
THAT SHE INHALED RADIUM POWDER.		03-605-13D
ASSUMED WORK PERIOD 07-01-1923 TO 07-01-1925		03-605-13*
23.22 YEARS OF AGE WHEN FIRST EMPLOYED.		03-605-13Z
FAMILY HISTORY		03-605-15
NEVER MARRIED		03-605-15A
MEDICAL HISTORY		03-605-20
APPENDECTOMY 1917. FRACTURE 3 RIGHT RIBS AND RIGHT CLAVICLE IN		03-605-20A
AUTO ACCIDENT 1946. NO OTHER SERIOUS ILLNESSES. INQUIRY BY		03-605-20B
SYSTEMS--NEGATIVE EXCEPT FOR CHRONIC CONSTIPATION AND SOME		03-605-20C
ARTHRITIS OF FEET AND BACK, DISCOMFORT HAS BEEN MILD FOR PAST		03-605-20D
10 OR 15 YEARS. DENTAL HISTORY--SEVERAL TEETH EXTRACTED. (06-13-60)		03-605-20E
GAMMA-RAY MEASUREMENTS		03-605-25
06-13-60 RAB,RAC 0.001 UCI HGS 1 TILTING CHAIR CEM		03-605-25A
COMPUTED TOTAL-BODY RADIUM		03-605-27
06-13-60 0.001 UCI 0.003 UCI TOTAL 0.31		03-605-27A
X-RAY EXAMINATION		03-605-30
PARTIAL SKELETAL SURVEY		03-605-30A
06-13-60 ANL X-RAY NO. R-200 LOC. ANL		03-605-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0.5		03-605-30C
PPF BONE ISLAND IN REGION OF HEAD OF RIGHT HUMERUS, PROBABLY		03-605-30D
NOT RELATED TO RADIUM. THICKENING OF CORTEX OF RIGHT AND LEFT		03-605-30E
TIBIA AND FIBULA SECONDARY TO PROLIFERATION OF PERIOSTEUM, PROB-		03-605-30F
ABLY REPRESENTS HYPERTROPHIC PULMONARY OSTEOARTHROPATHY.		03-605-30G
CLINICAL LABORATORY FINDINGS		03-605-40
06-13-60 HG 12.3 HTC RBC 4.16		03-605-40A
WBC 7100 DIFF. P 57 ST 2 L 30 M 8 E 3 B		03-605-40B
200 -704 SECONDARY HYPERTROPHIC OSTEOARTHROPATHY		03-605-67
227 -416 FRACTURE OF THE CLAVICLE		03-605-67A
229 -416 FRACTURE OF RIBS		03-605-67B
661 -12 APPENDECTOMY		03-605-67C
DATA REVISED 09-27-67		03-605-99

PATIENT 03-606

FEMALE

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, 1924

COMPUTED TOTAL-BODY RADIUM
02-12-52

0.010 UCI TOTAL

PFG

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

12-08-51 RYBURN KING HOSP., OTTAWA, ILL. NO.

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.

PPF POSSIBLE GOUTY OR RHEUMATOID ARTHRITIS.

SCORE 0

03-606-01
03-606-02
03-606-03
03-606-05

03-606-12

03-606-13

03-606-27
03-606-27A

03-606-30
03-606-30A
03-606-30B
03-606-30C
03-606-30D

PATIENT 03-607	BORN 05-13-06	03-607-01
		03-607-02
		03-607-03
FEMALE		03-607-05
SOURCE OF CASE	SEARCH BY CEM	03-607-10
EXPOSURE	DIAL PAINTER 01	03-607-12
SOURCE RADIUM DIAL CO., PERU, ILL., 6 TO 8 MONTHS STARTING JUNE 1922, AT AGE 16. PAINTED DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-607-13
		03-607-13A
		03-607-13B
ASSUMED WORK PERIOD 06-01-1922 TO 01-01-1923		03-607-13*
16.04 YEARS OF AGE WHEN FIRST EMPLOYED.		03-607-13Z
FAMILY HISTORY		03-607-15
MARRIED 1929	PARA 2 GRAVIDA 2	03-607-15A
CHILDREN	MALE 1932 L W	03-607-16
	FEMALE 1937 L W	03-607-16A
MEDICAL HISTORY		03-607-20
NO FRACTURES, NO SURGERY, NO SERIOUS ILLNESSES. HOSPITALIZED ONLY FOR PREGNANCIES. INQUIRY BY SYSTEMS--OCCASIONAL TENSION HEADACHE, EPISODE OF HEMATURIA 5 YEARS AGO, OCCASIONAL PAIN RIGHT HIP AND DISCOMFORT LEFT KNEE. DENTAL HISTORY--DOUBLE DENTURES PAST 10 YEARS, TEETH EXTRACTED BECAUSE OF PYORRHEA. (03-01-61)		03-607-20A
		03-607-20B
		03-607-20C
		03-607-20D
		03-607-20E
GAMMA-RAY MEASUREMENTS		03-607-25
07-28-60 RAB,RAC 0.060 UCI VA LA TILTING CHAIR CEM		03-607-25A
COMPUTED TOTAL-BODY RADIUM		03-607-27
07-28-60 0.060 UCI 0.194 UCI TOTAL 0.31		03-607-27A
X-RAY EXAMINATION		03-607-30
COMPLETE SKELETAL SURVEY		03-607-30A
03-01-61 ANL X-RAY NO. R-218 LOC. ANL		03-607-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1		03-607-30C
PPF COARSENING OF TRABECULATION IN RIGHT AND LEFT TIBIA AND FIBULA, QUESTIONABLY RELATED TO RADIUM. MARKED SPONDYLOLISTHESIS.		03-607-30D
		03-607-30E
CLINICAL LABORATORY FINDINGS	NONE.	03-607-40
2203 -037 SPONDYLOLISTHESIS		03-607-67
DATA REVISED 09-28-67		03-607-99

PATIENT 03-608		03-608-01
		03-608-02
FEMALE		03-608-03
		03-608-05
SOURCE OF CASE	SEARCH BY CEM	03-608-10
EXPOSURE	DIAL PAINTER 01	03-608-12
SOURCE RADIUM DIAL CO., CHICAGO, ILLINOIS, PRIOR TO 1921, ABOUT		03-608-13
TWO YEARS TOTAL. PAINTED CLOCK DIALS. POINTED BRUSH IN MOUTH.		03-608-13A
PAINTED HER FINGERNAILS.		03-608-13B
FAMILY HISTORY	NOT ELICITED	03-608-15
MEDICAL HISTORY	NOT ELICITED	03-608-20
GAMMA-RAY MEASUREMENTS		03-608-25
07-28-60 RAB,RAC 0.006 UCI	VA LA TILTING CHAIR CEM	03-608-25A
COMPUTED TOTAL-BODY RADIUM		03-608-27
07-28-60 0.006 UCI	0.019 UCI TOTAL 0.31	03-608-27A
X-RAY EXAMINATION	NOT DONE	03-608-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-608-40
DATA REVISED 02-07-68		03-608-99

PATIENT 03-609	BORN 02-21-98	03-609-01
		03-609-02
		03-609-04
FEMALE		03-609-05
SOURCE OF CASE	SEARCH BY CEM	03-609-10
EXPOSURE	DIAL PAINTER 01	03-609-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, WORKED FOR LESS THAN 1		03-609-13
YEAR, 1923. PAINTED CLOCK AND WATCH DIALS FOR SHORT PERIOD.		03-609-13A
FAMILY HISTORY	NOT ELICITED	03-609-15
MEDICAL HISTORY	NOT ELICITED	03-609-20
GAMMA-RAY MEASUREMENTS		03-609-25
07-28-60 RAB,RAC LESS THAN 0.0003 UCI VA LA TILTING CHAIR CEM		03-609-25A
COMPUTED TOTAL-BODY RADIUM		03-609-27
07-28-60 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-609-27A
X-RAY EXAMINATION	NOT DONE	03-609-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-609-40
DATA REVISED 09-29-67		03-609-99

PATIENT 03-610	BORN 04-09-17	03-610-01
		03-610-02
		03-610-03
		03-610-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-610-10
EXPOSURE	DIAL PAINTER 01	03-610-12
SOURCE LUMINOUS PROCESSES, INC., FROM 1935 TO 1937. NEVER POINTED BRUSH IN MOUTH.		03-610-13
		03-610-13A
FAMILY HISTORY	NOT ELICITED	03-610-15
MEDICAL HISTORY	NOT ELICITED	03-610-20
GAMMA-RAY MEASUREMENTS		03-610-25
07-28-60 RAB,RAC 0.002 UCI	VA LA TILTING CHAIR CEM	03-610-25A
COMPUTED TOTAL-BODY RADIUM		03-610-27
07-26-60 0.002 UCI	0.008 UCI TOTAL 0.31	03-610-27A
X-RAY EXAMINATION	NOT DONE	03-610-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-610-40
DATA REVISED 11-07-67		03-610-99

PATIENT	03-611			03-611-01
				03-611-02
				03-611-03
				03-611-05
FEMALE				
SOURCE OF CASE		SEARCH BY CEM		03-611-10
EXPOSURE		DIAL PAINTER	01	03-611-12
SOURCE	ELGIN WATCH CO., 1916 TO 1918 FOR 2 YEARS AND RADIUM DIAL CO., CHICAGO, ILL. FROM 1918 TO DEC. 1920 FOR 2 YEARS. PAINTED CLOCK DIALS. POINTED BRUSH IN MOUTH.			03-611-13
				03-611-13A
				03-611-13B
FAMILY HISTORY		NOT ELICITED		03-611-15
MEDICAL HISTORY		NOT ELICITED		03-611-20
GAMMA-RAY MEASUREMENTS				03-611-25
07-29-60	RAB,RAC	0.001 UCI	VA LA TILTING CHAIR CEM	03-611-25A
COMPUTED TOTAL-BODY RADIUM				03-611-27
07-29-60	0.001 UCI		0.003 UCI TOTAL 0.31	03-611-27A
X-RAY EXAMINATION		NOT DONE		03-611-30
CLINICAL LABORATORY FINDINGS		NOT DONE		03-611-40
DATA REVISED	10-02-67			03-611-99

PATIENT 03-612	BORN 06-13-92	03-612-01
FEMALE		03-612-02
		03-612-05
SOURCE OF CASE	SEARCH BY CEM	03-612-10
EXPOSURE	DIAL PAINTER 01	03-612-12
SOURCE RADIUM DIAL CO., CHICAGO, ILL. (2 YEARS AFTER FIRM WAS ORGANIZED). FIRM SUBSEQUENTLY MOVED TO PERU, ILL. AND PATIENT WORKED THERE SEVERAL MONTHS. DATES WORKED APPROXIMATELY 1918 TO 1923, ALTHOUGH PATIENT COULD NOT RECALL DATES VERY WELL. PAINTED DIALS. DID NOT POINT BRUSH IN MOUTH MUCH SINCE SHE CLEANED BRUSH IN CROOK OF LEFT FIFTH FINGER INSTEAD, FINGERTIP WAS COVERED WITH RADIUM PAINT WHEN WORKING.		03-612-13
ASSUMED WORK PERIOD 07-01-1918 TO 01-01-1923		03-612-13A
26.04 YEARS OF AGE WHEN FIRST EMPLOYED.		03-612-13B
		03-612-13C
		03-612-13D
		03-612-13E
		03-612-13F
		03-612-13*
		03-612-13Z
FAMILY HISTORY		03-612-15
NEVER MARRIED		03-612-15A
MEDICAL HISTORY		03-612-20
EXCISION OF LARYNGEAL TUMOR AND THYROIDECTOMY 1945, EXCISION OF CATARACTS 1956, REPAIR OF RECTAL FISTULA IN 1920S. FRACTURE OF LEFT FIFTH FINGER. MANY X-RAY EXAMINATIONS FOR GALL BLADDER DISEASE. MUCH STOMACH TROUBLE, AND SOME ARTHRITIS DURING PAST 2 YEARS. THREE EPISODES OF COMPLETE NERVOUS BREAKDOWNS. INQUIRY BY SYSTEMS REVEALS SOME BURSITIS OF LEFT SHOULDER RECENTLY WITH PARALYSIS OF FIRST 3 FINGERS OF LEFT HAND, BRONCHIECTASIS SEVERE FOR PAST 3 YEARS. DENTAL HISTORY--ABOUT 8 TEETH LEFT IN NEED OF REPAIR. (10-25-60)		03-612-20A
		03-612-20B
		03-612-20C
		03-612-20D
		03-612-20E
		03-612-20F
		03-612-20G
		03-612-20H
		03-612-20I
GAMMA-RAY MEASUREMENTS		03-612-25
07-29-60 RAB,RAC C.140 UCI VA LA TILTING CHAIR CEM		03-612-25A
10-25-60 RAB,RAC C.154 UCI HGS 1 TILTING CHAIR CEM		03-612-25B
COMPUTED TOTAL-BODY RADIUM		03-612-27
07-29-60 0.140 UCI 0.450 UCI TOTAL 0.31		03-612-27A
10-25-60 0.154 UCI 0.500 UCI TOTAL 0.31		03-612-27B
X-RAY EXAMINATION		03-612-30
COMPLETE SKELETAL SURVEY		03-612-30A
10-25-60 ANL X-RAY NO. R-213 LOC. ANL		03-612-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-612-30C
PPF NONE.		03-612-30D
CLINICAL LABORATORY FINDINGS		03-612-40
10-25-60 HG 12.0 HTC RBC 3.89		03-612-40A
WBC 15,300 DIFF. P 64 ST L 25 M 8 E 3 B		03-612-40B

X20	-9X6	CATARACT, CAUSE UNKNOWN	03-612-67
X20	-12	REMOVAL OF CRYSTALLINE LENS	03-612-67A
234X	-416	FRACTURE OF THE FIFTH FINGER	03-612-67B
255	-430	BURSITIS, SUBDELTOID (LEFT)	03-612-67C
350	-100.6	BRONCHIECTASIS, DUE TO INFECTION	03-612-67D
668	-11	EXCISION OF RECTAL FISTULA	03-612-67E
810	-10	THYROIDECTOMY	03-612-67F

DATA REVISED 11-07-67

03-612-99

PATIENT 03-613	BORN 06-01-05	03-613-01
		03-613-02
		03-613-03
		03-613-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-613-10
EXPOSURE	DIAL PAINTER 01	03-613-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APR. 1925 TO FEB. 1927.		03-613-13
PAINTED NUMERALS ON DIALS. POINTED BRUSH IN MOUTH AT BEGINNING		03-613-13A
OF EMPLOYMENT, BUT SUBSEQUENTLY POINTED BRUSH BETWEEN FINGERS.		03-613-13B
SEVERAL MONTHS AFTER START OF EMPLOYMENT, FIRM CHANGED TO		03-613-13C
GLASS PENS.		03-613-13D
ASSUMED WORK PERIOD 04-01-1925 TO 02-01-1927		03-613-13*
19.83 YEARS OF AGE WHEN FIRST EMPLOYED.		03-613-13Z
FAMILY HISTORY		03-613-15
MARRIED 1927	PARA 3 GRAVIDA 3	03-613-15A
HUSBAND	1902 L W 3	03-613-15B
CHILDREN	MALE 1928	03-613-16
	FEMALE 1934 L W (MIGRAINE HEADACHES)	03-613-16A
	FEMALE 1936 L W (HYPOTHYROIDISM)	03-613-16B
MEDICAL HISTORY		03-613-20
NO SURGERY, FRACTURES OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--		03-613-20A
FAMILIAL MIGRAINE HEADACHES, OTHERWISE NEGATIVE. DENTAL HISTORY--		03-613-20B
EXTRACTION OF ALL REMAINING TEETH 1959 BECAUSE OF PYORRHEA.		03-613-20C
PARTIAL UPPER DENTURE SINCE 1950. (08-02-60)		03-613-20D
GAMMA-RAY MEASUREMENTS		03-613-25
08-02-60 RAB,RAC 0.002 UCI HGS 1 TILTING CHAIR CEM		03-613-25A
COMPUTED TOTAL-BODY RADIUM		03-613-27
08-02-60 0.002 UCI 0.008 UCI TOTAL 0.31		03-613-27A
X-RAY EXAMINATION		03-613-30
PARTIAL SKELETAL SURVEY		03-613-30A
08-02-60 ANL X-RAY NO. R-204 LOC. ANL		03-613-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-613-30C
PPF NONE.		03-613-30D
CLINICAL LABORATORY FINDINGS		03-613-40
08-02-60 HG 12.1 HTC RBC 4.56		03-613-40A
WBC 6400 DIFF. P 61 ST L 3 M 7 E 2 B		03-613-40B
930 -X41 MIGRAINE		03-613-67

PATIENT 03-614	BORN 09-03-09	03-614-01
FEMALE		03-614-02
		03-614-05
SOURCE OF CASE	SEARCH BY CEM	03-614-10
EXPOSURE	DIAL PAINTER 01	03-614-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 12 MONTHS, JUNE 1924 TO JULY 1925. PAINTED DIALS. POINTED BRUSH IN HER MOUTH, BUT THIS PRACTICE WAS DISCOURAGED SOON AFTER PATIENT STARTED TO WORK. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 06-01-1924 TO 07-01-1925 14.74 YEARS OF AGE WHEN FIRST EMPLOYED.		03-614-13
		03-614-13A
		03-614-13B
		03-614-13C
		03-614-13*
		03-614-13Z
FAMILY HISTORY		03-614-15
NOT MARRIED		03-614-15A
MEDICAL HISTORY		03-614-20
NO SURGERY, FRACTURES, OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS		03-614-20A
NEGATIVE EXCEPT FOR HISTORY OF ONE EPISODE OF ALLERGIC RHINITIS		03-614-20B
FROM 1945 TO 1947. DENTAL HISTORY--SEVERAL TEETH EXTRACTED.		03-614-20C
GAMMA-RAY MEASUREMENTS		03-614-25
09-26-60 RAB,RAC 0.043 UCI HGS 1 TILTING CHAIR CEM		03-614-25A
COMPUTED TOTAL-BODY RADIUM		03-614-27
09-26-60 0.043 UCI 0.137 UCI TOTAL 0.31		03-614-27A
X-RAY EXAMINATION		03-614-30
COMPLETE SKELETAL SURVEY		03-614-30A
09-26-60 ANL X-RAY NO. R-205 LOC. ANL		03-614-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 4		03-614-30C
PPF SCATTERED SMALL AREAS OF BONE RESORPTION IN THE SKULL, AND		03-614-30D
IN RIGHT AND LEFT FIBULA. COARSENING OF TRABECULAR PATTERN OF		03-614-30E
LEFT RADIUS AND ULNA, AND RIGHT AND LEFT TIBIA.		03-614-30F
CLINICAL LABORATORY FINDINGS		03-614-40
09-26-60 HG 13.4 HTC RBC 4.20		03-614-40A
WBC 8100 DIFF. P 65 ST L 33 M E 2 B		03-614-40B
DATA REVISED 09-29-67		03-614-99

PATIENT 03-615	BORN 05-14-05	03-615-01
		03-615-02
FEMALE		03-615-03
		03-615-05
SOURCE OF CASE	SEARCH BY CEM	03-615-10
EXPOSURE	DIAL PAINTER 01	03-615-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., JUNE 12, 1923 TO JULY 2, 1925.		03-615-13
PAINTED DIALS WITH BRUSHES. POINTED BRUSHES IN MOUTH ONLY FEW		03-615-13A
TIMES, FOUND PRACTICE TOO DISTASTEFUL, THEREAFTER POINTED BRUSH		03-615-13B
WITH THUMB INSTEAD, CHANGED RINSE WATER DAILY. NEVER PAINTED ANY		03-615-13C
PART OF BODY BUT HANDS GLOWED IN DARK.		03-615-13D
ASSUMED WORK PERIOD 06-12-1923 TO 07-01-1925		03-615-13*
18.07 YEARS OF AGE WHEN FIRST EMPLOYED.		03-615-13Z
FAMILY HISTORY		03-615-15
MARRIED 1942	PARA 1 GRAVIDA 1	03-615-15A
HUSBAND DEC. 1948		03-615-15B
CHILDREN	FEMALE 1944 L W	03-615-16
MEDICAL HISTORY		03-615-20
HOSPITALIZED FOR TUBERCULOSIS 9 MONTHS JAN. TO SEPT. 1937. MINOR		03-615-20A
RECTAL SURGERY 1941. NO FRACTURES, NO OTHER SERIOUS DISEASES.		03-615-20B
INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR MILD ARTHRITIS OF FINGERS		03-615-20C
AND TOES. DENTAL HISTORY--3 TEETH EXTRACTED, REMAINING TEETH		03-615-20D
MANY FILLINGS. (09-26-60)		03-615-20E
GAMMA-RAY MEASUREMENTS		03-615-25
09-26-60 RAB,RAC C.007 UCI HGS 1 TILTING CHAIR CEM		03-615-25A
COMPUTED TOTAL-BODY RADIUM		03-615-27
09-26-60 0.007 UCI 0.023 UCI TOTAL 0.31		03-615-27A
X-RAY EXAMINATION		03-615-30
PARTIAL SKELETAL SURVEY		03-615-30A
09-26-60 ANL X-RAY NO. R-206 LOC. ANL		03-615-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1		03-615-30C
PPF SLIGHT COARSENING OF TRABECULAR PATTERN IN MID-SHAFT OF		03-615-30D
RIGHT AND LEFT TIBIA. QUESTIONABLE AREAS OF BONE RESORPTION		03-615-30E
IN SKULL.		03-615-30F
CLINICAL LABORATORY FINDINGS		03-615-40
09-26-60 HG 13.9 HTC RBC 4.27		03-615-40A
WBC 12,500 DIFF. P 48 ST 1 L 48 M 2 E 1 B		03-615-40B
360 -123 PULMONARY TUBERCULOSIS		03-615-67
DATA REVISED 09-29-67		03-615-99

PATIENT 03-617	BORN 10-30-02	03-617-01
DECEASED		03-617-02
		03-617-03
FEMALE		03-617-05
OTHER PERTINENT NOS.	AMBH	03-617-05A
DECEASED 09-28-51		03-617-06
DEATH CERT.NO.	AUTOPSY YES	03-617-07
INTERMENT	ST. MARY'S CEMETERY, EVERGREEN PARK, ILL.	03-617-08
CAUSES OF DEATH	RADIATION OSTEITIS	03-617-09
	RADIUM POISONING	03-617-09A
	EMACIATION	03-617-09B
SOURCE OF CASE	SEARCH BY LOONEY	03-617-10
	SYMPTOMS	03-617-10A
EXPOSURE	DIAL PAINTER 01	03-617-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS. WORKED AS DIAL PAINTER	03-617-13
	FROM 1921-1927.	03-617-13A
FAMILY HISTORY		03-617-15
MARRIED		03-617-15A
MEDICAL HISTORY		03-617-20
IN 1937, TEN YEARS AFTER STOPPING WORK AS DIAL PAINTER, PATIENT		03-617-20A
FELL DOWN STEPS AND SUFFERED A GREENSTICK FRACTURE OF THE LEFT		03-617-20B
FEMUR, WHICH WENT UNRECOGNIZED UNTIL THE FEMORAL SHAFT SNAPPED		03-617-20C
WHILE PATIENT WAS STOOPING OVER A FEW DAYS LATER. ELEVEN MONTHS		03-617-20D
LATER, AT AGE 36, SHE FRACTURED HER RIGHT FEMUR WHILE PICKING UP		03-617-20E
HER CHILD. AT AGE 42, IN 1945, SHE REFRRACTURED HER LEFT FEMUR		03-617-20F
WHILE PRESSING HER FOOT TO THE FLOOR DURING A QUICK STEP. ALL		03-617-20G
THREE FRACTURES HEALED. IN 1946, PATIENT HAD SWELLING OF LEFT		03-617-20H
MANDIBLE AND DISCHARGE OF PUS (BIOPSY OF MANDIBLE BY DR. J.E.		03-617-20I
SCHAFFER,) AND SINCE FALL OF 1950 BONE		03-617-20J
SLIVERS SLOUGHED OUT OF HER JAW FROM TIME TO TIME. IN SEPT.		03-617-20K
1949, PATIENT NOTED ONSET OF ARTHRITIS. SWELLING AND TENDERNESS		03-617-20L
OF KNUCKLES OF RIGHT HAND, WRIST, ELBOW, AND LATER, RIGHT		03-617-20M
SHOULDER JOINT. ALSO HAD SOME PAIN IN LEFT KNEE FOR 1 YEAR. ORAL		03-617-20N
CORTISONE GAVE SOME RELIEF OF JOINT PAIN. ON 09-14-51		03-617-20O
PATIENT READMITTED TO HOSPITAL BECAUSE OF PARALYZED URINARY		03-617-20P
BLADDER. PATIENT DIED 09-28-51 AT LITTLE CO. OF MARY HOSP.		03-617-20Q
AUTOPSY DONE, PRESUMABLY WITHOUT SPECIFIC FINDINGS.		03-617-20R
RADIOCHEMICAL ANALYSIS		03-617-51
1951	BONE	03-617-51A
	10-15 UG	
219	-4722.1 ASEPTIC NECROSIS OF THE MANDIBLE	03-617-66
235	-416 FRACTURE OF THE FEMUR (LEFT, RIGHT)	03-617-66A
DATA REVISED	02-22-68	03-617-99

PATIENT 03-618	BORN 07-25-93	03-618-01
FEMALE		03-618-02
		03-618-05
SOURCE OF CASE	SEARCH BY CEM	03-618-10
EXPOSURE	DIAL PAINTER 01	03-618-12
SOURCE ELGIN NATIONAL WATCH CO., ELGIN, ILL. RADIUM DIAL CO., CHICAGO, ILL. APPROX. 6 MONTHS, PERU, ILL. APPROX. 4 MONTHS.		03-618-13
PATIENT CANNOT REMEMBER DATES OF EMPLOYMENT BUT PERIOD INVOLVED MUST HAVE BEEN BETWEEN 1920 AND 1924. STAMPED FIGURES ON DIALS, PAINTED DIALS. DID NOT PUT BRUSH IN MOUTH.		03-618-13A
ASSUMED WORK PERIOD 09-01-1920 TO 07-01-1921		03-618-13B
27.09 YEARS OF AGE WHEN FIRST EMPLOYED.		03-618-13C
		03-618-13D
		03-618-13E
		03-618-13F
		03-618-13G
MEDICAL HISTORY		03-618-20
NO SERIOUS ILLNESSES EXCEPT FOR TYPHOID PNEUMONIA AT AGE 15.		03-618-20A
NO SURGERY. LEFT WRIST FRACTURED ABOUT 1940 WHEN PATIENT FELL DOWN FLIGHT OF STAIRS. INQUIRY BY SYSTEMS REVEALS RECENT LOSS OF HEARING AND VISION. COMPLAINS OF CHRONIC ARTHRITIC PAINS IN BACK, HIPS, KNEES, AND ELBOWS FOR PAST SEVERAL YEARS. PATIENT HAS COMPLETE UPPER DENTURE AND SEVERAL TEETH IN LOWER JAW HAVE BEEN EXTRACTED. (10-07-60)		03-618-20B
		03-618-20C
		03-618-20D
		03-618-20E
		03-618-20F
		03-618-20G
GAMMA-RAY MEASUREMENTS		03-618-25
10-07-60 RAB,RAC C.003 UCI HGS 1, TILTING CHAIR CEM		03-618-25A
COMPUTED TOTAL-BODY RADIUM		03-618-27
10-07-60 0.003 UCI 0.010 UCI TOTAL 0.31		03-618-27A
X-RAY EXAMINATION		03-618-30
PARTIAL SKELETAL SURVEY		03-618-30A
10-07-60 ANL X-RAY NO. R-210 LOC. ANL		03-618-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-618-30C
PPF NONE		03-618-30D
CLINICAL LABORATORY FINDINGS		03-618-40
10-07-60 HG 13.8 HTC RBC 4.33		03-618-40A
WBC 7850 DIFF. P 6C ST 2 L 33 M 2 E 3 B		03-618-40B

PATIENT 03-619	BORN 06-29-03	03-619-01
DECEASED		03-619-02
		03-619-02A
		03-619-03
FEMALE		03-619-05
DECEASED 08-12-62		03-619-06
DEATH CERT.NO.	AUTOPSY NONE	03-619-07
INTERMENT	ASSUMPTION CEMETERY, BLOOM, ILL.	03-619-08
CAUSES OF DEATH	BRONCHOPNEUMONIA,	03-619-09
	METASTATIC SARCOMA,	03-619-09A
	PRIMARY OSTEOSARCOMA, LEFT FEMUR (DEATH CERT.)	03-619-09B
	FIBROSARCOMA, LEFT FEMUR (ACTUAL)	03-619-09C
SOURCE OF CASE	SEARCH BY CEM	03-619-10
LITERATURE CITATION		03-619-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-619-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-619-11B
EXPOSURE	DIAL PAINTER 01	03-619-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SEPT. 1922 TO APRIL 1923,		03-619-13
ABOUT 6 MONTHS. LUMINOUS PROCESSES, INC., ABOUT 6 MONTHS 1935.		03-619-13A
PAINTED DIALS BOTH PERIODS. FIRST PERIOD, POINTED BRUSH IN MOUTH.		03-619-13B
SECOND PERIOD, GLASS PENS WERE USED. NEVER PAINTED OWN PERSON.		03-619-13C
ASSUMED WORK PERIOD 08-01-1922 TO 04-01-1923		03-619-13*
19.08 YEARS OF AGE WHEN FIRST EMPLOYED.		03-619-13Z
FAMILY HISTORY		03-619-15
MARRIED 1924	PARA 1 GRAVIDA 1	03-619-15A
CHILDREN	MALE 1925 L W	03-619-16
MEDICAL HISTORY		03-619-20
NO PREVIOUS SURGERY, FRACTURES, OR SERIOUS ILLNESSES. INQUIRY		03-619-20A
BY SYSTEMS NEGATIVE. ALL TEETH EXTRACTED 1940. (03-08-62)		03-619-20B
(FROM MEDICAL RECORD) SURGERY--MID-THIGH AMPUTATION OF LEFT LEG		03-619-21A
03-02-62. PATIENT HAS HAD PAIN, TENDERNES AND SWELLING OF LEFT		03-619-21B
KNEE SINCE NOV. 1961. X-RAY SHOWED FRACTURE AND OSTEOLYTIC LESION		03-619-21C
AT DISTAL END OF FEMUR. PHYSICAL EXAM NEGATIVE EXCEPT FOR EN-		03-619-21D
LARGED, TENDER, DEFORMED KNEE AND EFFUSION AT KNEE. X-RAYS SHOWED		03-619-21E
INCIPIENT COLLAPSE OF FEMORAL HEADS OF HIP JOINT, SPOTTY RARE-		03-619-21F
FACTION OF SKULL. (03-08-62)		03-619-21G
GAMMA-RAY MEASUREMENTS		03-619-25
03-08-62 RAB,RAC C.465 UCI FIELD MEASUREMENT CEM		03-619-25A
03-08-62 ACRH AMPUTATED TIBIA AND FIBULA		03-619-25B
COMPUTED TOTAL-BODY RADIUM		03-619-27
03-08-62 0.465 UCI 1.500 UCI TOTAL 0.31		03-619-27A
03-08-62 AMPUTATED TIBIA, FIBULA 0.076 UCI TOTAL		03-619-27B

X-RAY EXAMINATION	NOT DONE	03-619-30A
CLINICAL LABORATORY FINDINGS	NOT DONE	03-619-40
AUTORADIOGRAPHIC ANALYSES		03-619-53
04-30-62 FEMUR		03-619-53A
AV. DIFF. LEVEL	0.037 UUCI/MG	03-619-53B
MAX. HOT SPOTS	5.1 UUCI/MG	03-619-53C
HOT SPOT TO DIFF. RATIO	131.	03-619-53D
ESTIMATED TOTAL BODY CONTENT	0.47 + OR -0.2 UCI	03-619-53E
MALIGNANT TUMOR FIBROSARCOMA, LEFT FEMUR 1962		03-619-60
235 -20 MID-THIGH AMPUTATION OF FEMUR (LEFT)		03-619-66
23523-870F FIBROSARCOMA, DISTAL THIRD OF THE FEMUR		03-619-66A
361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE		03-619-67
DATA REVISED 08-20-68		03-619-99

PATIENT 03-620	BORN 11-16-23	03-620-01
		03-620-02
		03-620-03
FEMALE		03-620-05
SOURCE OF CASE	SEARCH BY CEM	03-620-10
EXPOSURE	DIAL PAINTER 01	03-620-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1942 TO 1946.		03-620-13
PAINTED AIRPLANE PARTS WITH RADIUM. USED BRUSH BUT NEVER POINTED		03-620-13A
IT IN MOUTH.		03-620-13B
ASSUMED WORK PERIOD 07-01-1942 TO 07-01-1946		03-620-13*
18.62 YEARS OF AGE WHEN FIRST EMPLOYED.		03-620-13Z
FAMILY HISTORY	NOT ELICITED	03-620-15
MEDICAL HISTORY	NOT ELICITED	03-620-20
GAMMA-RAY MEASUREMENTS		03-620-25
11-15-60 RAB,RAC C.005 UCI HGS 1 TILTING CHAIR CEM		03-620-25A
COMPUTED TOTAL-BODY RADIUM		03-620-27
11-15-60 0.005 UCI 0.017 UCI TOTAL 0.31		03-620-27A
X-RAY EXAMINATION		03-620-30
PARTIAL SKELETAL SURVEY		03-620-30A
10-25-60 ANL X-RAY NO. R-212 LOC. ANL		03-620-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-620-30C
PPF NONE.		03-620-30D
CLINICAL LABORATORY FINDINGS		03-620-40
10-25-60 HG 12.5 HTC RBC 4.34		03-620-40A
WBC 5600 DIFF. P 71 ST L 24 M 4 E B 1		03-620-40B
DATA REVISED 09-29-67		03-620-99

PATIENT 03-621	BORN 06-20-16	03-621-01
		03-621-02
FEMALE		03-621-03
		03-621-05
SOURCE OF CASE	SEARCH BY CEM	03-621-10
EXPOSURE	DIAL PAINTER 01	03-621-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1942 TO 1946.		03-621-13
WORKED SILK-SCREENING MACHINE AND APPLIED RADIUM PAINT WITH		03-621-13A
SQUEEGEE, WORE NO GLOVES. NEVER PUT MATERIAL IN MOUTH.		03-621-13B
ASSUMED WORK PERIOD 07-01-1942 TO 07-01-1946		03-621-13*
26.02 YEARS OF AGE WHEN FIRST EMPLOYED.		03-621-13Z
FAMILY HISTORY	NOT ELICITED	03-621-15
MEDICAL HISTORY	NOT ELICITED	03-621-20
GAMMA-RAY MEASUREMENTS		03-621-25
10-25-60 RAB,RAC 0.004 UCI HGS 1 TILTING CHAIR CEM		03-621-25A
COMPUTED TOTAL-BODY RADIUM		03-621-27
10-25-60 0.004 UCI 0.013 UCI TOTAL CEM		03-621-27A
X-RAY EXAMINATION		03-621-30
PARTIAL SKELETAL SURVEY		03-621-30A
10-25-60 ANL X-RAY NO. R-211 LOC. ANL		03-621-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-621-30C
PPF NONE		03-621-30D
CLINICAL LABORATORY FINDINGS		03-621-40
10-25-60 HG 12.1 HTC RBC 3.94		03-621-40A
WBC 4700 DIFF. P 55 ST L 40 M 3 E 2 B		03-621-40B
DATA REVISED 09-29-67		03-621-99

PATIENT 03-622

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

BREATH MEASUREMENTS

06-29-60

EM-222

NOT DETECTABLE

BREATH RADON BOTTLE HFL

DATA REVISED 09-29-67

03-622-01

03-622-02

03-622-05

03-622-10

03-622-12

03-622-26

03-622-26A

03-622-99

PATIENT 03-623

FEMALE

03-623-01
03-623-02
03-623-05

SOURCE OF CASE

SEARCH BY CEM

03-623-10

EXPOSURE

DIAL PAINTER 01

03-623-12

SOURCE ELGIN WATCH CO., ELGIN, ILL.

03-623-13

BREATH MEASUREMENTS

06-12-63

EM-222

0.010 UCI

RADON BREATH BOTTLE

HFL

03-623-26
03-623-26A

DATA REVISED 09-29-67

03-623-99

PATIENT 03-624	BORN 12-30-05	03-624-01
DECEASED		03-624-02
		03-624-02A
		03-624-03
FEMALE		03-624-05
DECEASED 12-28-59		03-624-06
DEATH CERT. NO.	AUTOPSY NONE	03-624-07
INTERMENT	OAKWOOD MEMORIAL PARK, OTTAWA, ILLINOIS	03-624-08
CAUSES OF DEATH	ACUTE RIGHT CEREBRAL HEMORRHAGE	03-624-09
	GENERALIZED ARTERIOSCLEROSIS, ALZHEIMER'S DISEASE	03-624-09A
SOURCE OF CASE	SEARCH BY CEM	03-624-10
EXPOSURE	DIAL PAINTER 01	03-624-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.	03-624-13
GAMMA-RAY MEASUREMENTS		03-624-25
12-28-59	FIELD MEASUREMENT	03-624-25A
COMPUTED TOTAL-BODY RADIUM		03-624-27
12-28-59	ABOUT 1.0 UCI TOTAL	03-624-27A
460 -942	GENERALIZED ARTERIOSCLEROSIS	03-624-67
477 -942.5	CEREBRAL HEMORRHAGE, ARTERIOSCLEROTIC	03-624-67A
930 -910	CEREBRAL CORTICAL ATROPHY, GEN. (ALZHEIMER'S DISEASE)	03-624-67B
DATA REVISED 09-29-67		03-624-99

PATIENT 03-625

03-625-01

03-625-02

FEMALE

03-625-03

03-625-05

SOURCE OF CASE

SEARCH BY CEM

03-625-10

EXPOSURE

DIAL PAINTER 01

03-625-12

SOURCE RADIUM DIAL CO., OTTAWA, ILLINCIS, 2 OR 3 MONTHS EMPLOYMENT. 03-625-13

BREATH MEASUREMENTS

03-625-26

06-23-60 EM-222 NOT DETECTABLE BREATH RADON BOTTLE HFL

03-625-26A

DATA REVISED 09-29-67

03-625-99

PATIENT 03-626

03-626-01
03-626-02
03-626-03
03-626-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

03-626-10

EXPOSURE

DIAL PAINTER 01

03-626-12

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.

03-626-13

BREATH MEASUREMENTS

07-13-60

EM-222

0.200 UCI

BREATH RADON BOTTLE

HFL

03-626-26

03-626-26A

DATA REVISED 09-29-67

03-626-99

PATIENT	03-627.	BORN	10-23-05	03-627-01
	DECEASED			03-627-02
				03-627-02A
	FEMALE			03-627-03
				03-627-05
DECEASED	10-05-66			03-627-06
DEATH CERT. NO.		AUTOPSY	NONE	03-627-07
INTERMENT	CALVARY CEMETERY, OTTAWA, ILLINOIS			03-627-08
CAUSES OF DEATH	TERMINAL PNEUMONITIS, GENERALIZED CARCINOMATOSIS, CARCINOMA OF BREAST			03-627-09
				03-627-09A
SOURCE OF CASE	SEARCH BY CEM			03-627-10
LITERATURE CITATION				03-627-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BCNE-SEEKING RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-627-11A
				03-627-11B
EXPOSURE	DIAL PAINTER 01			03-627-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINCIS, 1924-1928.			03-627-13
BREATH MEASUREMENT				03-627-26
06-23-60	EM-222	0.050 UCI	BREATH RADON BOTTLE	HFL
				03-627-26A
TOTAL-BCDY RADIUM COMPUTED FROM BREATH RADON				03-627-28
06-23-60	0.050 UCI	0.072 UCI	TOTAL	0.69
				03-627-28A
MALIGNANT TUMOR	CARCINOMA OF BREAST 1966			03-627-60
DATA REVISED	11-08-67			03-627-99

PATIENT 03-628	BORN 04-18-05	03-628-01
		03-628-02
		03-628-03
FEMALE		03-628-05
SOURCE OF CASE	SEARCH BY CEM	03-628-10
EXPOSURE	DIAL PAINTER 01	03-628-12
SOURCE RADIUM DIAL CO., PERU, ILL. 6 TO 7 MONTHS 1920, AGE 15.		03-628-13
PAINTED DIALS 4 TO 5 MONTHS, INSPECTION 2 MONTHS. POINTED BRUSH		03-628-13A
IN MOUTH. NEVER PAINTED ANY PART OF BODY. ALSO SALVAGED RADIUM		03-628-13B
FROM IMPERFECT DIALS BY WASHING.		03-628-13C
ASSUMED WORK PERIOD 06-01-1921 TO 02-01-1922		03-628-13*
16.11 YEARS OF AGE WHEN FIRST EMPLOYED.		03-628-13Z
FAMILY HISTORY		03-628-15
MARRIED 1927, DIV. 1939 PARA 1 GRAVIDA 1		03-628-15A
CHILDREN	INFANT DIED AFTER BIRTH UNKNOWN CAUSE	03-628-16
MEDICAL HISTORY		03-628-20
FRACTURED LEFT RIBS RESULT OF FALL 1956, FRACTURED RIGHT RIBS		03-628-20A
RESULT OF FALL 1959. NO SURGERY. NO SERIOUS ILLNESSES EXCEPT		03-628-20B
FOR SUSPICION OF TUBERCULOSIS. INQUIRY BY SYSTEMS--DIFFICULTY		03-628-20C
IN SWALLOWING, BRONCHOSCOPY AT COOK COUNTY HOSPITAL. ARTHRITIS		03-628-20D
OF LEFT ELBOW, HANDS, POSTERIOR UPPER BACK. TEETH--UPPERS		03-628-20E
COMPLETELY EXTRACTED, 7 TEETH LEFT IN LOWER JAW. (12-06-62)		03-628-20F
GAMMA-RAY MEASUREMENTS		03-628-25
12-06-62 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-628-25B
BREATH MEASUREMENTS		03-628-26
05-04-60 EM-222 0.010 UCI RADON BREATH BOTTLE HFL		03-628-26A
COMPUTED TOTAL-BODY RADIUM		03-628-27
12-06-62 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-628-27B
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON		03-628-28
05-04-60 0.010 UCI 0.014 UCI TOTAL 0.69		03-628-28A
X-RAY EXAMINATION		03-628-30
PARTIAL SKELETAL SURVEY		03-628-30A
12-06-62 ANL X-RAY NO. R-224 LOC. ANL		03-628-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-628-30C
PPF NONE.		03-628-30D
CLINICAL LABORATORY FINDINGS		03-628-40
12-06-62 HG 15.4 HTC RBC		03-628-40A
WBC 6200 DIFF. P 52 ST L 37 M 9 E 1 B 1		03-628-40B
229 -416 FRACTURE OF RIBS		03-628-67
DATA REVISED 11-08-67		03-628-99

PATIENT 03-629

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., PERU, ILLINOIS, 1922.

BREATH MEASUREMENT

01-29-60 EM-222

0.060 UCI

BREATH RADON BOTTLE

HFL

DATA REVISED 10-02-67

03-629-01

03-629-02

03-629-03

03-629-05

03-629-10

03-629-12

03-629-13

03-629-26

03-629-26A

03-629-99

PATIENT 03-630

FEMALE

SOURCE OF CASE

EXPOSURE

BREATH MEASUREMENT

01-29-60

EM-222

NOT DETECTABLE

BREATH RADON BOTTLE HFL

DATA REVISED 10-02-67

03-630-01

03-630-02

03-630-03

03-630-05

03-630-10

03-630-12

03-630-26

03-630-26A

03-630-99

PATIENT 03-634

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

BREATH MEASUREMENT

09-23-60

EM-222

C.010 UCI

BREATH RADON BOTTLE HFL

DATA REVISED 10-02-67

03-634-01

03-634-02

03-634-03

03-634-05

03-634-10

03-634-12

03-634-26

03-634-26A

03-634-99

PATIENT 03-635

03-635-01
03-635-02
03-635-03
03-635-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

03-635-10

EXPOSURE

DIAL PAINTER 01

03-635-12

SOURCE RADIUM DIAL CO., STREATOR, ILLINOIS.

03-635-13

BREATH MEASUREMENT

10-19-60 EM-222

0.050 UCI

BREATH RADON BOTTLE

HFL

03-635-26

03-635-26A

DATA REVISED 10-02-67

03-635-99

PATIENT 03-636

FEMALE

03-636-01
03-636-02
03-636-05

SOURCE OF CASE

SEARCH BY CEM

03-636-10

EXPOSURE

DIAL PAINTER 01

03-636-12

SOURCE ELGIN WATCH CO., ELGIN, ILLINOIS.

03-636-13

BREATH MEASUREMENT

06-03-60

EM-222

C.010 UCI

BREATH RADON BOTTLE

HFL

03-636-26
03-636-26A

DATA REVISED 10-02-67

03-636-99

PATIENT 03-637

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, ABOUT 6 WEEKS.

BREATH MEASUREMENT

09-15-60

EM-222

0.040 UCI

BREATH RADON BOTTLE

HFL

DATA REVISED 10-02-67

03-637-01

03-637-02

03-637-03

03-637-05

03-637-10

03-637-12

03-637-13

03-637-26

03-637-26A

03-637-99

PATIENT 03-638

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE ELGIN WATCH CO., ELGIN, ILLINOIS.

BREATH MEASUREMENT

06-03-60 EM-222

0.010 UCI

BREATH RADON BOTTLE HFL

DATA REVISED 10-02-67

03-638-01

03-638-02

03-638-03

03-638-05

03-638-10

03-638-12

03-638-13

03-638-26

03-638-26A

03-638-99

PATIENT 03-639

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, WORKED 1 YEAR, 1925-1926.

BREATH MEASUREMENT

06-29-60 EM-222

0.070 UCI

BREATH RADON BOTTLE

HFL

DATA REVISED 10-02-67

03-639-01

03-639-02

03-639-03

03-639-05

03-639-10

03-639-12

03-639-13

03-639-26

03-639-26A

03-639-99

PATIENT 03-640	BORN 12-07-02	03-640-01
		03-640-02
		03-640-03
		03-640-04
		03-640-05
FEMALE		
OTHER PERTINENT NOS.	CASE 303	03-640-05A
SOURCE OF CASE	SEARCH BY CEM, LOONEY	03-640-10
LITERATURE CITATION		03-640-11
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 303.		03-640-11A
EXPOSURE	DIAL PAINTER 01	03-640-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 14 MONTHS FROM 1924 TO 1925.		03-640-13
PAINTED CLOCK DIALS, POINTED BRUSH IN MOUTH. STATED THAT GLASS		03-640-13A
PENS CAME INTO USE SOON AFTER SHE LEFT THIS TYPE OF WORK.		03-640-13B
NEVER PAINTED ANY PART OF HER OWN BODY.		03-640-13C
ASSUMED WORK PERIOD 10-01-1924 TO 12-01-1925		03-640-13*
21.81 YEARS OF AGE WHEN FIRST EMPLOYED.		03-640-13Z
FAMILY HISTORY		03-640-15
MARRIED 1927	PARA 2 GRAVIDA 2	03-640-15A
HUSBAND	DEC. 1956	03-640-15B
MARRIED 1956		03-640-15C
CHILDREN	MALE 1932 L W	03-640-16
	FEMALE 1930 L W	03-640-16A
MEDICAL HISTORY		03-640-20
APPENDECTOMY 1924, HYSTERECTOMY 1948. FRACTURE LEFT THUMB 1950.		03-640-20A
SINUS TROUBLE FOR MANY YEARS INCLUDING SURGERY 1948, SYMPTOMS		03-640-20B
RELIEVED BY MOVE TO ARIZONA. FAMILIAL HEARING DEFECT RIGHT EAR.		03-640-20C
FREQUENT HEADACHES. KNOWN HISTORY OF HYPERTENSION. ARTHRITIC		03-640-20D
PAINS RIGHT THUMB, BOTH ELBOWS, RIGHT SHOULDER, AND BACK.		03-640-20E
DENTAL HISTORY--COMPLETE EXTRACTION 1941. (06-28-60)		03-640-20F
GAMMA-RAY MEASUREMENTS		03-640-25
06-28-60 RAB,RAC C.002 UCI HGS 1 TILTING CHAIR CEM		03-640-25B
COMPUTED TOTAL-BODY RADIUM		03-640-27
1951	0.11 UCI TOTAL LOONEY A	03-640-27A
06-28-60 0.002 UCI	0.005 UCI TOTAL 0.31	03-640-27B

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

12-26-51 RYBURN KING HOSP., OTTAWA, ILL. NO.
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.
PPF NONE.

SCORE 0

03-640-30
03-640-30A
03-640-30B
03-640-30C
03-640-30D

PARTIAL SKELETAL SURVEY

06-28-60 ANL X-RAY NO. R-202 LOC. ANL
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.
PPF NONE.

SCORE 0

03-640-31A
03-640-31B
03-640-31C
03-640-31D

CLINICAL LABORATORY FINDINGS

06-28-60 HG 15.6 HTC RBC 4.78
WBC 8900 DIFF. P 64 ST L 31 M 3 E 2 B

03-640-40
03-640-40A
03-640-40B

47X -X30 ESSENTIAL HYPERTENSION
320 -100 SINUSITIS
661 -12 APPENDECTOMY
782 -10 HYSTERECTOMY
2346 -416 FRACTURE OF THE THUMB

03-640-67
03-640-67A
03-640-67B
03-640-67C
03-640-67D

DATA REVISED 05-15-68

03-640-99

PATIENT 03-641

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, WORKED 6 MONTHS 1922.

BREATH MEASUREMENT

05-20-60 EM-222

0.020 UCI

BREATH RADON BOTTLE HFL

DATA REVISED 10-02-67

03-641-01

03-641-02

03-641-03

03-641-04

03-641-05

03-641-10

03-641-12

03-641-13

03-641-26

03-641-26A

03-641-99

PATIENT	03-642				03-642-01
					03-642-02
					03-642-03
	FEMALE				03-642-05
SOURCE OF CASE		SEARCH BY CEM			03-642-10
EXPOSURE		DIAL PAINTER 01			03-642-12
SOURCE	PAINTED DIALS AT RADIUM DIAL CO., PERU, ILL. ON 1922 PHOTO.				03-642-13
FAMILY HISTORY					03-642-15
	DIVORCED				03-642-15A
CHILDREN	MALE	DECEASED			03-642-16
MEDICAL HISTORY		NOT ELICITED			03-642-20
GAMMA-RAY MEASUREMENTS					03-642-25
11-24-59	RAB,RAC	0.015 UCI	FIELD MEASUREMENT	CEM	03-642-25A
COMPUTED TOTAL-BODY RADIUM					03-642-27
11-24-59	0.015 UCI		0.050 UCI TOTAL	0.31	03-642-27A
X-RAY EXAMINATION		NOT DONE			03-642-30
CLINICAL LABORATORY FINDINGS		NOT DONE			03-642-40
DATA REVISED	11-08-67				03-642-99

PATIENT 03-643

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, 2 YEARS.

BREATH MEASUREMENT

09-29-60

EM-222

0.030 UCI

BREATH RADON BOTTLE

HFL

DATA REVISED 10-02-67

03-643-01

03-643-02

03-643-03

03-643-05

03-643-10

03-643-12

03-643-13

03-643-26

03-643-26A

03-643-99

PATIENT 03-645	BORN 09-09-06	03-645-01
		03-645-02
		03-645-03
FEMALE		03-645-05
SOURCE OF CASE	SEARCH BY CEM	03-645-10
EXPOSURE	DIAL PAINTER 01	03-645-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., APPROX. 2 YEARS 1924 TO 1926. PAINTED CLOCK FACES. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY PART OF BODY.		03-645-13
		03-645-13A
		03-645-13B
ASSUMED WORK PERIOD 10-01-1924 TO 07-01-1926		03-645-13*
18.05 YEARS OF AGE WHEN FIRST EMPLOYED.		03-645-13Z
MEDICAL HISTORY		03-645-15
MARRIED 1926	PARA 1 GRAVIDA 1	03-645-15A
DIVORCED 1959		03-645-15B
CHILDREN FEMALE 1932 L W		03-645-16
MEDICAL HISTORY		03-645-20
HYSTERECTOMY 1940. NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS		03-645-20A
REVEALS MIGRAINE HEADACHES BUT IS OTHERWISE NEGATIVE. DENTAL		03-645-20B
HISTORY--FOUR TEETH EXTRACTED. (10-14-59)		03-645-20C
GAMMA-RAY MEASUREMENTS		03-645-25
10-14-59 RAB,RAC C.017 UCI HGS 1 TILTING CHAIR CEM		03-645-25A
COMPUTED TOTAL-BODY RADIUM		03-645-27
10-14-59 0.017 UCI 0.056 UCI TOTAL 0.31		03-645-27A
X-RAY EXAMINATION		03-645-30
COMPLETE SKELETAL SURVEY		03-645-30A
10-14-59 ANL X-RAY NO. R-174 LOC. ANL		03-645-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-645-30C
PPF CONGENITAL ANOMALY OF THE THORACIC SPINE.		03-645-30D
CLINICAL LABORATORY FINDINGS		03-645-40
10-14-59 HG 14.7 HTC RBC 4.01		03-645-40A
WBC 9300 DIFF. P 68 ST L 29 M 2 E 1 B		03-645-40B
782 -10 HYSTERECTOMY		03-645-67
930 -X41 MIGRAINE		03-645-67A
TOOTH MEASUREMENT		03-645-73
SAMPLE 12.0C TOOTH PREMOLAR		03-645-73A
TOTAL WT. 0.6244 CALC.GMS.CA. 0.1748		03-645-73B
UNSEALED EQUILIBRIUM PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY		03-645-73C
9.3 27.3 34 156.0 2.785		03-645-73D

PATIENT 03-647

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, 5 WEEKS, 1925.

BREATH MEASUREMENT

11-22-60 EM-222

0.040 UCI

BREATH RADON BOTTLE HFL

DATA REVISED 10-03-67

03-647-01

03-647-02

03-647-03

03-647-05

03-647-10

03-647-12

03-647-13

03-647-26

03-647-26A

03-647-99

PATIENT 03-648	BORN 03-23-03	03-648-01
DECEASED		03-648-02
		03-648-02A
		03-648-03
FEMALE		03-648-05
OTHER PERTINENT NOS.	MIT 01-013	03-648-05A
	CASE 13	03-648-05B
	AMBH	03-648-05C
	AMBH AUTOPSY	03-648-05D
	CASE RB	03-648-05E
DECEASED 09-16-56		03-648-06
DEATH CERT. NO.	AUTOPSY YES	03-648-07
INTERMENT	PERU CITY CEMETERY, PERU, ILLINOIS	03-648-08
CAUSES OF DEATH	CARCINOMA OF RIGHT MASTOID,	03-648-09
	RADIUM NECROSIS OF BCNE (DEATH CERT.)	03-648-09A
	FIBROSARCOMAS, LEFT FEMUR AND RIGHT MASTOID,	03-648-09B
	MIXED CARCINOSARCOMA, RIGHT MASTOID (ACTUAL)	03-648-09C
SOURCE OF CASE	SEARCH BY CEM	03-648-10
	REFERRED TO U OF CHICAGO CLINICS	03-648-10A
	SYMPTOMS	03-648-10B
	KNOWN FROM LITERATURE	03-648-10C
LITERATURE CITATION		03-648-11
AUB, ET AL, MEDICINE 31,221 (SEPT. 1952). CASE 13.		03-648-11A
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959). CASE RB.		03-648-11B
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959). CASE RB.		03-648-11C
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN.,		03-648-11D
MINNEAPOLIS (1960).		03-648-11E
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-648-11F
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-648-11G
EXPOSURE	DIAL PAINTER 01	03-648-12
SGOURCE RADIUM DIAL CO., OTTAWA AND PERU, ILLINOIS, FROM 1922 TO		03-648-13
1924, 3 YEARS TOTAL.		03-648-13A
ASSUMED WRK PERIOD 01-02-1922 TO 12-26-1924		03-648-13*
18.78 YEARS OF AGE WHEN FIRST EMPLOYED.		03-648-13Z
MEDICAL HISTORY		03-648-20
FOR MANY YEARS THE PATIENT HAD PAIN AND PARTIAL RESTRICTION OF		03-648-20A
MOTION AT THE HIP JOINTS, KNEES, ANKLES AND SHOULDERS. IN APPROX-		03-648-20B
IMATELY 01-54, THE PATIENT BEGAN TO COMPLAIN OF PAIN BEHIND THE		03-648-20C
RIGHT EAR OVER THE MASTOID AREA AND RADIOGRAPHS DONE AT THIS TIME		03-648-20D
IN LASALLE, ILLINOIS DEMONSTRATED DISTURBED PNEUMATIZATION OF		03-648-20E
BOTH MASTOIDS MORE MARKED ON THE RIGHT. IN 01-55 AN ENLARGEMENT		03-648-20F
DEVELOPED BEHIND THE RIGHT EAR AND IN 06-55 THE PATIENT WAS RE-		03-648-20G
FERRED TO THE U OF CHICAGO CLINICS. ON 07-28-55 EXPLORATION OF		03-648-20H
THE RIGHT MASTOID WAS CARRIED OUT AND DEMONSTRATED A LARGE TUMOR		03-648-20I
MASS FILLING THE MASTOID PROCESSES AND EXTENDING TO THE DURAL		03-648-20J
SURFACE. HISTOLOGIC EXAMINATION OF THE TISSUE REMOVED DEMONSTRAT-		03-648-20K
ED A SQUAMOUS CELL CARCINOMA WITH A STROMA THAT WAS NOT DIS-		03-648-20L
TINGUISHABLE FROM A FIBROSARCOMA. IN 10-55 THE PATIENT HAD SEVERE		03-648-20M

PAIN IN THE NECK AND RADIOGRAPHY DEMONSTRATED DESTRUCTION OF THE THIRD CERVICAL VERTEBRA WHICH WAS BELIEVED TO BE CAUSED BY METASTATIC TUMOR. IN 01-56 THE PATIENT AGAIN ENTERED THE HOSPITAL BECAUSE OF INCREASED PAIN BEHIND THE RIGHT EAR. ON 07-24-56 THE PATIENT ENTERED THE HOSPITAL IN A CACHECTIC STATE AND DIED ON 09-16-56.	03-648-20N 03-648-200 03-648-20P 03-648-20Q 03-648-20R 03-648-20S
GAMMA-RAY MEASUREMENTS	
07-26-55 RAB,RAC 2.40 UCI	03-648-25
	ACRH 03-648-25B
BREATH MEASUREMENTS	
07-30-56 EM-222 1.88 UCI	03-648-26
RADON BREATH FACE MASK	HFL 03-648-26A
COMPUTED TOTAL-BODY RADIUM	
1950	03-648-27
07-26-55 2.40 UCI	4.00 UCI TOTAL AUB A 03-648-27A
	7.61 UCI TOTAL 0.31 03-648-27B
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON	
1.88 UCI	03-648-28
2.72 UCI TOTAL	0.69 03-648-28A
X-RAY EXAMINATION	
SPECIAL VIEWS--MASTOIDS	03-648-30
07-15-55 U OF CHICAGO CLINICS UNIT	03-648-30A
PPF THERE IS EITHER AN ABSENCE OF AIR CELLS OR A DESTRUCTIVE LESION IN THE RIGHT MASTOID PROCESS, PROBABLY AS RESULT OF DISEASE RATHER THAN SURGICAL DEFECT, WHICH IS SUGGESTED BY MARKED IRREGULARITY OF THE MARGINS WITH DESTRUCTION OF NORMAL AIR CELLS.	03-648-30B 03-648-30D 03-648-30E 03-648-30F 03-648-30G
IF OSTEOLYTIC LESION IS DUE TO RADIUM POISONING, IT WOULD BE COMPATIBLE WITH EITHER ASEPTIC NECROSIS OR POSSIBLY OSTEOSARCOMA.	03-648-30H 03-648-30I
PARTIAL SKELETAL SURVEY	03-648-31A
07-22-55 U OF CHICAGO CLINICS UNIT	03-648-31B
PPF MULTIPLE WIDESPREAD AREAS OF DESTRUCTION THROUGHOUT ENTIRE SKELETON COMPRISED OF AREAS OF ASEPTIC NECROSIS. MARKED DEGENERATIVE ARTHRITIS, MOST PRONOUNCED IN THORACIC, LUMBOSACRAL SPINES, HIPS AND SHOULDERS AND KNEES. MASTOID CARCINOMA PROVED BY BIOPSY.	03-648-31D 03-648-31E 03-648-31F 03-648-31G
SPECIAL VIEWS--CHEST, SKULL, MASTOIDS	03-648-32A
10-19-55 U OF CHICAGO CLINICS UNIT	03-648-32B
PPF SOME ZONES OF OSTEOLYSIS IN RIBS ON RIGHT. NUMEROUS AREAS OF OSTEOLYSIS IN CALVARIUM AND DEFECT IN ZONE OF RESECTION FOR CARCINOMA OF RIGHT MASTOID. NORMAL LEFT MASTOID EXCEPT FOR AREAS OF OSTEOLYSIS SEEN IN CALVARIUM. MANDIBLE SHOWS SOME AREAS SUGGESTIVE OF OSTEOLYSIS.	03-648-32D 03-648-32E 03-648-32F 03-648-32G 03-648-32H
SPECIAL VIEWS--CERVICAL SPINE	03-648-33A
10-22-55 U OF CHICAGO CLINICS UNIT	03-648-33B
DESTRUCTIVE LESION OF C3, POSSIBLY ON BASIS OF RADIUM POISONING AND ASEPTIC NECROSIS, OR POSSIBLY MALIGNANT DEGENERATIVE CHANGE. THERE IS SLIGHT ANTERIOR DISPLACEMENT OF PHARYNX AT THAT LEVEL, POSSIBLY DUE TO SOFT TISSUE MASS. ALSO NARROWING OF DISC SPACE BETWEEN C6-7 AND DEGENERATIVE ARTHRITIC CHANGES THROUGHOUT CERVICAL SPINE. CYSTIC CHANGES IN OTHER VISIBLE OSSEOUS STRUCTURES POSSIBLY DUE TO RADIUM POISONING.	03-648-33D 03-648-33E 03-648-33F 03-648-33G 03-648-33H 03-648-33I 03-648-33J
SPECIAL VIEWS--CERVICAL SPINE	03-648-34A
01-04-56 U OF CHICAGO CLINICS UNIT	03-648-34B
PPF PROGRESS OF DESTRUCTIVE LESION OF C3. THIS IS NEARLY COMPLETELY DESTROYED AND THERE IS EXTENSION DOWNWARD TOWARD 4TH ON RIGHT SIDE, AS WELL AS ACCENTUATION OF CYSTIC AND ARTHRITIC PROCESSES PREVIOUSLY DESCRIBED.	03-648-34D 03-648-34E 03-648-34F 03-648-34G

CLINICAL LABORATORY FINDINGS										03-648-40
07-15-55	HG 13.5	HTC 49	RBC							03-648-40A
WBC 5900										03-648-40B
11-29-55	HG 12.8	HTC 45	RBC							03-648-41A
WBC 7700	DIFF. P 61	ST	L 29	M 8	E 1	B 1				03-648-41B
01-04-56	HG 13.4	HTC	RBC							03-648-42A
WBC 6100	DIFF. P 76	ST	L 21	M 2	E 0	B 0				03-648-42B
07-25-56	HG 11.3	HTC	RBC 4.06							03-648-43A
WBC 7500	DIFF. P	ST	L 6	M 8	E 1	B 1				03-648-43B
PLATELETS 226,600, RETICS 1.6, 2 ATYPICAL, IMMATURE LYMPHOCYTES										03-648-43C
SPECIMENS AVAILABLE										03-648-50
FROM AUTOPSY										
DISTAL 21 CM OF FEMUR										LOC. ACRH 320 GMS RJH 03-648-50A
1 VERTEBRAL BODY										47 GMS 03-648-50B
ILIUM WITH ACETABULUM (2 PCS)										160 GMS 03-648-50C
HALF SECTION HEAD AND NECK OF LEFT FEMUR										100 GMS 03-648-50D
HALF SECTION OF PROXIMAL 9 CM ULNA										37 GMS 03-648-50E
FRAGMENT OF HEAD OF FEMUR										15 GMS 03-648-50F
PORTION OF DISTAL END OF FEMUR										27 GMS 03-648-50G
RIBS										14 GMS 03-648-50H
5 FRAGMENTS OF BONE (ACETABULUM OF ILIUM)										34 GMS 03-648-50I
LONG. SECTION THROUGH HEAD AND NECK OF FEMUR										27 GMS 03-648-50J
TRIANGULAR PIECE OF SKULL 5X6X6 CM										12 GMS 03-648-50K
CROSS-SECTION OF FEMUR										17 GMS 03-648-50L
MASTOID AND TEMPORAL BONE										20 GMS 03-648-50M
RADIOCHEMICAL ANALYSIS										03-648-51
FEMUR										HFL 03-648-51A
06-58	3.81 G ASH	1335 UUG/G ASH	RA-226	7.65 UUCI/G ASH	TH-228					03-648-51B
06-58	3.93 G ASH	1610 UUG/G ASH	RA-226	7.65 UUCI/G ASH	TH-228					03-648-51C
11-58	4.15 G ASH	1485 UUG/G ASH	RA-226	8.32 UUCI/G ASH	TH-228					03-648-51D
11-58	3.73 G ASH	1370 UUG/G ASH	RA-226	7.15 UUCI/G ASH	TH-228					03-648-51E
AUTORADIOGRAPHIC ANALYSIS										03-648-53
FEMUR										RER 03-648-53A
MAXIMUM HOT SPOT										15. PCI RA-226/MG BONE 03-648-53B
AVERAGE DIFFUSE LEVEL										0.38 PCI RA-226/MG BONE 03-648-53C
CALCULATED UNIFORM LABEL										0.49 PCI RA-226/MG BONE 03-648-53D
HOT SPOT TO DIFFUSE RATIO										40 03-648-53E
DIFFUSE TO UNIFORM LABEL										0.78 03-648-53F
THE GROSS AUTORADIOGRAPHS OF PROXIMAL END OF FEMUR INDICATE CON-										03-648-53G
SIDERABLE RADIUM PRESENT IN TRABECULAR BONE, WHICH INDICATES THAT										03-648-53H
BONE TURNOVER IN THIS REGION CANNOT BE VERY HIGH FOR ACTIVITY HAS										03-648-53I
PERSISTED IN THIS LOCATION FOR OVER 30 YEARS.										03-648-53J
MALIGNANT TUMOR FIBROSARCOMAS, LEFT FEMUR AND RIGHT HUMERUS 1956										03-648-60
MIXED CARCINOSARCOMA, RIGHT MASTOID 1955										03-648-60A
2134 -814	EPIDERMOID CARCINOMA OF THE MASTOID (RIGHT)									03-648-66
2134 -870F	FIBROSARCOMA OF THE MASTOID (RIGHT)									03-648-66A
23522-870F	FIBROSARCOMA OF THE MIDDLE THIRD OF THE FEMUR (LEFT)									03-648-66B

AUTOPSY REPORT AT ANL

03-648-70

PRIMARY TUMOR SLIDE AT ANL

03-648-71

ADDITIONAL INFORMATION

03-648-91

THE GROSS SPECIMENS REMOVED AT AUTOPSY INCLUDE THE UPPER END OF A FEMUR AND ACETABULAR PORTION OF INNOMINATE BONE AND FEMORAL CON- 03-648-91A
DYLES. CARTILAGE SURFACE OF FEMUR HEAD GROSSLY SHOWS THINNING, 03-648-91B
PARTICULARLY OVER INFERIOR QUADRANT. CARTILAGE OF CONDYLE IS IR- 03-648-91C
REGULAR AND COVERED WITH FIBROUS TISSUE POSTERIORLY. MICROSCOPIC 03-648-91E
SECTIONS ARE PREPARED THROUGH HIP AND UPPER END OF FEMUR, SAGITAL- 03-648-91F
LY THROUGH CONDYLE AND CROSS-SECTION OF FEMORAL SHAFT. SECTION 03-648-91G
THROUGH ACETABULUM AND UPPER LEFT FEMUR SHOWS ILIUM ADJACENT TO 03-648-91H
ACETABULUM TO BE OCCUPIED BY TUMOR. THOUGH THERE ARE AREAS OF 03-648-91I
HEMATOPOIETIC MARROW, MOST OF THE INTERTRABECULAR SPACES CONTAIN 03-648-91J
ONLY FIBROUS TUMOR, EXTENDING LATERALLY OUTSIDE BONE FOR 1 CM 03-648-91K
JUST ABOVE ACETABULAR MARGIN. CARTILAGES OF ACETABULUM AND HEAD 03-648-91L
OF FEMUR ARE FIBRILATED AND ON THE SURFACE FIBROUS. IN FEMUR HEAD 03-648-91M
THERE ARE AT LEAST 3 JUXTA ARTICULAR CYSTS THAT CONTAIN MATURE 03-648-91N
FIBROUS TISSUE. BONY ARTICULAR CORTEX IS BROKEN DOWN AND IRREGU- 03-648-91O
LARLY HYPERTROPHIED IN AREAS. THROUGH UPPER END OF FEMUR HEAD AND 03-648-91P
NECK ARE AREAS OF TUMOR AND NORMAL MARROW. IN SUBTROCHANTERIC RE- 03-648-91Q
GION THE MARROW SPACES CONTAIN ALMOST SOLID TUMOR. IN THE MARROW 03-648-91R
SPACES, EXCEPT FOR TUMOR, THE CHRONIC CHANGES OF RADIUM POISONING 03-648-91S
ARE NOT PROMINENT. THERE IS LITTLE OR NONE OF THE CHARACTERISTIC 03-648-91T
ACELLULAR PERITRABECULAR FIBROUS OR ATYPICAL BONE. THERE ARE NU- 03-648-91U
MEROUS ABSORPTIVE SPACES IN CORTEX FILLED WITH ATYPICAL, IRREGU- 03-648-91V
LARLY CALCIFIED BONE. THE TUMOR ITSELF IS A DISTINCTLY BONE-FORM- 03-648-91W
ING SARCOMA, WHICH FORMS MUCH COLLAGEN AND THE TUMOR CELLS HAVE 03-648-91X
PRODUCED MUCH OSTEOID AND CALCIFIED TUMOR BONE. SECTION OF FEMORAL 03-648-91Z

CONDYLE SHOWS BREAKDOWN OF ARTICULAR CARTILAGE AND CORTEX OVER 03-648-92A
POSTERIOR THIRD OF CONDYLE. CANCELLOUS BONE SHOWS HERE SHOWS MORE 03-648-92B
OF PERITRABECULAR AND INTERTRABECULAR FIBROUS OF RADIUM POISONING 03-648-92C
WITH SOME FORMATION OF ABNORMAL BONE. NO TUMOR SEEN HERE. CROSS- 03-648-92D
SECTION OF FEMUR SHOWS EXTENSIVE NECROSIS OF OLD BONE, THE FILLING 03-648-92E
IN OF HAVERSIAN CANALS AND ABSORPTIVE SPACES BY ABNORMAL IRRADI- 03-648-92F
ATION BONE. 03-648-92G

DATA REVISED 05-15-68

03-648-99

PATIENT 03-649 DECEASED	BORN 11-08-06	03-649-01 03-649-02 03-649-02A 03-649-03 03-649-05
FEMALE	SOC.SEC.NO.	
OTHER PERTINENT NOS.	AMBH AMBH AUTOPSY MIT 01-023 CASE 23 CASE 313	03-649-05A 03-649-05B 03-649-05C 03-649-05D 03-649-05E
DECEASED 07-22-54 DEATH CERT.NO. INTERMENT	AUTOPSY YES OAKWOOD MEMORIAL PARK, OTTAWA, ILLINOIS	03-649-06 03-649-07 03-649-08
CAUSES OF DEATH	SARCOMA OF THE ISCHIUM WITH METASTASES, RADIUM POISONING (DEATH CERT.) FIBROSARCOMA, RIGHT ISCHIUM (ACTUAL)	03-649-09 03-649-09A 03-649-09B
SOURCE OF CASE	SEARCH BY CEM KNOWN FROM LITERATURE	03-649-10 03-649-10A
LITERATURE CITATION		03-649-11
AUB, ET AL, MEDICINE 31,221 (SEPT. 1952). CASE 23.		03-649-11A
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 313.		03-649-11B
LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 313.		03-649-11C
HASTERLIK, (IN) PROC.INT.CONF. ON PEACEFUL USES OF ATOMIC ENERGY 11,149, GENEVA (1956).		03-649-11D 03-649-11E
LISCO, (IN) CIBA FOUND.SYMP. ON BONE STRUCTURE P.272 (1956).		03-649-11F
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959). CASE 313.		03-649-11G
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959). CASE 313.		03-649-11H
ROWLAND, (IN) RADIOISOTOPES IN THE BIOSPHERE, P. 339, U OF MINN., MINNEAPOLIS (1960).		03-649-11I 03-649-11J
LLOYD, BRIT.J.RADIOL. 34,521 (AUG. 1961).		03-649-11K
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RADIOISOTOPES, U OF UTAH, SALT LAKE CITY (1969).		03-649-11L 03-649-11M
EXPOSURE	DIAL PAINTER 01	03-649-12
SOURCE RADIUM DIAL CO., AND LUMINOUS PROCESSES, INC., OTTAWA, ILLINOIS FROM 1924 TO 1950.		03-649-13 03-649-13A
ASSUMED WORK PERIOD 10-01-1924 TO 10-01-1950 17.89 YEARS OF AGES WHEN FIRST EMPLOYED.		03-649-13* 03-649-13Z
MEDICAL HISTORY		03-649-20
PATIENT FRACTURED HER RIGHT FEMUR IN 1948 WITH MINIMAL TRAUMA AND REFRACTURED THE SAME FEMUR IN 1949. SINCE THAT TIME PATIENT WAS		03-649-20A 03-649-20B
IN GOOD HEALTH UNTIL 01-53 WHEN SHE BEGAN TO NOTE PAIN IN THE		03-649-20C
REGION OF THE RIGHT HIP. IN 06-53 A DIAGNOSIS OF CANCER OF THE		03-649-20D
CERVIX WAS MADE AND A HYSTERECTOMY WAS DONE. AT THE TIME OF THE		03-649-20E
SURGERY A RADIOGRAPH OF THE PELVIS REVEALED AN OSTEOLYTIC LESION		03-649-20F
OF THE RIGHT ISCHIUM. THE PATIENT RECEIVED 14 X-RAY TREATMENTS OF		03-649-20G
UNKNOWN TOTAL DOSE TO THE PELVIS. THE PAIN IN THE RIGHT HIP PER-		03-649-20H
SISTED AND THE PATIENT ENTERED THE U OF CHICAGO CLINICS ON		03-649-20I
11-03-53. A BIOPSY REVEALED A FIBROSARCOMA ARISING IN THE ISCHIUM		03-649-20J
WHICH WAS TOO LARGE AND INVASIVE FOR LOCAL RESECTION. ON 11-17-53		03-649-20K
RIGHT HEMIPELVECTOMY WAS PERFORMED. THE PATIENT AGAIN ENTERED THE		03-649-20L

HOSPITAL IN 02-54 AT WHICH TIME IT WAS OBVIOUS THAT THE TUMOR WAS AGAIN GROWING AT THE SITE OF THE RIGHT STUMP. THE PATIENT ENTERED THE U OF CHICAGO CLINICS FOR THE SIXTH TIME ON 04-07-54 AT WHICH TIME EXAMINATION REVEALED THAT THE LIVER WAS ENLARGED AND THAT THE PELVIS AND ENTIRE LOWER ABDOMEN WERE OCCUPIED BY A LARGE, STONY HARD MASS. THE PATIENT ENTERED THE HOSPITAL FOR THE SEVENTH AND LAST TIME ON 05-12-54 IN A CACHECTIC STATE AND DIED 07-22-54.

03-649-20M
03-649-20N
03-649-20O
03-649-20P
03-649-20Q
03-649-20R
03-649-20S
03-649-20T

COMPUTED TOTAL-BODY RADIUM

1.30 UCI TOTAL NORRIS B
1.30 UCI TOTAL LOONEY C

03-649-27
03-649-27A
03-649-27B

TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON

1945,48,49,50

ABOUT 1.0 UCI TOTAL AUB A

03-649-28
03-649-28A

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

10-10-51 U OF CHICAGO CLINICS UNIT NO.
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 23
PPF ADVANCED CHANGES ON BASIS OF PATHOLOGICAL FRACTURE OF THE LEFT FEMUR AND ASEPTIC NECROSIS OF THE RIGHT TARSAL SCAPHOID. MULTIPLE AREAS OF BONE RESORPTION IN THE SKULL, RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA, RIGHT FIBULA AND LEFT FIBULA AND TIBIA. COARSENING OF THE TRABECULAR PATTERN OF THE RIGHT FEMUR, RIGHT TIBIA, LEFT TIBIA AND FIBULA. OLD OBLIQUE FRACTURE OF THE MID PORTION OF THE SHAFT OF THE LEFT FEMUR. ASEPTIC NECROSIS OF THE RIGHT TARSAL SCAPHOID.

03-649-30
03-649-30A
03-649-30B
03-649-30C
03-649-30D
03-649-30E
03-649-30F
03-649-30G
03-649-30H
03-649-30I
03-649-30J
03-649-30K

COMPLETE SKELETAL SURVEY

10-15-53 AND 10-19-53 U OF CHICAGO CLINICS UNIT NO.
ADVANCED (MALIGNANT) CHANGES TYPICAL OF RA DEPOSITION. SCORE 18.5
PPF ADVANCED (MALIGNANT) CHANGES ON BASIS OF SARCOMA OF RIGHT ISCHIUM AND PUBIS AND ASEPTIC NECROSIS OF THE RIGHT TARSAL SCAPHOID. MULTIPLE AREAS OF BONE RESORPTION IN THE CALVARIUM, RIGHT RADIUS AND ULNA AND RIGHT CARPALNAVICULAR. COARSENING OF THE TRABECULAR PATTERN IN THE METACARPALS AND THE RIGHT FEMUR, RIGHT TIBIA AND FIBULA. OSTEOLYTIC TUMOR (FIBROSARCOMA) OF THE RIGHT ISCHIUM AND PUBIS.

03-649-31A
03-649-31B
03-649-31C
03-649-31D
03-649-31E
03-649-31F
03-649-31G
03-649-31H
03-649-31I
03-649-31J

CLINICAL LABORATORY FINDINGS

1. 110-15-53 HG 11. HTC 33 RBC 4.7
WBC 4300 DIFF. P 82 ST L 12 M 2 E 2 B 2
CALCIUM 9.9 MG PERCENT, PHOSPHORUS 3.9 MG PERCENT

03-649-40
03-649-40A
03-649-40B
03-649-40C

11-09-53 ALKALINE PHOSPHATASE 3.0 UNITS

03-649-41C

12-15-53 HG 11.8

WBC 3500 DIFF. P 38 ST L 41 M E B

03-649-42A
03-649-42B

1. 102-10-54 HG 12. HTC 29 RBC 3.5
WBC 3700 DIFF. P 75 ST L 21 M 2 E 2 B 0

03-649-43A
03-649-43B

05-17-54 HG 9.7 HTC RBC 3.53

WBC 15,200 DIFF. P 89 ST L 6 M 5 E B

03-649-44A
03-649-44B

SPECIMENS AVAILABLE			03-649-50
FROM AUTOPSY		RJH	03-649-50A
COMPLETE ASTRAGALUS		44 GMS.	03-649-50B
FEMUR, DISTAL 15 CMS., POSTERIOR 2 CMS.		154	03-649-50C
TIBIA, PROXIMAL 16 CMS., LATERAL 1.5 CMS.		116	03-649-50D
FEMUR, DISTAL 26 CMS., HALF SECTION		183	03-649-50E
FEMUR, PROXIMAL 23 CMS., HALF SECTION		98	03-649-50F
HEAD AND NECK OF FEMUR, HALF SECTION		58	03-649-50G
4 THORACIC VERTEBRAL BODIES		85	03-649-50H
CALVARIUM, 10 X 25 MM.		4	03-649-50I
2 LONGITUDINAL SECTIONS OF TIBIA OR FEMUR		27	03-649-50J
RADIOCHEMICAL ANALYSIS			03-649-51
FEMUR		HFL	03-649-51A
05-56	1.36 G ASH 726 UUG/G ASH RA-226	0.06 UUCI/G ASH TH-228	03-649-51B
06-56	1.36 G ASH 520 UUG/G ASH RA-226	0.02 UUCI/G ASH TH-228	03-649-51C
11-56	1.44 G ASH 282 UUG/G ASH RA-226	0.02 UUCI/G ASH TH-228	03-649-51D
VERTEBRAE		HFL	03-649-51E
07-57	1.22 G ASH 1415 UUG/G ASH RA-226	0.08 UUCI/G ASH TH-228	03-649-51F
FEMUR EPIPHYSIS		HFL	03-649-51G
08-58	3.01 G ASH 679 UUG/G ASH RA-226	0.11 UUCI/G ASH TH-228	03-649-51H
AUTORADIOGRAPHIC ANALYSIS			03-649-53
10-61	FEMUR	RER	03-649-53A
	MAXIMUM HOT SPOT	2.8 PCI RA-226/MG BONE	03-649-53B
	AVERAGE DIFFUSE	C.15 PIC RA-226/MG BONE	03-649-53C
	CALCULATED UNIFORM LEVEL	C.30 PCI RA-226/MG BONE	03-649-53D
	HOT SPOT TO DIFFUSE RATIO	19.	03-649-53E
	DIFFUSE TO UNIFORM LABEL	0.50	03-649-53F
MALIGNANT TUMOR FIBROSARCOMA, RIGHT ISCHIUM 1954			03-649-60
22X2 -870F	FIBROSARCOMA OF THE ISCHIUM (RIGHT)		03-649-66
235 -416	FRACTURE OF THE FEMUR (RIGHT)		03-649-66A
2394 -4722.1	ASEPTIC NECROSIS OF THE TARSAL SCAPHOID (RIGHT)		03-649-66B
782 -12	HYSTERECTOMY		03-649-67
783 -8191	CARCINOMA OF CERVIX		03-649-67A
AUTOPSY REPORT AT ANL			03-649-70
DATA REVISED 05-07-68			03-649-99

PATIENT	03-650	BORN	05-21-07	03-650-01
	DECEASED			03-650-02
				03-650-02A
				03-650-03
				03-650-05
	FEMALE			
DECEASED	06-02-43			03-650-06
DEATH CERT. NO.				03-650-07
INTERMENT	RIVERVIEW CEMETERY, LASALLE, ILL.			03-650-08
CAUSES OF DEATH	FRACTURE OF RIGHT LEG AND CRUSHING INJURIES			03-650-09
	TO SKULL, SUSTAINED IN CAR COLLISION			03-650-09A
SOURCE OF CASE	SEARCH BY CEM			03-650-10
EXPOSURE	DIAL PAINTER 01			03-650-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-650-13
DATA REVISED	10-02-67			03-650-99

PATIENT 03-651
DECEASED

BORN 02-19-97

03-651-01
03-651-02
03-651-03
03-651-04
03-651-04A
03-651-05

FEMALE

DECEASED 10-26-52
DEATH CERT. NO.
INTERMENT

AUTOPSY NONE
MARSEILLES, ILLINOIS

03-651-06
03-651-07
03-651-08

CAUSES OF DEATH

METASTATIC CARCINOMA,
CARCINOMA OF RIGHT BREAST

03-651-09
03-651-09A

SOURCE OF CASE

SEARCH BY CEM

03-651-10

EXPOSURE

DIAL PAINTER 01

03-651-12

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.

03-651-13

FAMILY HISTORY
MARRIED

03-651-15
03-651-15A

MALIGNANT TUMOR CARCINOMA OF RIGHT BREAST 1952

03-651-60

190 -8091 ADENOCARCINOMA OF THE BREAST (RIGHT)

03-651-67

DATA REVISED 04-10-68

03-651-99

PATIENT 03-652	BORN 05-25-08	03-652-01
DECEASED		03-652-02
		03-652-02A
FEMALE		03-652-05
DECEASED 10-18-40		03-652-06
DEATH CERT. NO.	AUTOPSY NONE	03-652-07
INTERMENT	ST. MARY'S CEMETERY, STREATOR, ILL.	03-652-08
CAUSES OF DEATH	SUBACUTE BACTERIAL ENDOCARDITIS	03-652-09
SOURCE OF CASE	SEARCH BY CEM	03-652-10
EXPOSURE	DIAL PAINTER 01	03-652-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.	03-652-13
450 -100.0	SUBACUTE BACTERIAL ENDOCARDITIS	03-652-67
DATA REVISED 10-02-67		03-652-99

PATIENT 03-653	BORN 10-10-08	03-653-01
DECEASED		03-653-02
		03-653-02A
FEMALE		03-653-05
DECEASED 12-07-57		03-653-06
DEATH CERT. NO.	AUTOPSY NONE	03-653-07
INTERMENT	OTTAWA AVE. CEMETERY, OTTAWA, ILL.	03-653-08
CAUSES OF DEATH	UREMIA, PARTIAL INTESTINAL OBSTRUCTION	03-653-09
	ACUTE GASTRO ENTERITIS	03-653-09A
SOURCE OF CASE	SEARCH BY CEM	03-653-10
EXPOSURE	DIAL PAINTER	03-653-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.	03-653-13
DATA REVISED 10-02-67		03-653-99

PATIENT 03-654	BORN 12-03-05	03-654-01
DECEASED		03-654-02
		03-654-02A
		03-654-03
FEMALE		03-654-05
DECEASED 02-01-54		03-654-06
DEATH CERT. NO.	AUTOPSY NONE	03-654-07
INTERMENT ST. JOSEPH CEMETERY, BUREAU COUNTY, ILL.		03-654-08
CAUSES OF DEATH CARCINOMA OF BRAIN		03-654-09
SOURCE OF CASE	SEARCH BY CEM	03-654-10
LITERATURE CITATION		03-654-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-654-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-654-11B
EXPOSURE	DIAL PAINTER	03-654-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.		03-654-13
MEDICAL HISTORY		03-654-20
OPERATION PERFORMED DEC. 1952, FINDING GLIOMA. CARCINOMA DIAG-		03-654-20A
NOSED 13 MONTHS PRIOR TO DEATH. PERSONAL PHYSICIAN, DR. WILLIAM		03-654-20B
SCANLON.		03-654-20C
930 -8475H GLIOMA OF THE BRAIN, DIFFERENTIATION UNDETERMINED		03-654-67
MALIGNANT TUMOR GLIOMA OF BRAIN 1954		03-654-60
DATA REVISED 10-02-67		03-654-99

PATIENT 03-655	BORN 05-19-79	03-655-01
DECEASED		03-655-02
		03-655-02A
FEMALE		03-655-05
DECEASED 08-08-43		03-655-06
DEATH CERT. NO.		03-655-07
INTERMENT PERU CITY CEMETERY, PERU, ILL.		03-655-08
CAUSES OF DEATH CEREBRAL HEMORRHAGE, HYPERTENSION, ARTERIOSCLEROSIS		03-655-09
SOURCE OF CASE SEARCH BY CEM		03-655-10
EXPOSURE DIAL PAINTER 01		03-655-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.		03-655-13
47X -X30 ESSENTIAL HYPERTENSION		03-655-67
460 -942 GENERALIZED ARTERIOSCLEROSIS		03-655-67A
477 -942.5 CEREBRAL HEMORRHAGE, ARTERIOSCLEROTIC		03-655-67B
DATA REVISED 10-03-67		03-655-99

PATIENT 03-656
DECEASED

BORN 01-06-93

03-656-01
03-656-02
03-656-02A
03-656-03
03-656-05

FEMALE

DECEASED 07-19-40
DEATH CERT. NO.
INTERMENT

AUTOPSY NONE

PERU CITY CEMETERY, PERU, ILL.

03-656-06
03-656-07
03-656-08

CAUSES OF DEATH

MALIGNANT HYPERTENSION,
MASSIVE CEREBRAL HEMORRHAGE,
CHRONIC GLOMERULAR NEPHRITIS,
MYOCARDITIS

03-656-09
03-656-09A
03-656-09B
03-656-09C

SOURCE OF CASE

SEARCH BY CEM

03-656-10

EXPOSURE

DIAL PAINTER 01

03-656-12

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.

03-656-13

460 -533 HYPERTENSIVE VASCULAR DISEASE
477 -533.5 CEREBRAL HEMORRHAGE, DUE TO HYPERTENSION
712 -100.0 ACUTE GLOMERULONEPHRITIS, CHRONIC

03-656-67
03-656-67A
03-656-67B

DATA REVISED 04-30-68

03-656-99

PATIENT	03-657	BORN	09-30-06	03-657-01
	DECEASED			03-657-02
				03-657-02A
	FEMALE			03-657-05
OTHER PERTINENT NOS.	MIT 01-002			03-657-05A
	AUB CASE 2			03-657-05B
DECEASED	01-02-39			03-657-06
	DEATH CERT. NO.	AUTOPSY (LAB EXAM)		03-657-07
	INTERMENT ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS			03-657-08
CAUSES OF DEATH	SPLENIC LEUKEMIA			03-657-09
	RENAL INSUFFICIENCY (DEATH CERT.)			03-657-09A
SOURCE OF CASE	KNOWN FROM LITERATURE			03-657-10
LITERATURE CITATION				03-657-11
	EVANS, AM.J.ROENT. 37,368 (MARCH 1937).			03-657-11A
	AUB, ET AL, MEDICINE 31,221 (SEPT. 1952). CASE 2.			03-657-11B
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-657-11C
	RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-657-11D
EXPOSURE	DIAL PAINTER 01			03-657-12
SOURCE	DIAL PAINTER, RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-657-13
	ASSUMED WORK PERIOD 07-01-1922 TO 07-01-1936			03-657-13*
	22.57 YEARS OF AGE WHEN FIRST EMPLOYED.			03-657-13Z
MEDICAL HISTORY				03-657-20
	PATIENT REPORTED TO HAVE DEVELOPED SPLENIC LEUKEMIA, CONFIRMED			03-657-20A
	BY LABORATORY ANALYSIS ACCORDING TO DEATH CERTIFICATE.			03-657-20B
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS				03-657-27
	07-01-36	18.0 UCI TOTAL	EVANS A	03-657-27A
X-RAY EXAMINATION				03-657-30
	COMPLETE SKELETAL SURVEY NOT DONE. FILMS AVAIL. FROM THESE DATES.			03-657-30A
	01-19-35, 08-13-35			03-657-30B
	11-12-36, 11-13-36, 11-14-36, 12-18-36			03-657-30B
	02-01-37, 02-08-37, 03-02-37, 03-05-37, 11-13-37			03-657-30B
	11-12-39			03-657-30B
	ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.			03-657-30C
CLINICAL LABORATORY FINDINGS	NOT DONE			03-657-40
502 -822F	CHRONIC GRANULOCYTIC LEUKEMIA			03-657-66
BLOOD DYSCRASIAS	SPLENIC LEUKEMIA 1935			03-657-65
DATA REVISED	02-09-68			03-657-99

PATIENT 03-658	BORN 02-04-07	03-658-01
DECEASED		03-658-02
		03-658-02A
		03-658-03
FEMALE		03-658-05
DECEASED 07-27-38		03-658-07
DEATH CERT. NO.		03-658-07
INTERMENT ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS		03-658-08
CAUSES OF DEATH RADIUM POISONING AND BREAKING DOWN OF BONES		03-658-09
AND BLOOD (DEATH CERT.)		03-658-09A
SOURCE OF CASE	SEARCH BY CEM	03-658-10
LITERATURE CITATION		03-658-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-658-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-658-11B
EXPOSURE	DIAL PAINTER 01	03-658-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.		03-658-13
BLOOD DYSCRASIAS	APLASTIC ANEMIA 1938	03-658-65
500 -7901.9 APLASTIC ANEMIA		03-658-66
2XX -4722.1 NECROSIS OF BONE DUE TO RADIUM		03-658-66A
DATA REVISED 11-08-67		03-658-99

PATIENT 03-659	BORN 07-02-08	03-659-01
DECEASED		03-659-02
		03-659-02A
FEMALE		03-659-05
DECEASED 01-06-38		03-659-06
DEATH CERT. NO.	AUTOPSY (LAB EXAM)	03-659-07
INTERMENT ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS		03-659-08
CAUSES OF DEATH	SPLENIC LEUKEMIA	03-659-09
LITERATURE CITATION		03-659-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-659-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-659-11B
EXPOSURE	DIAL PAINTER 01	03-659-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.		03-659-13
MEDICAL HISTORY		03-659-20
BLOOD COUNT 70,000, TEST MADE WHILE PATIENT WAS EMPLOYED BY		03-659-20A
LUMINOUS PROCESSES, INC. DIAGNOSIS OF SPLENIC LEUKEMIA CONFIRMED		03-659-20B
BY LAB TEST IN 1935 AND BY EXAMINATION BY RJH OF 1935 BLOOD SMEAR.		03-659-20C
SPECIMENS AVAILABLE		03-659-50
11-28-34 BLOOD SMEAR, MYELOID LEUKEMIA	ANL	03-659-50A
BLOOD DYSCRASIAS	SPLENIC LEUKEMIA 1934	03-659-65
502 -822F	CHRONIC GRANULOCYTIC LEUKEMIA	03-659-66
DATA REVISED 04-30-68		03-659-99

PATIENT 03-660	BORN 02-05-07	03-660-01
DECEASED		03-660-02
		03-660-02A
		03-660-03
FEMALE		03-660-05
DECEASED 02-25-36		03-660-06
DEATH CERT. NO.	AUTOPSY NONE	03-660-07
INTERMENT OTTAWA AVE. CEMETERY, OTTAWA, ILLINOIS		03-660-08
CAUSES OF DEATH HEMORRHAGE FROM SPINDLE-CELL SARCOMA OF NECK		03-660-09
SOURCE OF CASE	SEARCH BY CEM	03-660-10
LITERATURE CITATION		03-660-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-660-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-660-11B
EXPOSURE	DIAL PAINTER 01	03-660-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL. WORKED AS DIAL PAINTER FOR		03-660-13
ABOUT 6 YEARS, PROBABLY 1923 TO 1925.		03-660-13A
MEDICAL HISTORY AT AGE OF 22, PATIENT WAS SEEN AT MAYO CLINIC IN		03-660-20
SEPT. 1929, SHE COMPLAINED OF MUSCULAR ACHES AND PAINS AND JOINT		03-660-20A
PAINS OF TWO YEARS DURATION. TWO RADIUM EMANATION TESTS WERE DONE		03-660-20B
ON PATIENT'S BLOOD, THE FINAL OPINION WAS THAT THIS PATIENT HAD		03-660-20C
LATE RADIUM EFFECTS ON HER BONES. SHE RETURNED IN FEB. 1930 WITH		03-660-20D
JAW TROUBLE FOR WHICH AN INFECTED MCLAR WAS REMOVED.		03-660-20E
(FROM CLINICAL HISTORY OF PATIENT, MAYO CLINIC.)		03-660-20F
GAMMA-RAY MEASUREMENTS	NOT DONE	03-660-25
X-RAY EXAMINATION		03-660-30
TEETH, SKULL AND PELVIS		03-660-30A
09-29, 02-03-30 MAYO CLINIC, ROCHESTER, MINN.		03-660-30B
PPF IRREGULAR AREAS OF DESTRUCTION REVEALED IN EACH ILIUM AND		03-660-30D
THROUGHOUT THE SKULL, MAXILLA AND MANDIBLE.		03-660-30E
CLINICAL LABORATORY FINDINGS		03-660-40
09- -29 HG 13.3 HTC RBC		03-660-40A
WBC 5500		03-660-40B
MALIGNANT TUMOR SPINDLE-CELL SARCOMA, NECK 1936		03-660-60
030 -879 SARCOMA OF THE NECK		03-660-66
DATA REVISED 04-30-68		03-660-99

PATIENT 03-661	BORN 06-01-06	03-661-01
DECEASED		03-661-02
		03-661-02A
		03-661-03
FEMALE		03-661-05
DECEASED 05-20-34		03-661-06
DEATH CERT. NO.	AUTOPSY NONE	03-661-07
INTERMENT ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS		03-661-08
CAUSES OF DEATH	GENERALIZED SARCOMA	03-661-09
SOURCE OF CASE	SEARCH BY CEM	03-661-10
LITERATURE CITATION		03-661-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-661-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-661-11B
EXPOSURE	DIAL PAINTER 01	03-661-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.	03-661-13
MEDICAL HISTORY		03-661-20
ARM AMPUTATED PRIOR TO DEATH. PHYSICIAN, DR. ROSWELL T. PETTIT.		03-661-20A
MALIGNANT TUMOR	GENERALIZED SARCOMA 1934	03-661-60
DATA REVISED 04-30-68		03-661-99

PATIENT 03-662	BORN 04-29-01	03-662-01
DECEASED		03-662-02
		03-662-02A
		03-662-03
FEMALE		03-662-05
DECEASED 11-17-46		03-662-06
DEATH CERT. NO.	AUTOPSY NONE	03-662-07
INTERMENT PERU CITY CEMETERY, PERU, ILLINOIS		03-662-08
CAUSES OF DEATH	PULMONARY EDEMA,	03-662-09
	MYOCARDITIS,	03-662-09A
	CHRONIC NEPHRITIS,	03-662-09B
	APLASTIC ANEMIA	03-662-09C
SOURCE OF CASE	SEARCH BY CEM	03-662-10
LITERATURE CITATION		03-662-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-662-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-662-11B
EXPOSURE	DIAL PAINTER 01	03-662-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS.		03-662-13
BLOOD DYSCRASIAS	APLASTIC ANEMIA 1946	03-662-65
430 -930	MYOCARDITIS, ACUTE, ISOLATED, DUE TO UNKNOWN CAUSE	03-662-67
500 -7501.9	APLASTIC ANEMIA	03-662-67A
712 -100.0	ACUTE GLOMERULONEPHRITIS, CHRONIC	03-662-67B
DATA REVISED 04-30-68		03-662-99

PATIENT 03-663	BORN 09-28-05	03-663-01
DECEASED		03-663-02
FEMALE		03-663-05
DECEASED 12-10-31		03-663-06
DEATH CERT.NO.	AUTOPSY NONE	03-663-07
INTERMENT	OTTAWA AVE. CEMETERY, OTTAWA, ILLINOIS	03-663-08
CAUSES OF DEATH	BRONCHOPNEUMONIA	03-663-09
SOURCE OF CASE	SEARCH BY CEM	03-663-10
EXPOSURE	DIAL PAINTER 01	03-663-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.	03-663-13
361 -Y10	BRONCHOPNEUMONIA, UNDETERMINED CAUSE	03-663-67
DATA REVISED 10-11-67		03-663-99

PATIENT	03-664	BORN	10-21-02	03-664-01
	DECEASED			03-664-02
				03-664-02A
	FEMALE			03-664-03
				03-664-05
DECEASED	01-16-31			03-664-06
DEATH CERT. NO.		AUTOPSY	NONE	03-664-07
INTERMENT	PERU CITY CEMETERY, PERU, ILLINOIS			03-664-08
CAUSES OF DEATH	ACUTE DILATATION HEART, BASED ON HYPERTENSION AND MYOCARDITIS			03-664-09
				03-664-09A
SOURCE OF CASE	SEARCH BY CEM			03-664-10
EXPOSURE	DIAL PAINTER 01			03-664-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-664-13
400 -533	HYPERTENSIVE CARDIOVASCULAR DISEASE			03-664-67
430 -930	MYOCARDITIS, ACUTE, ISOLATED, DUE TO UNKNOWN CAUSE			03-664-67A
DATA REVISED	10-12-67			03-664-99

PATIENT	03-665	BORN	01-11-09	03-665-01
	DECEASED			03-665-02
				03-665-02A
				03-665-03
	FEMALE			03-665-05
DECEASED	02-22-30			03-665-06
	DEATH CERT.NO.	AUTOPSY	NONE	03-665-07
	INTERMENT	OTTAWA AVE. CEMETERY,	OTTAWA, ILLINOIS	03-665-08
CAUSES OF DEATH	SARCOMA OF RETROPERITONEAL LYMPH GLANDS			03-665-09
SCURCE OF CASE	SEARCH BY CEM			03-665-10
LITERATURE CITATION				03-665-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BCNE-SEEKING			03-665-11A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-665-11B
EXPOSURE	DIAL PAINTER	01		03-665-12
SCURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-665-13
MEDICAL HISTORY				03-665-20
	PATIENT'S JAWBONE DISINTEGRATED PRIOR TO DEATH. PHYSICIAN,			03-665-20A
	DR. B. EDGCOMB.			03-665-20B
559 -879	SARCOMA, RETROPERITONEAL LYMPH GLANDS			03-665-66
MALIGNANT TUMOR	SARCOMA OF RETROPERITONEAL LYMPH GLANDS 1930			03-665-60
DATA REVISED	11-08-67			03-665-99

PATIENT	03-666	BORN	12-20-05	03-666-01
	DECEASED			03-666-02
	FEMALE			03-666-02A
				03-666-05
OTHER PERTINENT NOS.	AMBH			03-666-05A
DECEASED	08-13-29			03-666-06
DEATH CERT. NO.		AUTOPSY	YES	03-666-07
INTERMENT	ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS			03-666-08
CAUSES OF DEATH	DIPHThERIA, BRONCHOPNEUMONIA			03-666-09
SOURCE OF CASE	SEARCH BY CEM			03-666-10
EXPOSURE	DIAL PAINTER 01			03-666-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-666-13
FAMILY HISTORY				03-666-15
NEVER MARRIED				03-666-15A
MEDICAL HISTORY				03-666-20
(INFORMATION TAKEN FROM AUTOPSY REPORT, AUTOPSY WAS PERFORMED BY DR. AARON ARKIN, OF THE CHICAGO LABORATORIES, 25 E. WASHINGTON ST., CHICAGO 20, ILLINOIS.) IN 1926 PATIENT HAD SEVERAL X-RAY EXAMINATIONS AND BLOOD TESTS. HAD TOOTH EXTRACTED, SUBSEQUENT DESTRUCTION OF BONE TISSUE DEVELOPED, THE JAW BONE WAS HONEY-COMBED, AND THIS CONDITION NEVER CLEARED UP. (THE AUTOPSY, HOWEVER, REVEALED NORMAL BONE TISSUE FROM THE UPPER JAW, WITH NO EVIDENCE OF NECROSIS OR OSTEOMYELITIS.) A RADIUM TEST WAS TAKEN APRIL OR MAY, 1928, AND AFTER THAT SHE WAS PLACED UNDER OBSERVATION. SHE WAS SENT TO THE U OF CHICAGO CLINICS FOR EXAMINATION WHERE THE PHYSICIANS TOLD HER TO CHANGE EMPLOYMENT. SHE WORKED UNTIL AUGUST 6, 1929 WHEN SHE BECAME ILL AND WAS SENT BY THE RADIUM DIAL CO. TO THE ILLINOIS VALLEY HOSP., OTTAWA, ILL. PHYSICIANS WHO ATTENDED HER-- DR. O'NEILL, DR. R.T. PETTIT, DR. BLUE. TEST FOR DIPHThERIA MADE AUG. 10 WAS POSITIVE, PATIENT DIED AUG. 13, 1929.				03-666-20A 03-666-20B 03-666-20C 03-666-20D 03-666-20E 03-666-20F 03-666-20G 03-666-20H 03-666-20I 03-666-20J 03-666-20K 03-666-20L 03-666-20M 03-666-20N 03-666-20O 03-666-20P
318	-125	DIPHThERIA, NASOPHARYNGEAL		03-666-67
361	-Y10	BRONCHOPNEUMONIA, UNDETERMINED CAUSE		03-666-67A
DATA REVISED	11-08-67			03-666-99

PATIENT	03-667	BORN	12-10-77	03-667-01
	DECEASED			03-667-02
				03-667-02A
	FEMALE			03-667-05
DECEASED	07-13-27			03-667-06
DEATH CERT.NO.		AUTOPSY	NONE	03-667-07
INTERMENT	MT. OLIVET CEMETERY, CHICAGO, ILLINOIS			03-667-08
CAUSES OF DEATH	CARCINOMA OF BOWELS, RECTUM			03-667-09
SOURCE OF CASE	SEARCH BY CEM			03-667-10
LITERATURE CITATION				03-667-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING			03-667-11A
	RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).			03-667-11B
EXPOSURE	DIAL PAINTER 01			03-667-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-667-13
MALIGNANT TUMOR	CARCINOMA OF RECTUM 1927			03-667-60
668 -814	ADENOCARCINOMA OF THE COLON AND RECTUM			03-667-67
DATA REVISED	11-08-67			03-667-99

PATIENT	03-668	BORN	03-02-03	03-668-01
	DECEASED			03-668-02
	FEMALE			03-668-02A
				03-668-05
DECEASED	09-06-27			03-668-06
DEATH CERT.NO.		AUTOPSY	NONE	03-668-07
INTERMENT	ST. COLUMBA CEMETERY, OTTAWA, ILLINOIS			03-668-08
CAUSES OF DEATH	STREPTOCOCCUS SEPTICAEMIA, INFECTION OF FACE			03-668-09
SOURCE OF CASE	SEARCH BY CEM			03-668-10
EXPOSURE	DIAL PAINTER 01			03-668-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-668-13
013 -102	STREPTOCOCCAL SEPTICEMIA			03-668-67
13027-102	ERYSIPELAS OF THE FACE			03-668-67A
DATA REVISED	10-12-67			03-668-99

PATIENT	03-669	BORN	10-13-06	03-669-01
	DECEASED			03-669-02
				03-669-02A
				03-669-03
	FEMALE			03-669-05
DECEASED	05-15-28			03-669-06
	DEATH CERT.NO.			03-669-07
INTERMENT	RANSOM CEMETERY, RANSOM, ILL.			03-669-08
CAUSES OF DEATH	MYOCARDITIS, ACUTE NEPHRITIS			03-669-09
SOURCE OF CASE	SEARCH BY CEM			03-669-10
EXPOSURE	DIAL PAINTER 01			03-669-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-669-13
712 -100	ACUTE GLOMERULONEPHRITIS			03-669-67
DATA REVISED	10-13-67			03-669-99

PATIENT	03-670	BORN	01-26-04	03-670-01
	DECEASED			03-670-02
				03-670-02A
	FEMALE			03-670-05
DECEASED	09-06-24			03-670-06
	DEATH CERT.NO.			03-670-07
	INTERMENT	OAKWOOD MEMORIAL PARK, OTTAWA, ILLINOIS		03-670-08
CAUSES OF DEATH	PULMONARY TUBERCULOSIS			03-670-09
SOURCE OF CASE	SEARCH BY CEM			03-670-10
EXPOSURE	DIAL PAINTER 01			03-670-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-670-13
360 -123	PULMONARY TUBERCULOSIS			03-670-67

PATIENT 03-671 DECEASED	BORN 01-28-06	03-671-01 03-671-02 03-671-02A 03-671-03
OTHER PERTINENT NOS.	CASE 302	03-671-05A
DECEASED 01-06-53 DEATH CERT. NO. INTERMENT	AUTOPSY YES ST. JOSEPH'S CEMETERY, BUREAU CO., ILL.	03-671-06 03-671-07 03-671-08
CAUSES OF DEATH	PULMONARY HEMORRHAGE, SARCOMA LEFT LUNG, SARCOMA LEFT KNEE (DEATH CERT.) FIBROSARCOMA, LEFT FEMUR (ACTUAL)	03-671-09 03-671-09A 03-671-09B 03-671-09C
LITERATURE CITATION		03-671-11
NORRIS, ET AL, AM.J.ROENT. 73,785 (MAY 1955). CASE 302.		03-671-11A
ROWLAND, ET AL, RADIATION RESEARCH 10,323 (1959). CASE 302.		03-671-11B
ROWLAND, ET AL, RADIATION RESEARCH 11,299 (1959). CASE 302.		03-671-11C
ROWLAND, RADIOISOTOPES IN THE BIOSPHERE, CALDECOTT AND SNYDER, EDS., U OF MINNESOTA, MINNEAPOLIS (1960). CASE 302.		03-671-11D 03-671-11E
ROWLAND, ANL-6199 (JUNE 1960) PP. 36-43. CASE 302.		03-671-11F
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-671-11G 03-671-11H
EXPOSURE	DIAL PAINTER 01	03-671-12
SOURCE RADIUM DIAL CO., PERU, ILL., 1922, PERIOD OF ABOUT 2 MCNTHS.		03-671-13
ASSUMED WORK PERIOD 07-01-1922 TO 09-01-1922		03-671-13*
16 YEARS OF AGE WHEN FIRST EMPLOYED.		03-671-13Z
FAMILY HISTORY		03-671-15
MARRIED 09-06-26		03-671-15A
MEDICAL HISTORY		03-671-20
IN 1932 PATIENT HAD DULL ACHING PAIN IN LEGS FOR 2 MONTHS, THEN		03-671-20A
SHARP PAIN IN LEFT HIP, WHICH WAS RELIEVED BY BODY CAST, PATIENT		03-671-20B
WAS PREGNANT AT TIME OF HIP PAIN. PAIN ALLEVIATED FOR SEVERAL		03-671-20C
YEARS. PAIN BEGAN AGAIN IN RIGHT HIP IN 1945. RESECTION OF		03-671-20D
NECROTIC FEMORAL HEAD PERFORMED BY DR. FREMONT CHANDLER, RESEARCH		03-671-20E
AND EDUCATIONAL HOSPITAL, U. OF ILLINOIS, CHICAGO, ILL., VITALLI-		03-671-20F
UM CUP INSERTED BUT REMOVED YEAR LATER. IN OCTOBER 1951 AND AGAIN		03-671-20G
IN JANUARY 1952, PATIENT SUSTAINED FRACTURES OF LEFT FEMUR AFTER		03-671-20H
MINIMAL TRAUMA. PATIENT ALSO NOTED DEEP, BORING PAIN IN RIGHT		03-671-20I
HUMERUS AND LEFT LEG. IN 1946 PATIENT BEGAN TO HAVE PAIN IN MAN-		03-671-20J
DIBLE AND TEETH. TEETH FRACTURED EASILY AT JUNCTION OF CROWN AND		03-671-20K
ROOTS. HAD LOST ALL BUT 5 MANDIBULAR TEETH AND ALL BUT 1 MAXIL-		03-671-20L
LARY TEETH. IN 1952 PATIENT DEVELOPED SARCOMA OF LEFT MID-		03-671-20M
FEMUR, WHICH WAS AMPUTATED (DR. CHANDLER). PATIENT DIED OF		03-671-20N
METASTATIC DISEASE. COMPLETE AUTOPSY PERFORMED ILL. R. E. HCSP.,		03-671-20O 03-671-20P
CHICAGO.		
COMPUTED TOTAL-BODY RADIUM		03-671-27
02-12-52 1.97 UCI 1.85 UCI 3.82 UCI TOTAL NORRIS A		03-671 27A

X-RAY EXAMINATION		03-671-30
COMPLETE SKELETAL SURVEY		03-671-30A
10-51	RYBURN KING HOSP., OTTAWA, ILL.	03-671-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION.		03-671-30C
PPF ASEPTIC NECROSIS OF HEAD OF RIGHT FEMUR.		03-671-30D
RADIOCHEMICAL ANALYSIS		03-671-51
FOOT		03-671-51A
06-58	1.51 G ASH 2984 UUG/G ASH RA-226 9.76 UUCI/G ASH TH-228	03-671-51B
06-58	1.57 G ASH 2690 UUG/G ASH RA-226 9.85 UUCI/G ASH TH-228	03-671-51C
AUTORADIOGRAPHIC ANALYSIS		03-671-53
10-61	TIBIA	03-671-53A
	MAXIMUM HOT SPOT 20 PCI RA226/MG BONE	03-671-53B
	AVERAGE DIFFUSE 0.54 PCI RA226/MG BONE	03-671-53C
	CALCULATED UNIFORM LABEL 0.67 PCI RA226/MG BONE	03-671-53D
	HOT SPOT TO DIFFUSE RATIO 37	03-671-53E
	DIFFUSE TO UNIFORM LABEL 0.81	03-671-53F
OTHER ANALYSES		03-671-55
GAMMA-RAY MEASUREMENT IN PRESSURIZED ION CHAMBER NORRIS		03-671-55A
BONE FROM AMPUTATION, 10-52 4.08 UCI (EST. TOTAL BODY)		03-671-55B
MALIGNANT TUMOR FIBROSARCOMA, LEFT FEMUR 1953		03-671-60
235 -20	MID-THIGH AMPUTATION OF FEMUR	03-671-66
23513-544	INSERTION OF PROSTHESIS, HEAD OF FEMUR	03-671-66A
23513-4722.1	ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR (RIGHT)	03-671-66B
2352 -416	FRACTURE OF SHAFT OF FEMUR (LEFT)	03-671-66C
23523-870F	FIBROSARCOMA, DISTAL THIRD OF THE FEMUR (LEFT)	03-671-66D
AUTOPSY SLIDE AT ANL		03-671-72
DATA REVISED 05-07-68		03-671-99

PATIENT 03-672

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

DIAL PAINTER 01

BREATH MEASUREMENT

11-21-60 EM-222

0.010 UCI

BREATH RADON BOTTLE

HFL

DATA REVISED 10-16-67

03-672-01

03-672-02

03-672-03

03-672-05

03-672-10

03-672-12

03-672-26

03-672-26A

03-672-99

PATIENT 03-673

FEMALE

SOURCE OF CASE

SEARCH BY CEM

EXPOSURE

LAB WORKER, INSPECTOR 02

SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS, WORKED 2 MONTHS AS
INSPECTOR.

BREATH MEASUREMENT

11-22-60

EM-222

0.040 UCI

BREATH RADON BOTTLE

HFL

DATA REVISED 11-08-67

03-673-01
03-673-02
03-673-03
03-673-05

03-673-10

03-673-12

03-673-13

03-673-13A

03-673-26

03-673-26A

03-673-99

PATIENT 03-674	BORN 04-15-08	03-674-01
		03-674-02
		03-674-03
FEMALE		03-674-05
SOURCE OF CASE	SEARCH BY CEM	03-674-10
EXPOSURE	DIAL PAINTER 01	03-674-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., LESS THAN 1 YEAR, 1924-1925.		03-674-13
(MORE LIKELY 1925-26). PAINTED NUMERALS ON DIALS, POINTED BRUSH		03-674-13A
IN MOUTH. COMPANY CHANGED TO GLASS PENS DURING PERIOD WORKED.		03-674-13B
NEVER PAINTED ANY PART OF OWN PERSON.		03-674-13C
ASSUMED WORK PERIOD 05-01-1925 TO 03-01-1926		03-674-13*
17.04 YEARS OF AGE WHEN FIRST EMPLOYED.		03-674-13Z
FAMILY HISTORY		03-674-15
MARRIED 1930	PARA 3	03-674-15A
HUSBAND	1904 GRAVIDA 3	03-674-15B
	L W	
CHILDREN	MALE 1932	03-674-16
	FEMALE 1937	03-674-16A
	MALE 1947	03-674-16B
	L W (RICKETS AT BIRTH)	
MEDICAL HISTORY.		03-674-20
D AND C 1946, CAESARIAN SECTION TERMINATED LAST PREGNANCY 1947.		03-674-20A
NO SERIOUS ILLNESSES EXCEPT FOR ELEVATED BLOOD PRESSURE. NO FRAC-		03-674-20B
TURES. INQUIRY BY SYSTEMS--OCCIPITAL HEADACHES FOR PAST 2 YEARS		03-674-20C
AND OCCASIONAL SWOLLEN ANKLES. ALL TEETH EXTRACTED EXCEPT FOR		03-674-20D
CANINE TEETH IN LOWER JAW, NOW WEARS UPPER DENTURE. (11-18-60)		03-674-20E
GAMMA-RAY MEASUREMENTS		03-674-25
11-18-60	RAB,RAC 0.003 UCI	03-674-25A
	HGS 1 TILTING CHAIR CEM	
COMPUTED TOTAL-BODY RADIUM		03-674-27
11-18-60	0.003 UCI	03-674-27A
	0.009 UCI TOTAL	
	0.31	
X-RAY EXAMINATION		03-674-30
PARTIAL SKELETAL SURVEY		03-674-30A
11-18-60	ANL X-RAY NO. R-216 LOC. ANL	03-674-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.		03-674-30C
PPF	NONE.	03-674-30D
CLINICAL LABORATORY FINDINGS		03-674-40
11-18-60	HG 9.0 HTC	03-674-40A
	RBC 5.30	
WBC 9800	DIFF. P 66 ST L 27 M 5 E 2 B	03-674-40B
47X -X30	ESSENTIAL HYPERTENSION	03-674-67
785 -104	DILATATION AND CURETTAGE OF THE UTERUS	03-674-67A
DATA REVISED 10-16-67		03-674-99

PATIENT 03-675	BORN 05-24-96	03-675-01
DECEASED		03-675-02
		03-675-02A
		03-675-03
FEMALE		03-675-05
DECEASED 02-05-60		03-675-06
DEATH CERT.NO.	AUTOPSY NONE	03-675-07
INTERMENT	ST MARY'S CEMETERY, UTICA, ILLINOIS	03-675-08
CAUSES OF DEATH	PARANASAL SINUS CARCINOMA (DEATH CERT.)	03-675-09
	RHABDOMYOSARCOMA, RIGHT MAXILLA (ACTUAL)	03-675-09A
SOURCE OF CASE	SEARCH BY CEM	03-675-10
LITERATURE CITATION		03-675-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING	03-675-11A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).	03-675-11B
EXPOSURE	DIAL PAINTER 01	03-675-12
SOURCE	HISTORY AS DIAL PAINTER, DETAILS NOT KNOWN.	03-675-13
FAMILY HISTORY		03-675-15
	MARRIED 1928	03-675-15A
	HUSBAND DECEASED 02-27-58	03-675-15B
MEDICAL HISTORY		03-675-20
	IN ABOUT NOV. 1958 PATIENT BEGAN TO HAVE PAIN IN RIGHT EYE, EAR,	03-675-20A
	AND CHEEK, ACCOMPANIED BY NUMBNESS IN THIS AREA. IN JAN. 1959	03-675-20B
	SHE SAW SEVERAL PHYSICIANS IN SAN FRANCISCO WHO TREATED HER FOR	03-675-20C
	SINUSITIS. IN FEB. 1959 THE RIGHT NASAL PASSAGE WAS OBSTRUCTED	03-675-20D
	WITH A SOFT TISSUE MASS LOCATED IN THE RIGHT NASOPHARYNX. AT	03-675-20E
	SURGERY THIS MASS WAS FOUND TO EXTEND INTO THE SPHENOID, ETHMOID,	03-675-20F
	AND MAXILLARY SINUSES (RIGHT). THE PATHOLOGIST REPORTED THAT THE	03-675-20G
	EXCISED TUMOR WAS A RHABDOMYOSARCOMA. THE PATIENT RETURNED TO	03-675-20H
	HER HOME AND DIED ON FEB. 5, 1960. (FROM MEDICAL RECORD)	03-675-20I
GAMMA-RAY MEASUREMENTS	NOT DONE	03-675-25
X-RAY EXAMINATION		03-675-30
	PARANASAL SINUSES	03-675-30A
	02-28-59 ST. FRANCIS MEM. HOSP., SAN FRANCISCO, CALIF.	03-675-30B
	SOFT TISSUE MASS INVOLVING THE RIGHT SIDE OF NOSE AND RIGHT MAX-	03-675-30C
	ILLARY SINUS WITH LOCAL BONE DESTRUCTION. THERE IS A DIFFUSE	03-675-30D
	MIXED SCLEROTIC AND RAREFACTIVE BONE CHANGE INVOLVING MOST OF	03-675-30E
	THE FACIAL BONES APPARENTLY SECONDARY TO MALIGNANT INVOLVEMENT.	03-675-30F
	CHEST, P-A AND LATERAL STUDIES	03-675-31A
	02-28-59 ST. FRANCIS MEM. HOSP., SAN FRANCISCO, CALIF.	03-675-31B
	RIB CAGE AND SHOULDER GIRDLE SHOW DIFFUSE MIXED RAREFACTIVE	03-675-31C
	SCLEROTIC BONE CHANGE STRONGLY SUGGESTING PRESENCE OF WIDESPREAD	03-675-31D
	METASTATIC NEOPLASM, WHICH MAY WELL BE SECONDARY TO TUMOR OF THE	03-675-31E
	NASAL PHARYNX.	03-675-31F

SKULL			03-675-32A
03-04-59	ST. FRANCIS MEM. HOSP., SAN FRANCISCO, CALIF.		03-675-32B
THE DIFFUSE PRODUCTIVE AND LYTIC CHANGES INVOLVING THE MANDIBLE,			03-675-32C
MAXILLA AND SPHENOIDS ARE AGAIN NOTED. THE SOFT TISSUE MASS IN			03-675-32D
THE RIGHT SIDE OF THE NOSE AND APPARENTLY ALSO INVOLVING THE			03-675-32E
PARANASAL SINUSES ON THIS SIDE SEEM TO EXTEND POSTERIORLY IN THE			03-675-32F
NASOPHARYNX AND PROBABLY INTO THE PTERYGOID FOSSA. THE TABLES OF			03-675-32G
THE CRANIUM ARE PERHAPS SOMEWHAT THICKENED, BUT DO NOT APPEAR TO			03-675-32H
BE INVOLVED IN THIS PROCESS. NO DEFINITE EVIDENCE OF METASTASES			03-675-32I
IN THE FLAT BONES OF THE SKULL.			03-675-32J
LUMBAR SPINE, PELVIS AND PROXIMAL FEMORA			03-675-33A
03-04-59	ST. FRANCIS MEM. HOSP., SAN FRANCISCO, CALIF.		03-675-33B
WIDESPREAD MIXED OSTEOLASTIC AND OSTEOLYTIC LESIONS INVOLVING			03-675-33C
THE FACIAL BONES, MANDIBLES, PELVIS AND PROXIMAL FEMORA.			03-675-33D
THESE HAVE THE APPEARANCE OF METASTASES PRESUMABLY FROM THE			03-675-33E
RHABDOMYOSARCOMA OF THE NASOPHARYNX.			03-675-33F
PARANASAL SINUSES, BASE OF SKULL			03-675-34A
11-24-59	BENJ. D. BRAUN, M.D.		03-675-34B
MARKED CLOUDING, RIGHT ANTRUM, RIGHT ETHMOID, AND RIGHT SIDE OF			03-675-34C
SPHENOID. BECAUSE OF BONE DESTRUCTION ADJACENT TO THESE STRUC-			03-675-34D
TURES, THE CLOUDING COULD BE CAUSED BY NEOPLASM. BONE DESTRUCTION,			03-675-34E
APPARENTLY DUE TO INVASION BY NEOPLASM, BASE OF SKULL IN MIDDLE			03-675-34F
FOSSA ON RIGHT SIDE AND PROBABLY ALSO IN THE PTERYGOID PROCESS			03-675-34G
AND QUESTIONABLY IN THE FLOOR OF THE RIGHT ANTRUM.			03-675-34H
CLINICAL LABORATORY FINDINGS	NOT DONE		03-675-40
SPECIMENS AVAILABLE			03-675-50
1 HISTOLOGIC SLIDE OF TUMOR	ACRH	RJH	03-675-50A
MALIGNANT TUMOR	RHABDOMYOSARCOMA, RIGHT MAXILLA	1960	03-675-60
321 -867F	RHABDOMYOSARCOMA OF THE MAXILLARY SINUS		03-675-66
DATA REVISED 11-08-67			03-675-99

PATIENT	03-676					03-676-01
						03-676-02
	FEMALE					03-676-03
						03-676-05
SOURCE OF CASE		SEARCH BY CEM				03-676-10
EXPOSURE		DIAL PAINTER 01				03-676-12
SOURCE HISTORY AS DIAL PAINTER, RADIUM DIAL CO., OTTAWA, ILLINOIS, DETAILS NOT KNOWN.						03-676-13
						03-676-13A
FAMILY HISTORY		NOT ELICITED				03-676-15
MEDICAL HISTORY		NOT ELICITED				03-676-20
GAMMA-RAY MEASUREMENTS						03-676-25
06-21-63	RAB,RAC	0.520 UCI	FIELD MEASUREMENT	CEM		03-676-25B
BREATH MEASUREMENTS						03-676-26
01-27-61	EM-222	1.200 UCI	RADON BREATH BOTTLE	HFL		03-676-26A
COMPUTED TOTAL-BODY RADIUM						03-676-27
06-21-63	0.520 UCI		1.700 UCI TOTAL	0.31		03-676-27B
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON						03-676-28
01-27-61	1.200 UCI		1.740 UCI TOTAL	0.69		03-676-28B
X-RAY EXAMINATION		NOT DONE				03-676-30
CLINICAL LABORATORY FINDINGS		NOT DONE				03-676-40
DATA REVISED 11-08-67						03-676-99

PATIENT	03-677				03-677-01
	DECEASED				03-677-02
	MALE				03-677-02A
					03-677-05
DECEASED	08-31-65				03-677-06
CAUSES OF DEATH	AUTOMOBILE ACCIDENT				03-677-09
SOURCE OF CASE		SEARCH BY CEM			03-677-10
EXPOSURE		LAB WORKER, SPRAYER	02		03-677-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.				03-677-13
BREATH MEASUREMENT					03-677-26
	01-27-61	EM-222	0.230 UCI	BREATH RADON BOTTLE	HFL 03-677-26A
TOTAL-BODY RADIUM COMPUTED FROM BREATH RADON					03-677-28
	01-27-61	0.230 UCI	0.333 UCI TOTAL	0.69	03-677-28
SPECIMENS AVAILABLE					03-677-50
	09-01-65	PORTION OF FEMUR			03-677-50A
DATA REVISED	05-07-68				03-677-99

PATIENT 03-678

MALE

SOURCE OF CASE

SEARCH BY CEM

BREATH MEASUREMENT

01-27-61 EM-222

0.160 UCI

BREATH RADON BOTTLE HFL

DATA REVISED 10-16-67

03-678-01

03-678-02

03-678-05

03-678-10

03-678-26

03-678-26A

03-678-99

PATIENT 03-679	BORN 11-15-10	03-679-01
		03-679-02
		03-679-03
FEMALE		03-679-05
SOURCE OF CASE	SEARCH BY CEM	03-679-10
EXPOSURE	DIAL PAINTER 01	03-679-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., DEC 26, 1929 TO MARCH 5, 1930.		03-679-13
PAINTED DIALS WITH MACHINES, NEVER USED BRUSHES. NEVER PAINTED		03-679-13A
ANY PART OF HER BODY.		03-679-13B
ASSUMED WORK PERIOD 12-26-1929 TO 03-05-1930		03-679-13*
19.11 YEARS OF AGE WHEN FIRST EMPLOYED.		03-679-13Z
FAMILY HISTORY		03-679-15
MARRIED 1931	PARA 3	GRAVIDA 3
HUSBAND	1908	L W
		03-679-15A
		03-679-15B
CHILDREN	MALE	L W
	FEMALE	L W
	MALE	L W
		03-679-16
		03-679-16A
		03-679-16B
MEDICAL HISTORY		03-679-20
TONSILLECTOMY 1920, COMPLETE HYSTERECTOMY 1952, COMPLETE		03-679-20A
THYROIDECTOMY 1954, EXCISION OF LIPOMA FROM BACK 1960. NO		03-679-20B
FRACTURES OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS REVEALS HEAD-		03-679-20C
ACHES ATTRIBUTED TO HYPERTENSION. ANNUAL EXAMINATION AT LOCAL		03-679-20D
TUBERCULOSIS SANATORIUM TO CHECK ON SHADOW FOUND 1946. TEETH IN		03-679-20E
EXCELLENT CONDITION, TWO WISDOM TEETH EXTRACTED AND PATIENT		03-679-20F
HAD ONLY ONE FILLING. (09-07-61)		03-679-20G
GAMMA-RAY MEASUREMENTS		03-679-25
09-07-61 KAB,RAC 0.018 UCI HGS 1 TILTING CHAIR CEM		03-679-25A
COMPUTED TOTAL-BODY RADIUM		03-679-27
09-07-61 0.018 UCI 0.057 UCI TOTAL 0.31		03-679-27A
X-RAY EXAMINATION		03-679-30
PARTIAL SKELETAL SURVEY		03-679-30A
09-07-61 ANL R-221 LOC. ANL		03-679-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-679-30C
PPF NONE.		03-679-30D
CLINICAL LABORATORY FINDINGS	NOT DONE	03-679-40
47X -X30 ESSENTIAL HYPERTENSION		03-679-67
634 -12 TONSILLECTOMY		03-679-67A
782 -12 HYSTERECTOMY, COMPLETE		03-679-67B
810 -12 THYROIDECTOMY, TOTAL		03-679-67C
DATA REVISED 10-16-67		03-679-99

PATIENT 03-680	BORN 06-09-06	03-680-01
DECEASED		03-680-02
		03-680-02A
		03-680-03
FEMALE		03-680-05
DECEASED 02-28-46		03-680-06
DEATH CERT. NO.	AUTOPSY NONE	03-680-07
INTERMENT	MT. CALVARY, SENECA, ILLINOIS	03-680-08
CAUSES OF DEATH	SARCOMA LEFT HUMERUS	03-680-09
SOURCE OF CASE	SEARCH BY CEM	03-680-10
LITERATURE CITATION		03-680-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-680-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-680-11B
EXPOSURE	DIAL PAINTER	03-680-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.	03-680-13
MEDICAL HISTORY		03-680-20
PATIENT ILL ABOUT 3 YEARS PRIOR TO DEATH. PHYSICIAN, DR. TIMOTHY		03-680-20A
MULLEN.		03-680-20B
MALIGNANT TUMOR	OSTEOGENIC SARCOMA, LEFT HUMERUS 1946	03-680-60
230 -876F	OSTEOGENIC SARCOMA OF THE HUMERUS (LEFT)	03-680-66
DATA REVISED 11-08-67		03-680-99

PATIENT 03-681					03-681-01
	FEMALE				03-681-02
					03-681-05
SOURCE OF CASE		SEARCH BY CEM			03-681-10
EXPOSURE		DIAL PAINTER 01			03-681-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINGIS, WORKED 6 WEEKS 1922.				03-681-13
BREATH MEASUREMENT					03-681-26
02-20-62	EM-222	0.010 UCI	BREATH RADON BOTTLE	HFL	03-681-26A
TOTAL-BODY RADIUM COMPUTED	FROM BREATH RADON				03-681-28
02-20-62	0.010 UCI	0.014 UCI	TOTAL	0.69	03-681-28A
DATA REVISED	05-07-68				03-681-99

PATIENT 03-682	BORN 11-07-07	03-682-01
		03-682-02
FEMALE		03-682-03
		03-682-05
SOURCE OF CASE	SEARCH BY CEM	03-682-10
LITERATURE CITATION		03-682-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-682-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-682-11B
EXPOSURE	DIAL PAINTER 01	03-682-12
SOURCE RADIUM DIAL CO., STREATOR, LATER OTTAWA, ILL., JUNE 1925		03-682-13
TO AUG. 1926. PAINTED DIALS FOR 2 MONTHS, THEN WORKED AS SUPER-		03-682-13A
VISOR AT STREATOR UNTIL PLANT CLOSED. SUBSEQUENTLY PAINTED DIALS		03-682-13B
AT OTTAWA FOR APPROX. 6 MONTHS. CANNOT REMEMBER POINTING BRUSH		03-682-13C
IN MOUTH, USED BLOTTER TO POINT BRUSH.		03-682-13D
ASSUMED WORK PERIOD 06-01-1925 TO 08-01-1926		03-682-13*
17.56 YEARS OF AGE WHEN FIRST EMPLOYED.		03-682-13Z
FAMILY HISTORY		03-682-15
MARRIED 1932	PARA 1 GRAVIDA 1	03-682-15A
CHILDREN	MALE 1935 L W	03-682-16
MEDICAL HISTORY		03-682-20
RIGHT MASTECTOMY, FEB. 1958, FOR MALIGNANT TUMOR, FOLLOWED BY		03-682-20A
DEEP X-RAY THERAPY TO BREAST AND OVARIES. APPENDECTOMY AND		03-682-20B
UTERINE REPAIR ABOUT 1942. SUPERFICIAL RADIUM THERAPY TO LEFT		03-682-20C
NECK FOR TREATMENT OF MCLE, WITH RESULTANT RADIODERMATITIS.		03-682-20D
NO FRACTURES. NO OTHER SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--		03-682-20E
ESSENTIALLY NEGATIVE EXCEPT FOR MODERATE OBESITY, OCCASIONALLY		03-682-20F
DYSPNEA, AND INTESTINAL POLYPS. DENTAL HISTORY--WEARS UPPER		03-682-20G
DENTURE, BUT LOWER TEETH ARE INTACT. (10-05-62)		03-682-20H
GAMMA-RAY MEASUREMENTS		03-682-25
10-05-62 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-682-25A
COMPUTED TOTAL-BODY RADIUM		03-682-27
10-05-62 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-682-27A
X-RAY EXAMINATION	NOT DONE	03-682-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-682-40
MALIGNANT TUMOR	CARCINOMA OF BREAST	03-682-60
110 -470	DERMATITIS ACTINICA, DUE TO X-RAYS	03-682-67
190 -14	RADICAL MASTECTOMY (RIGHT)	03-682-67A
190 -8091	ADENOCARCINOMA OF THE BREAST (RIGHT)	03-682-67B
661 -12	APPENDECTOMY	03-682-67C
DATA REVISED 11-08-67		03-682-99

PATIENT 03-683	BORN 06-30-06	03-683-01
		03-683-02
		03-683-03
		03-683-04
		03-683-04
		03-683-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-683-10
EXPOSURE	DIAL PAINTER 01	03-683-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 1 DAY ONLY 1923. PAINTED		03-683-13
DIALS. POINTED BRUSH IN MOUTH BUT TERMINATED EMPLOYMENT BECAUSE		03-683-13A
SHE DID NOT LIKE TASTE OF PAINT MATERIAL OR PIECE WORK.		03-683-13B
FAMILY HISTORY		03-683-15
MARRIED 1926		03-683-15A
MARRIED 1929	PARA 3 GRAVIDA 3	03-683-15B
CHILDREN	SON 1927 L W	03-683-16
	SON 1930 L W	03-683-16A
	SON 1933 L W	03-683-16B
MEDICAL HISTORY		03-683-20
OOPHORECTOMY AND SUSPENSION OF UTERUS 1937, HYSTERECTOMY 1953.		03-683-20A
FRACTURE OF LEFT FEMUR AND LEFT TIBIA IN CAR ACCIDENT 1935.		03-683-20B
NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS ESSENTIALLY NEGATIVE		03-683-20C
EXCEPT FOR NERVOUSNESS. DENTAL HISTORY--DOUBLE DENTURES FOR		03-683-20D
PAST YEAR, EXTRACTIONS BECAUSE OF PYORRHEA. (03-01-61)		03-683-20E
GAMMA-RAY MEASUREMENTS		03-683-25
03-01-61 RAB,RAC LESS THAN 0.0003 UCI VA LA TILTING CHAIR CEM		03-683-25A
COMPUTED TOTAL-BODY RADIUM		03-683-27
03-01-61 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-683-27A
X-RAY EXAMINATION	NOT DONE	03-683-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-683-40
235 -416 FRACTURE OF THE FEMUR		03-683-67
237 -416 FRACTURE OF TIBIA (LEFT)		03-683-67A
782 -10 HYSTERECTOMY		03-683-67B
788 -12 BILATERAL OOPHORECTOMY		03-683-67C
DATA REVISED 11-08-67		03-683-99

PATIENT 03-684	BORN 03-24-07	03-684-01
		03-684-02
FEMALE		03-684-03
		03-684-05
SOURCE OF CASE	SEARCH BY CEM	03-684-10
EXPOSURE	DIAL PAINTER 01	03-684-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., 2 TO 3 MONTHS, 1927. PAINTED DIALS. STATED THAT SHE POINTED BRUSH IN MOUTH ALTHOUGH GIVES YEAR AS LATE AS 1927. NEVER PAINTED ANY PART OF HER BODY.		03-684-13
		03-684-13A
		03-684-13B
FAMILY HISTORY		03-684-15
MARRIED 1928	PARA 2 GRAVIDA 2	03-684-15A
CHILDREN	FEMALE 1935 L W	03-684-16
	FEMALE 1939 L W	03-684-16A
MEDICAL HISTORY		03-684-20
NO SERIOUS ILLNESSES AND NO SURGERY EXCEPT FOR EXCISION OF BENIGN MASS IN LEFT BREAST 1945. NO FRACTURES. SURGERY IN RIGHT EYE FOR INCREASED INTRA-OCULAR PRESSURE. HAD PLEURISY MANY TIMES. INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--MOST TEETH EXTRACTED. (09-07-61)		03-684-20A
		03-684-20B
		03-684-20C
		03-684-20D
		03-684-20E
GAMMA-RAY MEASUREMENTS		03-684-25
09-07-61 RAB,RAC 0.019 UCI HGS 1 TILTING CHAIR CEM		03-684-25A
COMPUTED TOTAL-BODY RADIUM		03-684-27
09-07-61 0.019 UCI 0.060 UCI TOTAL 0.31		03-684-27A
X-RAY EXAMINATION	NOT DONE	03-684-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-684-40
X18 -610 GLAUCOMA, TYPE NOT SPECIFIED		03-684-67
190 -16 BIOPSY OF BREAST (BENIGN LESION)		03-684-67A
DATA REVISED 10-16-67		03-684-99

PATIENT 03-685	BORN 10-10-02	03-685-01
		03-685-02
		03-685-03
FEMALE		03-685-05
OTHER PERTINENT NOS.	AMBH PASSAVANT	03-685-05A 03-685-05B
SOURCE OF CASE	SEARCH BY CEM	03-685-10
LITERATURE CITATION		03-685-11
MILLER, ANL-6839 (1964) PP. 18-39.		03-685-11A
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING RACIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-685-11B 03-685-11C
EXPOSURE	DIAL PAINTER 01	03-685-12
SOURCE RADIUM DIAL CO., PERU, ILL., AUTUMN 1921 UNTIL PLANT MOVED.		03-685-13
OTTAWA, ILL., SEVERAL MONTHS. TOTAL ABOUT 15 MONTHS. PAINTED		03-685-13A
DIALS, POINTED BRUSH IN MOUTH, NEVER PAINTED ANY PART OF BODY.		03-685-13B
ASSUMED WORK PERIOD 10-01-1921 TO 01-01-1923		03-685-13*
18.97 YEARS OF AGE WHEN FIRST EMPLOYED.		03-685-13Z
FAMILY HISTORY		03-685-15
MARRIED 1949	PARA 0 GRAVIDA 0	03-685-15A
HUSBAND	DECEASED 09-58	03-685-15B
MEDICAL HISTORY		03-685-20
SURGERY--TONSILLECTOMY 1942 APPROX., EXCISION CERVICAL POLYPS		03-685-20A
APPROX. 1944, EXCISION BENIGN LESION LOWER LIP 1944, EXCISION		03-685-20B
BENIGN TUMORS LEFT BREAST 1945. FRACTURE 5TH LEFT METATARSAL		03-685-20C
1960 AFTER FALL. NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS--		03-685-20D
GI X-RAY, NORMAL. BILATERAL AEROTITIS 1945, SEVERAL RECURRENCES,		03-685-20E
MOST RECENT 1949. MENOPAUSAL SYMPTOMS. TEETH--SEVERAL EXTRACTED.		03-685-20F
(12-17-62)		03-685-20G
PATIENT WAS WELL UNTIL APPROXIMATELY 11-01-62 AT WHICH TIME SHE		03-685-21A
DEVELOPED A PAINFUL RIGHT UPPER BICUSPID. TWO WEEKS LATER THIS		03-685-21B
TOOTH WAS REMOVED BY DR. SHELDON WALLACH, OF , AT		03-685-21C
THE TIME OF THE RESECTION OF THE TOOTH, THE TOOTH SOCKET DID NOT		03-685-21D
APPEAR NORMAL AND A SURGICAL BIOPSY WAS TAKEN BY DR. WALLACH AND		03-685-21E
SENT TO DR. RICHARD TIECKE OF NORTHWESTERN UNIVERSITY DENTAL		03-685-21F
SCHOOL FOR HISTOLOGIC EXAMINATION. ON 12-12-62 DR. TIECKE SUB-		03-685-21G
MITTED THE FOLLOWING REPORT "SEVERAL SECTIONS ARE COMPOSED OF		03-685-21H
FIBROUS CONNECTIVE TISSUE CONTAINING A SUBACTURE INFLAMMATORY		03-685-21I
EXUDATE. ALONG THE BORDERS OF THESE SECTIONS THERE IS A LAYER OF		03-685-21J
SQUAMOUS EPITHELIUM WHICH IS INTERPRETED AS A CYST LINING. ONE		03-685-21K
ADDITIONAL SECTION, HOWEVER, IS CONSIDERABLY DIFFERENT FROM		03-685-21L
THESE IN THAT THE CONNECTIVE TISSUE IS INVADDED BY CORDS AND NESTS		03-685-21M
OF MALIGNANT EPITHELIUM. THE PRECISE SOURCE OF ORIGIN CANNOT BE		03-685-21N
DETERMINED FROM THESE SECTIONS. IT IS POSSIBLE, HOWEVER, ON THE		03-685-21O
BASIS OF YOUR CLINICAL HISTORY THAT IT IS ARISING FROM THE ORAL		03-685-21P
MUCOSA IN THE REGION OF THE EXTRACTED TEETH. DIAGNOSIS--SQUAMOUS		03-685-21Q
CELL CARCINOMA." THE PATIENT ENTERED PASSAVANT HOSPITAL, CHICAGO,		03-685-21R
ON 12-18-62 AT WHICH TIME A RESECTION OF THE LEFT MAXILLA WAS		03-685-21S
CARRIED OUT AND WHICH INCLUDED THE FLOOR OF THE MAXILLARY SINUS.		03-685-21T

THE PATHOLOGICAL REPORT ON THIS TISSUE SUBMITTED BY DR. MARK C. WHEELOCK WAS "(1) SQUAMOUS CELL CARCINOMA, GRADE 1, IN FIBROUS TISSUE, (2) SQUAMOUS CELL CARCINOMA, GRADE 1, IN BONE, (3) CHRONIC OSTEITIS IN BONE." THE PATIENT HAS REMAINED WELL SINCE THIS TIME. THE SECTIONS CUT FROM THE ORIGINAL BLOCK MADE BY DR. TIECKE WERE REVIEWED BY DR. JOSEPH L. BERNIER, PROFESSOR OF DEN-

TISTRY, SCHOOL OF DENTISTRY, GEORGETOWN UNIVERSITY. HIS REPORT IS AS FOLLOWS "THE TUMOR HAS DEFINITE ODONTOGENIC FEATURES WITH EPITHELIAL CELLS BEING ARRANGED IN ISLANDS AND CORDS. OF INTEREST IS THE RETICULATION SEEN IN MANY OF THE MASSES WHICH IS REMINISCENT OF THE STELLATE RETICULUM OF THE DEVELOPING TOOTH. IT IS POSSIBLE THAT IT AROSE FROM THE EPITHELIAL DEBRIS OF MALLASSEZ RATHER THAN FROM SURFACE OR CREVICULAR EPITHELIUM. IT IS A BIT DIFFICULT TO GIVE A NAME BECAUSE OF THE INDETERMINATE POSITION IT OCCUPIES IN THE GREY AREA BETWEEN THE AMELOBLASTOMA AND THE SQUAMOUS CELL CARCINOMA. I SUSPECT IT IS NEARER THE LATTER THAN THE FORMER. I WOULD, THEREFORE, SIMPLY LABEL IT AN ODONTOGENIC EPITHELIAL TUMOR. AS TO MALIGNANCY I WOULD CONSIDER IT QUITE LOW GRADE. ADMITTEDLY I AM SOMEWHAT INFLUENCED BY ITS CLINICAL BEHAVIOUR." THESE SAME SLIDES WERE REVIEWED BY DR. SHIELDS WARREN, NEW ENGLAND DEACONESS HOSPITAL, BOSTON, MASSACHUSETTS, WHO BELIEVED THAT THE TUMOR REPRESENTED A SQUAMOUS CELL CARCINOMA, GRADE 1. (03-25-68)

IN 06-68 AT A SYMPOSIUM ON THE LATE EFFECTS OF RADIATION HELD BY THE MEDICAL RESEARCH COUNCIL OF THE UNITED KINGDOM IN LONDON AND ORGANIZED BY DAME JANET VAUGHAN, SLIDES OF THE PRIMARY BIOPSY AND OF THE TISSUE RESECTED AT SURGERY WERE REVIEWED BY SEVERAL PROMINENT GENERAL PATHOLOGISTS AND SPECIALISTS IN ORAL PATHOLOGY. THE GENERAL PATHOLOGISTS SAW NOTHING INCONSISTENT WITH CALLING THIS A SQUAMOUS CELL CARCINOMA, GRADE 1, WHEREAS THE SPECIALISTS IN ORAL PATHOLOGY BELIEVED THAT THIS DID NOT REPRESENT A MALIGNANT TUMOR BUT WAS AN EPITHELIAL REACTION TO EARLIER CHRONIC INFECTION. IN 10-68 THE PATIENT ENTERED THE U OF CHICAGO CLINICS BECAUSE OF A CHRONIC MIDDLE EAR INFECTION ON THE LEFT WITH A SECONDARY CHRONIC MASTOIDITIS. A SIMPLE MASTOIDECTOMY WAS DONE FOR THE TREATMENT OF THIS DIFFICULTY AND MATERIAL REMOVED FROM THE MASTOID AT SURGERY DEMONSTRATED NO EVIDENCE OF MALIGNANCY. IN ADDITION, AT THE TIME OF SURGERY A BIOPSY OF THE FLOOR OF THE RIGHT ANTRUM WAS ALSO TAKEN AS THIS WAS THE SITE OF THE PREVIOUS MAXILLARY RESECTION. NO EVIDENCE OF SQUAMOUS CELL TUMOR TISSUE WAS PRESENT IN THIS BIOPSY, WHICH DEMONSTRATED ONLY A MILD CHRONIC SINUSITIS. (12-68)

GAMMA-RAY MEASUREMENTS

12-17-62	RAB,RAC	0.052 UCI	HGS 1 TILTING CHAIR	CEM	03-685-25
12-17-62	RAB,RAC	0.048 UCI	HGS 1 7-CRYST-POS	CEM	03-685-25A
05-24-66	RAB,RAC	0.042 UCI	HGS 1 TILTING CHAIR	CEM	03-685-25B
05-24-66	RAB,RAC	0.041 UCI	HGS 1 7-CRYST-POS	CEM	03-685-25C

COMPUTED TOTAL-BODY RADIUM

12-17-62	0.052 UCI	0.167 UCI TOTAL	0.31	03-685-27
12-17-62	0.048 UCI	0.154 UCI TOTAL	0.31	03-685-27A
05-24-66	0.042 UCI	0.134 UCI TOTAL	0.31	03-685-27B
05-24-66	0.041 UCI	0.133 UCI TOTAL	0.31	03-685-27C

X-RAY EXAMINATION				03-685-30
COMPLETE SKELETAL SURVEY AND VIEWS OF MAXILLA				03-685-30A
12-14-62	U OF C CLINICS	UNIT NO.	LOC. U OF C	03-685-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0				03-685-30C
PPF NO CHANGES TYPICAL OF RADIUM DEPOSITION. SLIGHT THINNING				03-685-30D
OF LATERAL WALL RIGHT MAXILLARY ANTRUM. CARCINOMA OF MAXILLA.				03-685-30E
COMPLETE SKELETAL SURVEY				03-685-31A
05-24-66	ANL	X-RAY NO. R-240	LOC. ANL	03-685-31B
QUESTIONABLE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 2				03-685-31C
PPF FEW AREAS OF BONE RESORPTION IN THE SHAFT OF THE RIGHT RA-				03-685-31D
DIUS. SLIGHT COARSENING OF THE TRABECULAR PATTERN OF THE PORTION				03-685-31E
OF THE SHAFT OF THE RIGHT AND LEFT TIBIA.				03-685-31F
CLINICAL LABORATORY FINDINGS			NOT DONE	03-685-40
MALIGNANT TUMOR EPIDERMOID CARCINOMA OF MAXILLA 1962, QUESTIONABLE				03-685-60
THIS IS A PRELIMINARY DIAGNOSIS. FOR THE PRESENT, THE DEFINITIVE				03-685-60A
DIAGNOSIS REMAINS MOOT.				03-685-60B
613	-886A	ODONTOGENIC TUMOR EXCLUDING AMELOBLASTOMA, QUESTIONABLE		03-685-66
190	-16	BIOPSY OF BREAST (BENIGN LESION)		03-685-67
634	-12	TONSILLECTOMY		03-685-67A
TOOTH MEASUREMENT				03-685-73
SAMPLE 29.01		TOOTH INCISOR		03-685-73A
TOTAL WT. 0.8654		CALC.GMS.CA. 0.2423		03-685-73B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	03-685-73C
	43.6		180.1	03-685-73D
			RATIO-TOOTH/BODY	
			1.13	
SAMPLE 29.02		TOOTH INCISOR		03-685-74A
TOTAL WT. 1.4477		CALC.GMS.CA. 0.4054		03-685-74B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	03-685-74C
	78.2		193.0	03-685-74D
			RATIO-TOOTH/BODY	
			1.206	
SAMPLE 29.03		TOOTH INCISOR		03-685-75A
TOTAL WT. 0.6965		CALC.GMS.CA. 0.1950		03-685-75B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	03-685-75C
	21.81		111.8	03-685-75D
			RATIO-TOOTH/BODY	
			0.6989	
SAMPLE 29.04		TOOTH INCISOR		03-685-76A
TOTAL WT. 0.5935		CALC.GMS.CA. 0.1662		03-685-76B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	03-685-76C
	23.46		141.17	03-685-76D
			RATIO-TOOTH/BODY	
			0.8823	
SAMPLE 29.05		TOOTH INCISOR		03-685-77A
TOTAL WT. 0.6691		CALC.GMS.CA. 0.1873		03-685-77B
UNSEALED	EQUILIBRIUM	PCT RET	UUCI RA/GM CA	03-685-77C
	38.69		206.51	03-685-77D
			RATIO-TOOTH/BODY	
			1.291	
PRIMARY TUMOR SLIDE AT ANL				03-685-71
DATA REVISED 11-14-68				03-685-99

PATIENT 03-686	BORN 08-25-04	03-686-01
		03-686-02
		03-686-02A
		03-686-03
		03-686-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-686-10
EXPOSURE	DIAL PAINTER 01	03-686-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SUBSEQUENTLY AT LUMINOUS PROCESSES, INC., OTTAWA, ILL., 1922 TO 1942, ABOUT 20 YEARS. PAINTED CLOCK HANDS MOSTLY. POINTED BRUSH IN MOUTH UNTIL GLASS PENS CAME INTO USE. NEVER PAINTED ANY PART OF HER BODY. ASSUMED WORK PERIOD 10-01-1922 TO 10-01-1942. 18.09 YEARS OF AGE WHEN FIRST EMPLOYED.		03-686-13
		03-686-13A
		03-686-13B
		03-686-13C
		03-686-13*
		03-686-13Z
FAMILY HISTORY		03-686-15
MARRIED	PARA 0 GRAVIDA 0	03-686-15A
MEDICAL HISTORY		03-686-20
NO SURGERY. NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS NEGATIVE. TEETH--ONLY WISDOM TEETH EXTRACTED. (10-09-57)		03-686-20A
		03-686-20B
SURGERY--CHOLECYSTECTOMY 1961, HYSTERECTOMY 1962, DR. PANARES, ST. MARGARET'S HOSP., HAMMOND, INDIANA. NO FRACTURES. INQUIRY BY SYSTEMS NEGATIVE. (02-04-64)		03-686-21A
		03-686-21B
		03-686-21C
GAMMA-RAY MEASUREMENTS		03-686-25
02-04-64 RAB,RAC 0.009 UCI HGS 1 TILTING CHAIR CEM		03-686-25A
COMPUTED TOTAL-BODY RADIUM		03-686-27
02-04-64 0.009 UCI 0.028 UCI TOTAL 0.31		03-686-27A
X-RAY EXAMINATION		03-686-30
COMPLETE SKELETAL SURVEY		03-686-30A
02-04-64 ANL X-RAY NO. R-233 LOC. ANL		03-686-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-686-30C
PPF NONE		03-686-30D
CLINICAL LABORATORY FINDINGS		03-686-40
02-04-64 HG 13.2 HTC RBC 412		03-686-40A
WBC 6900 DIFF. P 55 ST L 36 M 5 E 4 B 0		03-686-40B
687 -12 CHOLECYSTECTOMY		03-686-67
782 -12 HYSTERECTOMY, COMPLETE		03-686-67A
DATA REVISED 05-07-68		03-686-99

PATIENT 03-684	BORN 11-19-00	03-687-01
		03-687-02
		03-687-03
FEMALE		03-687-05
SOURCE OF CASE	SEARCH BY CEM	03-687-10
EXPOSURE	DIAL PAINTER 01	03-687-12
SOURCE RADIUM DIAL CO., STREATOR, ILL., 10 MONTHS, 1925. PAINTED		03-687-13
NUMERALS AND POINTED BRUSH IN HER MOUTH. NEVER PAINTED ANY PART		03-687-13A
OF HER BODY.		03-687-13B
ASSUMED WORK PERIOD 05-01-1925 TO 03-01-1926		03-687-13*
24.44 YEARS OF AGE WHEN FIRST EMPLOYED.		03-687-13Z
FAMILY HISTORY.		03-687-15
MARRIED 1942	PARA 0 GRAVIDA C	03-687-15A
MEDICAL HISTORY		03-687-20
NO SURGERY EXCEPT D AND C 1956. NO FRACTURES AND NO SERIOUS ILL-		03-687-20A
NESSES. INQUIRY BY SYSTEMS--BIRTH INJURY TO LEFT ARM WITH SOME		03-687-20B
DEFECTIVE GROWTH IN LIMB. RECURRENT SACRO-ILIAC DIFFICULTY.		03-687-20C
DIFFICULTY WITH KNEES FOR PAST 8 YEARS LEADING TO INTERMITTENT		03-687-20D
DIFFICULTY IN CLIMBING STAIRS. DENTAL HISTORY--ABOUT 1/3 OF		03-687-20E
TEETH EXTRACTED. (03-02-61)		03-687-20F
GAMMA-RAY MEASUREMENTS		03-687-25
03-02-61 RAB,RAC C.016 UCI HGS 1 TILTING CHAIR CEM		03-687-25A
COMPUTED TOTAL-BODY RADIUM		03-687-27
03-02-61 0.016 UCI 0.051 UCI TOTAL 0.31		03-687-27A
X-RAY EXAMINATION		03-687-30
COMPLETE SKELETAL SURVEY		03-687-30A
03-02-61 VA LA,CALIF. X-RAY NO. R-219 LOC. ANL		03-687-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-687-30C
PPF NONE.		03-687-30D
CLINICAL LABORATORY FINDINGS	NOT DONE	03-687-40
785 -104 DILATATION AND CURETTAGE OF THE UTERUS		03-687-67
DATA REVISED 11-08-67		03-687-99

PATIENT 03-688	BORN 10-24-18	03-688-01
		03-688-02
FEMALE		03-688-03
		03-688-05
SOURCE OF CASE	SEARCH BY CEM	03-688-10
EXPOSURE	DIAL PAINTER 01	03-688-12
SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILL., 5 YEARS, 1936 TO 1941.		03-688-13
PAINTED DIALS WITH BRUSH AND PEN BUT NEVER PUT ANY OF THESE		03-688-13A
IMPLEMENTS IN HER MOUTH. NEVER PAINTED ANY PART OF HER BODY.		03-688-13B
FAMILY HISTORY		03-688-15
MARRIED 1941	PARA 3 GRAVIDA 3	03-688-15A
HUSBAND	1913 L W	03-688-15B
CHILDREN	MALE 1944 L W	03-688-16
	MALE 1948 L W	03-688-16A
	MALE 1951 L W	03-688-16B
MEDICAL HISTORY		03-688-20
NO SURGERY, NO FRACTURES, AND NO SERIOUS ILLNESSES. INQUIRY BY		03-688-20A
SYSTEMS IS NEGATIVE. DENTAL HISTORY--FOUR TEETH EXTRACTED,		03-688-20B
OTHERWISE, TEETH IN FAIRLY GOOD CONDITION. (02-28-61)		03-688-20C
GAMMA-RAY MEASUREMENTS		03-688-25
02-28-61 RAB,RAC	0.004 UCI VA LA TILTING CHAIR CEM	03-688-25A
COMPUTED TOTAL-BODY RADIUM		03-688-27
02-28-61 0.004 UCI	0.012 UCI TOTAL 0.31	03-688-27A
X-RAY EXAMINATION	NOT DONE	03-688-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-688-40
DATA REVISED 11-08-67		03-688-99

PATIENT 03-689	BORN 02-27-03	03-689-01
		03-689-02
		03-689-03
		03-689-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-689-10
EXPOSURE	DIAL PAINTER 01	03-689-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., INTERMIT. 1923 TO 1927,		03-689-13
CUMULATIVE ABSENCE TOTAL 2 MONTHS. PAINTED CLOCK FACES. POINTED		03-689-13A
BRUSH IN MOUTH. NEVER PAINTED OWN BODY.		03-689-13B
ASSUMED WORK PERIOD 07-01-1923 TO 07-01-1927		03-689-13*
20.33 YEARS OF AGE WHEN FIRST EMPLOYED.		03-689-13Z
FAMILY HISTORY		03-689-15
MARRIED 1925, DIV. 1942 PARA 1 GRAVIDA 1		03-689-15A
CHILDREN MALE 1928 L W		03-689-16
MEDICAL HISTORY		03-689-20
NO SURGERY, FRACTURES OR SERIOUS ILLNESSES. INQUIRY BY SYSTEMS		03-689-20A
NEGATIVE. DENTAL HISTORY--ONE-THIRD TEETH EXTRACTED. (03-01-61)		03-689-20B
GAMMA-RAY MEASUREMENTS		03-689-25
03-01-61 RAB,RAC 0.040 UCI VA LA TILTING CHAIR CEM		03-689-25A
COMPUTED TOTAL-BODY RADIUM		03-689-27
03-01-61 0.040 UCI 0.130 UCI TOTAL 0.31		03-689-27A
X-RAY EXAMINATION		03-689-30
COMPLETE SKELETAL SURVEY		03-689-30A
03-01-61 VA HOSP. X-RAY NO. R-217 LOC. ANL		03-689-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 1.5		03-689-30C
PPF QUESTIONABLE LINEAR AREAS OF RESORPTION IN RIGHT FIBULA.		03-689-30D
(FILMS TAKEN AT VETERANS ADMINISTRATION HOSPITAL, LOS ANGELES,		03-689-30E
CALIF.)		03-689-30F
CLINICAL LABORATORY FINDINGS	NOT DONE	03-689-40
DATA REVISED 10-16-67		03-689-99

PATIENT 03-690	BORN 03-24-09	03-690-01
		03-690-02
		03-690-03
		03-690-04
		03-690-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	03-690-10
EXPOSURE	DIAL PAINTER 01	03-690-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SPRING 1924 TO NOV. 1929,		03-690-13
4 OR 5 YEARS TOTAL.		03-690-13A
ASSUMED WORK PERIOD 04-01-1924 TO 11-01-1929		03-690-13*
15.01 YEARS OF AGE WHEN FIRST EMPLOYED.		03-690-13Z
GAMMA-RAY MEASUREMENTS	LASL	MVD 03-690-25
COMPUTED TOTAL-BODY RADIUM		03-690-27
11-58	0.320 UCI TOTAL	03-690-27A
X-RAY EXAMINATION		03-690-30
PARTIAL SKELETAL SURVEY		03-690-30A
11-12-58 SANDIA CORP., ALBUQUERQUE, N. MEXICO		03-690-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.	SCORE 0	03-690-30C
PPF SLIGHT COARSENING OF TRABECULAR PATTERN OF RIGHT AND LEFT		03-690-30D
HUMERUS, RIGHT AND LEFT TIBIA AND FIBULA. SOLITARY AREA OF		03-690-30E
RADIOLUCENCY IN DISTAL RIGHT ULNA. CHANGES COULD BE RELATED		03-690-30F
TO RADIUM DEPOSITION, BUT MAY ALSO BE RESULT OF OSTEOPOROSIS		03-690-30G
OF DISUSE.		03-690-30H
CLINICAL LABORATORY FINDINGS	NOT DONE	03-690-40

PATIENT	03-691	BORN	83	03-691-01
	DECEASED			03-691-02
	MALE			03-691-05
OTHER PERTINENT NOS.	MIT 01-028			03-691-05A
	CASE 28			03-691-05B
	CASE 121			03-691-05C
DECEASED	02-12-65			03-691-06
DEATH CERT. NO.		AUTOPSY	YES	03-691-07
CAUSES OF DEATH	ACCIDENTAL DROWNING			03-691-09
SOURCE OF CASE	KNOWN FROM LITERATURE			03-691-10
LITERATURE CITATION				03-691-11
	AUB, ET AL, MEDICINE 31,221 (SEPT. 1952). CASE 28.			03-691-11A
	LOONEY, ET AL, AM.J.ROENT. 73,1006 (JUNE 1955). CASE 121.			03-691-11B
EXPOSURE	RADIUM CHEMIST	02		03-691-12
COMPUTED TOTAL-BODY RADIUM				03-691-27
1939	0.3-0.4	UCI TOTAL	AUB A	03-691-27A
1953	0.250	UCI TOTAL	LOONEY B	03-691-27B
X-RAY EXAMINATION				03-691-30
PARTIAL SKELETAL SURVEY				03-691-30A
02-19-53	ANL	X-RAY NO. R-014	LOC. ANL	03-691-30B
NEGATIVE CHANGES TYPICAL OF RADIUM DEPOSITION.			SCORE 1.5	03-691-30C
PPF SLIGHT COARSENING OF TRABECULATION OF RIGHT AND LEFT TIBIA				03-691-30D
AND FIBULA. PROBABLE LUMBAR INTERVERTEBRAL DISC DISEASE.				03-691-30E
POSTMORTEM--FACIAL BONES, DORSAL LUMBAR SPINE, PELVIS, FEMUR				03-691-31A
02-15-65	OAK RIDGE INST. NUCLEAR STUDIES	NO.		03-691-31B
NO EVIDENCE OF SIGNIFICANT LYTIC OR BLASTIC OSSEOUS LESIONS.				03-691-31C
CLINICAL LABORATORY FINDINGS	NUI DONE			03-691-40
ADDITIONAL INFORMATION				03-691-91
YEAR OF BIRTH IN AUB PAPER--1879				03-691-91
DATA REVISED	02-09-68			03-691-99

PATIENT 03-692	BORN 07-07-87	03-692-01
MALE		03-692-02
		03-692-05
SOURCE OF CASE	REFERRED BY BARRER, NEW JERSEY	03-692-10
EXPOSURE	DIAL PAINTER 01	03-692-12
SOURCE	HANDLED RADIUM IN 1920. EMPLOYED BY EDISON CO., 1922 TO 1949.	03-692-13
FAMILY HISTORY		03-692-15
MARRIED 1913		03-692-15A
CHILDREN	(6)	03-692-16
MEDICAL HISTORY		03-692-20
APPENDECTOMY ABOUT 1931. PATIENT FRACTURED SPINE ABOUT 1939, FELL ON BACK WHILE HANDLING LOAD OF CROSSBARS, AFTER 5 YEARS SPINAL FUSION WAS PERFORMED. PNEUMONIA ABOUT 1941. TRAUMATIC AMPUTATION OF RIGHT THUMB, WAS REPLACED AND RESUTURED 1951. HEART ATTACK 1951. CANCER OF LEFT LOWER LIP, TREATED TWICE WITH EXTERNALLY APPLIED RADIUM 1941 AND 1951. INQUIRY BY SYSTEMS NEGATIVE. TEETH ALL EXTRACTED AT TIME OF BACK TROUBLE. (03-02-61)	03-692-20A 03-692-20B 03-692-20C 03-692-20D 03-692-20E 03-692-20F 03-692-20G	
GAMMA-RAY MEASUREMENTS		03-692-25
03-02-61 RAB,RAC 0.002 UCI VA LA TILTING CHAIR CEM		03-692-25A
COMPUTED TOTAL-BODY RADIUM		03-692-27
03-02-61 0.002 UCI 0.006 UCI TOTAL 0.31		03-692-27A
X-RAY EXAMINATION	NOT DONE	03-692-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-692-40
MALIGNANT TUMOR	CANCER OF LEFT LOWER LIP 1941 AND 1951	03-692-60
6113 -8191 CARCINOMA OF THE LOWER LIP		03-692-67
661 -12 APPENDECTOMY		03-692-67A
DATA REVISED 06-12-68		03-692-99

PATIENT	03-693		03-693-01
	FEMALE		03-693-02
			03-693-05
SOURCE OF CASE	REFERRED BY MR. CARL GERDEN, LIBERTY MUTUAL INSURANCE CO., CHICAGO		03-693-10
			03-693-10A
EXPOSURE	DIAL PAINTER 01		03-693-12
SOURCE	CONSOLIDATED DIAL CO., 27 E. MONROE ST., CHICAGO, ILLINOIS.		03-693-13
	WORKED AS DIAL PAINTER FOR ABOUT 5 YEARS, 1948-1952. REPAINTED		03-693-13A
	WATCH DIALS WITH RADIUM-CONTAINING LUMINOUS PAINT. DURING THIS		03-693-13B
	TIME SHE HAS HAD SEVERAL RADON BREATH DETERMINATIONS, WHICH WERE		03-693-13C
	SENT TO M.I.T. FOR ANALYSIS AND WERE REPORTED AS BELOW PERMISS-		03-693-13D
	IBLE LEVEL FOR RADIUM.		03-693-13E
COMPUTED TOTAL-BODY RADIUM			03-693-27
05-08-52	0.014 UCI TOTAL	PFG	03-693-27A
X-RAY EXAMINATION	NOT DONE		03-693-30
CLINICAL LABORATORY FINDINGS	NOT DONE		03-693-40
DATA REVISED 05-08-68			03-693-99

PATIENT 03-695	BORN 02-08-21	03-695-01
FEMALE		03-695-02
		03-695-05
SOURCE OF CASE	SEARCH BY CEM	03-695-10
EXPOSURE	DIAL PAINTER 01	03-695-12
SOURCE LUMINOUS PROCESSES, INC., 6 TO 9 MONTHS 1942. PAINTED AIR-PLANE DIALS. NEVER POINTED BRUSHES IN MOUTH.		03-695-13
ASSUMED WORK PERIOD 03-01-1942 TO 11-01-1942		03-695-13A
21.05 YEARS OF AGE WHEN FIRST EMPLOYED.		03-695-13*
		03-695-13Z
FAMILY HISTORY		03-695-15
MARRIED 1943	PARA 2 GRAVIDA 2	03-695-15A
CHILDREN	MALE 1943 L W	03-695-16
	MALE 1945 L W	03-695-16A
MEDICAL HISTORY		03-695-20
SURGERY--APPENDECTOMY AND TUBAL LIGATION ABOUT 1946. PELVIC TUMOR		03-695-20A
AND BLADDER SUSPENSION MAY 1961. NO FRACTURES. SUSTAINED WHIPLASH		03-695-20B
INJURY TO NECK IN AUTOMOBILE ACCIDENT 1948, STILL SEES CHIRO-		03-695-20C
PRACTOR REGULARLY. NO SERIOUS ILLNESSES. INQUIRY BY SYSTEMS		03-695-20D
NEGATIVE. TEETH--FOUR WISDOM TEETH EXTRACTED. (09-28-62)		03-695-20E
GAMMA-RAY MEASUREMENTS		03-695-25
09-28-62 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-695-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		03-695-27
09-28-62 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-695-27A
X-RAY EXAMINATION	NOT DONE	03-695-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-695-40
661 -12	APPENDECTOMY	03-695-67
787 -74	LIGATION OF FALLOPIAN TUBE	03-695-67A
DATA REVISED 10-17-67		03-695-99

PATIENT 03-696	BORN 01-14-32	03-696-01
		03-696-02
FEMALE		03-696-05
EXPOSURE	DIAL PAINTER 01	03-696-12
SOURCE WORKED AS DIAL PAINTER FOR PDQ CO., CHICAGO, ILL. PAINTED		03-696-13
DIALS IN HER HOME FOR ABOUT ONE YEAR NOT ON ANY REGULAR SCHEDULE.		03-696-13A
PAINTED ABOUT 2500 DIALS IN 2 TO 3 HOURS BY USE OF JIG SETUP.		03-696-13B
PAINT WAS LUMINOUS BUT SHE DID NOT KNOW WHETHER RADIUM WAS USED.		03-696-13C
MEDICAL HISTORY		03-696-20
NO ILLNESSES EXCEPT FOR MINOR COLDS. (10-07-63)		03-696-20A
GAMMA-RAY MEASUREMENTS		03-696-25
10-07-63 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-696-25A
COMPUTED TOTAL-BODY RADIUM		03-696-27
10-07-63 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-696-27A
X-RAY EXAMINATION	NOT DONE	03-696-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-696-40
DATA REVISED 10-17-67		03-696-99

PATIENT	03-697			03-697-01
				03-697-02
				03-697-03
				03-697-05
	FEMALE			
OTHER PERTINENT NOS.		U. OF MISSOURI		03-697-05A
SOURCE OF CASE		SEARCH BY CEM		03-697-10
EXPOSURE		DIAL PAINTER 01		03-697-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS. WORKED 8 MONTHS FROM 01-24				03-697-13
THROUGH 08-24. WORKED WHEN 1924 PHOTOGRAPH WAS MADE OF GIRLS ON				03-697-13A
STEPS BUT QUIT BEFORE PRINTS WERE DELIVERED. (THIS DEFINITELY				03-697-13B
DATES PHOTOGRAPH.) PAINTED BIG BENS (CLOCK DIALS) AND BLACK BIRDS				03-697-13C
(POCKET WATCH DIALS). TIPPED BRUSH IN MOUTH. GIRLS RECEIVED				03-697-13D
ENOUGH RADIUM PAINT IN MORNING TO PAINT ALL DIALS TO BE PAINTED				03-697-13E
THAT DAY, WHICH WAS ABOUT 1 TABLESPOON WITH ADHESIVE AND DIS-				03-697-13F
TILLED WATER ADDED. TRAY WAS REMOVED AND DIALS INSPECTED IN DARK-				03-697-13G
ROOM AS SOON AS ALL DIALS ON TRAY WERE PAINTED. GIRLS SAT AT				03-697-13H
ORDINARY SCHOOL DESKS AND BENT OVER THE TRAY OF DIALS AND RADIUM				03-697-13I
SUPPLY. RADIUM SUPPLY WAS 8 TO 12 INCHES FROM BODY.				03-697-13J
ASSUMED WORK PERIOD 01-02-1924 TO 09-01-1924				03-697-13*
24.08 YEARS OF AGE WHEN FIRST EMPLOYED.				03-697-13Z
FAMILY HISTORY				03-697-15
MARRIED				03-697-15A
CHILDREN	FEMALE		L W	03-697-15B
MEDICAL HISTORY				03-697-20
PATIENT HAS BEEN FOLLOWED BY U OF MISSOURI MEDICAL CENTER SINCE				03-697-20A
03-05-64 WHEN SHE COMPLAINED OF PAINS IN HER HANDS AND KNEES				03-697-20B
SINCE 06-62. BOTH KNEES HAD BEEN PAINFUL INTERMITTENTLY SINCE				03-697-20C
1963. LOWER NECK PAIN DEVELOPED 06-62, ALONG WITH MILD SWELLING				03-697-20D
OF BOTH KNEES. PAIN AND SWELLING OF WRISTS AND HANDS DEVELOPED				03-697-20E
IN MARCH 1963. HISTORY OF STEROID AND URICOSURIC MEDICATION SINCE				03-697-20F
03-63. PATIENT WAS THOUGHT TO HAVE MULTIPLE RHEUMATOID ARTHRITIS				03-697-20G
AND A HYPERMETABOLIC STATE OF UNCERTAIN ETIOLOGY. SUBSEQUENT				03-697-20H
HISTORY FROM AUDRAIN COUNTY HOSPITAL, MEXICO, MISSOURI IN 09-65				03-697-20I
REVEALS PROGRESSION OF STIFFNESS OF HANDS AND NECK WITH DIFFUSE				03-697-20J
ARTHRITIC SPURRING OF THE CERVICAL SPINE NOTED ON THE X-RAYS.				03-697-20K
(06-13-67)				03-697-20L
GAMMA-RAY MEASUREMENTS				03-697-25
05-06-67	RAB,RAC	0.056 UCI	U OF MO 2-PI LIQUID COFFMAN	03-697-25A
COMPUTED TOTAL-BODY RADIUM				03-697-27
05-06-67	0.056 UCI	0.181 UCI TOTAL	0.31	03-697-27A

X-RAY EXAMINATION

PARTIAL SKELETAL SURVEY

03-13-64 U OF MISSOURI MEDICAL SCHOOL X-RAY

NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0

PPF MODERATE HYPERTROPHIC OSTEOARTHRITIS OF THE CERVICAL AND
THORACIC SPINE. COARSENING OF TRABECULATION OF THE METACARPALS

AND PHALANGES OF BOTH HANDS AND DISTAL RIGHT AND LEFT ULNA,

SEVERAL SCATTERED BONE CYSTS IN THE RIGHT WRIST. THESE CHANGES

MAY BE THE RESULT OF OSTEOPOROSIS OR AGING.

03-697-30

03-697-30A

03-697-30B

03-697-30C

03-697-30D

03-697-30E

03-697-30F

03-697-30G

03-697-30H

CLINICAL LABORATORY FINDINGS

NOT DONE

03-697-40

240 -952 ARTHRITIS, RHEUMATOID, MULTIPLE

03-697-67

PATIENT 03-726	BORN 12-22-02	03-726-01
		03-726-02
		03-726-03
		03-726-04
		03-726-05
SOURCE OF CASE	SEARCH BY CEM	03-726-10
EXPOSURE	DIAL PAINTER 01	03-726-12
SOURCE RADIUM DIAL CO., PERU, ILLINOIS AND OTTAWA, ILLINOIS. WORKED FROM ABOUT MARCH 1922 TO PROBABLY OCTOBER 1925. PAINTED DIALS, PUT BRUSH IN MOUTH.		03-726-13
ASSUMED WORK PERIOD 03-01-1922 TO 10-01-1925		03-726-13A
19.19 YEARS OF AGE WHEN FIRST EMPLOYED.		03-726-13B
		03-726-13*
		03-726-13Z
FAMILY HISTORY		03-726-15
MARRIED 1925, HUSBAND DEC. 1946		03-726-15A
MARRIED 1956		03-726-15B
CHILDREN		
MALE 1926 L, POLIO		03-726-16
FEMALE 1934 L W		03-726-16A
MALE 1935 L W		03-726-16B
FEMALE 1942 L, POLIO		03-726-16C
(DATES ARE APPROXIMATE)		03-726-16D
MEDICAL HISTORY		03-726-20
APPENDECTOMY IN CHILDHOOD, SUSTAINED 9 BROKEN RIBS AND FRACTURE OF RIGHT PELVIS IN AUTO ACCIDENT 1960. STIFF LEFT HIP SINCE INJURY. EDENTULOUS. (02-26-68)		03-726-20A
		03-726-20B
		03-726-20C
GAMMA-RAY MEASUREMENTS		03-726-25
02-26-68 RAB,RAC 0.178 UCI HGS 1 TILTING CHAIR CEM		03-726-25A
COMPUTED TOTAL-BODY RADIUM		03-726-27
02-26-68 0.178 UCI 0.574 UCI TOTAL 0.31		03-726-27A
X-RAY EXAMINATION		03-726-30
COMPLETE SKELETAL SURVEY		03-726-30A
02-26-68 ANL X-RAY NO. R-243 LOC. ANL		03-726-30B
ADVANCED CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 25		03-726-30C
PPF INFARCTION AND ASEPTIC NECROSIS OF RIGHT AND LEFT FEMORAL HEADS. PATCHY BONE SCLEROSIS IN RIGHT AND LEFT ULNA, RIGHT AND LEFT FEMUR AND RIGHT AND LEFT TIBIA AND FIBULA. AREAS OF BONE RESORPTION IN CALVARIUM, MANDIBLE, PELVIS, RIGHT AND LEFT TIBIA AND FIBULA, RIGHT METATARSALS AND LEFT CALCANEUS. COARSENING OF TRABECULATION IN RIGHT AND LEFT FEMUR.		03-726-30D
		03-726-30E
		03-726-30F
		03-726-30G
		03-726-30H
		03-726-30I
CLINICAL LABORATORY FINDINGS		03-726-40
02-26-68 HG 13.3 HTC 42 RBC 3.94		03-726-40A
WBC 11,000 DIFF. P 64 ST 2 L 27 M 4 E 3 B		03-726-40B

23513-4722.1 ASEPTIC NECROSIS OF THE HEAD OF THE FEMUR

03-726-66

22X -416 FRACTURE OF THE PELVIS (RIGHT)

03-726-67

229 -416 FRACTURE OF RIBS

03-726-67A

661 -12 APPENDECTOMY

03-726-67B

DATA REVISED 05-10-68

03-726-99

PATIENT 03-727	BORN 01-30-06	03-727-01
		03-727-02
FEMALE		03-727-03
		03-727-05
SOURCE OF CASE	SEARCH BY CEM	03-727-10
EXPOSURE	DIAL PAINTER 01	03-727-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., SPRING 1922 TO SEPT. 1924,		03-727-13
TOTAL OF ABOUT 30 MONTHS. RADIUM DIAL CO. AND LUMINOUS PROCESSES,		03-727-13A
INC., OTTAWA, FROM SEPT. 1929 TO 1942. PAINTED ALL SIZES OF DIALS.		03-727-13B
POINTED BRUSH IN MOUTH BUT STATED THAT SHE RINSED IT THOROUGHLY		03-727-13C
BEFORE POINTING BRUSH IN MOUTH. NEVER PAINTED HER OWN BODY.		03-727-13D
ASSUMED WORK PERIOD. 03-01-1922 TO 08-01-1924		03-727-13*
16.07 YEARS OF AGE WHEN FIRST EMPLOYED.		03-727-13Z
FAMILY HISTORY		03-727-15
MARRIED 10-04-24	PARA 3 GRAVIDA 3	03-727-15A
HUSBAND	L W	03-727-15B
CHILDREN	FEMALE 08-09-27 L W	03-727-16
	MALE 12-06-28 L W	03-727-16A
	FEMALE 12-01-34 L W	03-727-16B
MEDICAL HISTORY		03-727-20
SURGERY--PROLAPSED RECTUM 1935, HYSTERECTOMY 1957, CHOLECYSTEC-		03-727-20A
TOMY 09-01-64. NO SERIOUS ILLNESSES, NO FRACTURES. INQUIRY BY		03-727-20B
SYSTEMS NEGATIVE. TEETH--SEVERAL EXTRACTED. (10-10-66)		03-727-20C
GAMMA-RAY MEASUREMENTS		03-727-25
10-10-66	RAB,RAC 0.060 UCI	HGS 1 TILTING CHAIR CEM 03-727-25A
10-10-66	RAB,RAC 0.075 UCI	HGS 1 7-CRYSTAL-PCS CEM 03-727-25B
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		03-727-27
10-10-66	0.060 UCI	0.194 UCI TOTAL 0.31 03-727-27A
10-10-66	0.075 UCI	0.241 UCI TOTAL 0.31 03-727-27B
X-RAY EXAMINATION		03-727-30
COMPLETE SKELETAL SURVEY		03-727-30A
10-10-66	ANL X-RAY NO. R-241 LOC. ANL	03-727-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION.		SCORE 6 03-727-30C
PPF COARSENING OF TRABECULAR PATTERN OF RIGHT FEMUR, RIGHT TIBIA		03-727-30D
AND LEFT TIBIA. SINGLE AREAS OF BONE RESORPTION IN LEFT RADIUS		03-727-30E
AND ULNA. SEVERAL AREAS OF BONE RESORPTION IN CORTEX OF SHAFT OF		03-727-30F
RIGHT AND LEFT FIBULAE.		03-727-30G
CLINICAL LABORATORY FINDINGS		03-727-40
10-10-66	HG 15.0 HTC 46 RBC 4.45	03-727-40A
WBC 5800	DIFF. P 46 ST 2 L 46 M 3 E 3 B	03-727-40B
687 -12	CHOLECYSTECTOMY	03-727-67
782 -10	HYSTERECTOMY	03-727-67A
DATA REVISED 11-14-68		03-727-99

PATIENT 03-729

BORN

27

03-729-01

03-729-02

03-729-03

03-729-05

FEMALE

EXPOSURE

DIAL PAINTER 01

03-729-12

SOURCE LUMINOUS PROCESSES, INC., OTTAWA, ILLINOIS. WORKED 1941-1944 03-729-13

AS DIAL PAINTER, AGAIN DURING 1946 FOR ABOUT 6 MONTHS. 03-729-13A

COMPUTED TOTAL-BODY TOTAL

02-12-52

0.06 UCI TOTAL

03-729-27

03-729-27A

PATIENT 03-730	BORN 10-02-94	03-730-01
MALE		03-730-02
		03-730-05
SOURCE OF CASE	SEARCH BY CEM	03-730-10
EXPOSURE	RA CHEMIST OR LAB WORKER (02)	03-730-12
SOURCE 1923--GRAD. MINING ENGINEER OF COLORADO SCHOOL OF MINES,		03-730-13
WORKED WITH DR. LLEWELLYN ROBERTS ON RADIUM. 1924--TECHNICAL		03-730-13A
DIRECTOR, RADIUM ORE REVIGATOR CO., SAN FRANCISCO, CALIF.		03-730-13B
COMPANY MANUFACTURED WATER JARS, FUSED CARNOTITE ORE IN JARS.		03-730-13C
1925--ORGANIZED OWN COMPANY, AMERICAN RADIUM CO., LOS ANGELES,		03-730-13D
CALIF., MANUFACTURED RADIUM PRODUCTS. (NEVER BID ON RADIUM PAINT		03-730-13E
JOB FOR WATCHES.) 1926--STUDIED AT KAISER WILHELM INST. OF		03-730-13F
TECHNOLOGY, BERLIN, GERMANY. 1925-1933--AMERICAN RADIUM CO.,		03-730-13G
LEASED AND OPERATED MINES IN BELGIAN CONGO, COLORADO, AND UTAH.		03-730-13H
1933-1941--CONSULTING ENGINEER, NO WORK WITH RADIUM. 1942-1946--		03-730-13I
OPENED LABORATORY IN LOS ANGELES TO DEVELOP RADIATION FOR INDUS-		03-730-13J
TRIAL USE. 1946--RETURNED TO MINING. 1958-1960--BONDED URANIUM		03-730-13K
TO OTHER METAL SURFACES IN THIN LAYERS.		03-730-13L
FAMILY HISTORY	NOT ELICITED	03-730-15
MEDICAL HISTORY		03-730-20
SURGERY--DIVERTICULITIS, OPERATIONS PERFORMED 1958 AND 1960,		03-730-20A
APPENDECTOMY 1919. NO OTHER SERIOUS ILLNESSES. HAS BEEN DRINKING		03-730-20B
RADIUM WATER REGULARLY SINCE 1919 TO PRESENT (4000 MACHE UNITS/		03-730-20C
LITER), ENTIRE FAMILY AS WELL. INQUIRY BY SYSTEMS NEGATIVE.		03-730-20D
TEETH--LOOSE FROM HG POISONING, 8 TEETH EXTRACTED NEEDLESSLY.		03-730-20E
(02-28-61)		03-730-20F
GAMMA-RAY MEASUREMENTS		03-730-25
02-28-61 RAB,RAC 0.002 UCI VA LA TILTING CHAIR CEM		03-730-25A
COMPUTED GAMMA-RAY MEASUREMENTS		03-730-27
02-28-61 0.002 UCI 0.007 UCI TOTAL 0.31		03-730-27A
X-RAY EXAMINATION	NOT DONE	03-730-30
CLINICAL LABORATORY FINDINGS	NOT DONE	03-730-40
660 -642.0 DIVERTICULITIS OF THE COLON		03-730-67
661 -12 APPENDECTOMY		03-730-67A
DATA REVISED 11-09-67		03-730-99

PATIENT 03-740
DECEASED

BORN 08-05-78 03-740-01
03-740-02
03-740-02A
03-740-03
03-740-05

FEMALE

DECEASED 08-02-57
DEATH CERT.NO.
INTERMENT

AUTOPSY NONE
MOON CEMETERY, STREATOR, ILL.

03-740-06
03-740-07
03-740-08

CAUSES OF DEATH BRONCHIAL PNEUMONIA

03-740-09

SOURCE OF CASE SEARCH BY CEM

03-740-10

EXPOSURE DIAL PAINTER 01

03-740-12

361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE

03-740-67

PATIENT 03-747	BORN 10-12-07	03-747-01
DECEASED		03-747-02
		03-747-03
FEMALE		03-747-05
DECEASED 08-28-24		03-747-06
DEATH CERT.NO.	AUTOPSY NONE	03-747-07
INTERMENT	OTTAWA AVENUE CEMETERY, OTTAWA, ILLINOIS	03-747-08
CAUSES OF DEATH	ACUTE DILATATION OF STOMACH DUE TO APPENDECTOMY	03-747-09
SOURCE OF CASE	SEARCH BY CEM	03-747-10
EXPOSURE	DIAL PAINTER 01	03-747-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINCIS.	03-747-13
FAMILY HISTORY		03-747-15
MARRIED		03-747-15A
640 -415.6	DILATATION, ACUTE, OF STOMACH FOLLOWING OPERATION	03-747-67
661 -12	APPENDECTOMY	03-747-67A

PATIENT 03-749	BORN 09-13-02	03-749-01
DECEASED		03-749-02
		03-749-03
FEMALE		03-749-05
DECEASED 07-09-49		03-749-06
DEATH CERT. NO.	AUTOPSY NONE	03-749-07
INTERMENT	OAKWOOD CEMETERY, LASALLE, ILL.	03-749-08
CAUSES OF DEATH	CARCINOMA OF STOMACH AND DUODENUM	03-749-09
SOURCE OF CASE	SEARCH BY CEM	03-749-10
EXPOSURE	DIAL PAINTER 01	03-749-12
SOURCE	RADIUM DIAL CO., PERU, ILLINOIS. WORKED AS DIAL PAINTER ABOUT 1922.	03-749-13
		03-749-13A
FAMILY HISTORY		03-749-15
MARRIED		03-749-15A
MALIGNANT TUMOR	CARCINOMA OF STOMACH AND DUODENUM 1948	03-749-60
640 -8191	CARCINOMA OF THE STOMACH	03-749-67

PATIENT	03-750	BORN	09-01-07	03-750-01
	DECEASED			03-750-02
				03-750-03
	FEMALE			03-750-05
DECEASED	09-14-43			03-750-06
	DEATH CERT. NO.	AUTOPSY	NONE	03-750-07
	INTERMENT	OAKWOOD MEMORIAL CEMETERY, OTTAWA, ILLINOIS		03-750-08
CAUSES OF DEATH		ECLAMPSIA,		03-750-09
		PREGNANCY PARA 13,		03-750-09A
		DIABETES MELLITUS		03-750-09B
SOURCE OF CASE		SEARCH BY CEM		03-750-10
EXPOSURE		DIAL PAINTER 01		03-750-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS. PAINTED DIALS 1924.			03-750-13
	SUBJECT ON 1924 PHOTOGRAPH.			03-750-13A
FAMILY HISTORY				03-750-15
	MARRIED			03-750-15A
015 -388	ECLAMPSIA			03-750-67
870 -785	DIABETES MELLITUS			03-750-67A
DATA REVISED	06-12-68			03-750-99

PATIENT	03-760	BORN	12-25-07	03-760-01
	DECEASED			03-760-02
	FEMALE			03-760-03
				03-760-05
DECEASED	03-09-46			03-760-06
	DEATH CERT. NO.	AUTOPSY	NONE	03-760-07
	INTERMENT	ST. COLUMBA CEMETERY,	OTTAWA	03-760-08
CAUSES OF DEATH	TUMOR BASE OF BRAIN PETROUS PORTION TEMPORAL BONE,			03-760-09
	PARALYSIS RIGHT SIDE OF FACE,			03-760-09A
	INFECTIONS, FOLLOWED BY MENINGITIS			03-760-09B
EXPOSURE	DIAL PAINTER 01			03-760-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS. SUBJECT ON 1925 PHOTO.			03-760-13
MEDICAL HISTORY				03-760-20
	PATIENT WAS ILL WITH BRAIN TUMOR THAT STARTED IN EAR. TREATED AT			03-760-20A
	RYBURN KING HOSPITAL, OTTAWA, ILLINOIS AND BY DR. NOVACK AT			03-760-20B
	ILLINOIS R.E. HOSP., CHICAGO, ILLINOIS.			03-760-20C
MALIGNANT TUMOR	TUMOR BASE OF BRAIN PETROUS PORTION OF TEMPORAL BONE			03-760-60
2135 -8Y00	TUMOR, TYPE UNDET., OF PETROUS PORTION OF TEMPORAL BONE			03-760-67
DATA REVISED	06-12-68			03-760-99

PATIENT	03-766	03-766-01
	DECEASED	03-766-02
	FEMALE	03-766-05
DECEASED	11-16-24	03-766-06
DEATH CERT. NO.		03-766-07
INTERMENT	MT. OLIVET CEMETERY, SPRING VALLEY, ILL.	03-766-08
CAUSES OF DEATH	HEMORRHAGIC NEPHRITIS,	03-766-09
	VALVULAR HEART LEAK,	03-766-09A
	ARTICULAR RHEUMATISM	03-766-09B
SOURCE OF CASE	SEARCH BY CEM	03-766-10
EXPOSURE	DIAL PAINTER 01	03-766-12
SOURCE	RADIUM DIAL CO., PERU, ILLINOIS.	03-766-13
FAMILY HISTORY		03-766-15
	NEVER MARRIED	03-766-15A
712 -100	ACUTE GLOMERULONEPHRITIS	03-766-67
DATA REVISED	05-07-68	03-766-99

PATIENT	03-768	BORN	06	03-768-01
	DECEASED			03-768-02
				03-768-03
	FEMALE			03-768-05
DECEASED	03-23-64			03-768-06
	DEATH CERT. NO.	AUTOPSY	YES	03-768-07
	INTERMENT	BEECH GROVE CEMETERY, MUNCIE, INDIANA		03-768-08
CAUSES OF DEATH	BRONCHOPNEUMONIA			03-768-09
	MALIGNANT ASTROCYTOMA			03-768-09A
SOURCE OF CASE	SEARCH BY CEM			03-768-10
EXPOSURE	DIAL PAINTER	01		03-768-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS, ABOUT 1924-1925.			03-768-13
FAMILY HISTORY				03-768-15
	MARRIED			03-768-15A
MALIGNANT TUMOR	MALIGNANT ASTROCYTOMA			03-768-60
361	-Y10	BRONCHOPNEUMONIA, UNDETERMINED CAUSE		03-768-67
930	-8473	ASTROCYTOMA OF BRAIN		03-768-67A

PATIENT 03-769
DECEASED

BORN 03-13-88

03-769-01
03-769-02
03-769-02A
03-769-03
03-769-05

FEMALE

DECEASED 03-28-47
DEATH CERT.NO.
INTERMENT

AUTOPSY NONE

DEER PARK CEMETERY, DEER PARK, ILLINOIS

03-769-06
03-769-07
03-769-08

CAUSES OF DEATH BRONCHOPNEUMONIA

03-769-09

SOURCE OF CASE

SEARCH BY CEM

03-769-10

EXPOSURE

DIAL PAINTER 01

03-769-12

361 -Y10 BRONCHOPNEUMONIA, UNDETERMINED CAUSE

03-769-67

DATA REVISED 11-09-67

03-769-99

PATIENT 03-772	BORN 07-12-04	03-772-01
DECEASED		03-772-02
		03-772-02A
		03-772-03
DECEASED 03-12-53		03-772-06
DEATH CERT. NO.	AUTOPSY NONE	03-772-07
INTERMENT ST. JOSEPH'S CEMETERY, HALL TWP., BUREAU COUNTY, ILL.		03-772-08
CAUSES OF DEATH	CARCINOMA OF LEFT EAR AND MASTOID	03-772-09
SOURCE OF CASE	SEARCH BY CEM	03-772-10
LITERATURE CITATION		03-772-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-772-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-772-11B
EXPOSURE	DIAL PAINTER 01	03-772-12
MEDICAL HISTORY		03-772-20
BIOPSY IN JOLIET HOSPITAL.		03-772-20A
MALIGNANT TUMOR	CARCINOMA LEFT MASTOID 1953	03-772-60
2134 -814	EPIDERMOID CARCINOMA OF THE MASTOID (LEFT)	03-772-66
PRIMARY TUMOR SLIDE KODACHROME AT ACRH		03-772-71
DATA REVISED 11-09-67		03-772-99

PATIENT 03-778	BORN 09-27-68	03-778-01
		03-778-02
FEMALE		03-778-03
		03-778-05
SOURCE OF CASE	SEARCH BY CEM	03-778-10
EXPOSURE	DIAL PAINTER 01	03-778-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS. WORKED AS DIAL PAINTER		03-778-13
FROM 1922 TO ABOUT 1924, QUIT WHEN MARRIED WOMEN WERE LAID OFF		03-778-13A
BECAUSE OF SLOWDOWN (PATIENT COULD NOT REMEMBER EXACT LENGTH OF		03-778-13B
TIME). PAINTED DIALS. POINTED BRUSH IN MOUTH.		03-778-13C
FAMILY HISTORY		03-778-15
MARRIED 1921	PARA 1 GRAVIDA 0 (1 MISC.)	03-778-15A
HUSBAND	1891 L W	03-778-15B
CHILDREN NONE		03-778-16
MEDICAL HISTORY		03-778-20
BACK DISCOMFORT FOR PREVIOUS 10 YEARS, DIAGNOSED AS MILD ARTHRI-		03-778-20A
TIS BY DR. COMPERE, NO SERIOUS ILLNESSES, SURGERY OR		03-778-20B
FRACTURES. CHRONIC SINUSITIS FOR MANY YEARS. HAS RETAINED MOST		03-778-20C
OF HER TEETH. (09-27-68)		03-778-20D
GAMMA-RAY MEASUREMENTS		03-778-25
09-27-68 RAB,RAC 0.017 UCI HGS 1 TILTING CHAIR CEM		03-778-25A
COMPUTED TOTAL-BODY RADIUM		03-778-27
09-27-68 0.017 UCI 0.055 UCI TOTAL 0.31		03-778-27A
X-RAY EXAMINATION		03-778-30
COMPLETE SKELETAL SURVEY		03-778-30A
09-27-68 ANL X-RAY NO. R-244 LOC. ANL		03-778-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3		03-778-30C
PPF MARKED COARSENING OF TRABECULATION OF THE MANDIBLE AND		03-778-30D
RIGHT AND LEFT TIBIA.		03-778-30E
CLINICAL LABORATORY FINDINGS		03-778-40
09-27-68 HG 15.8 HTC 49 RBC		03-778-40A
WBC 8200 DIFF. P 65 ST 0 L 27 M 7 E 1 B 0		03-778-40B
320 -100 SINUSITIS		03-778-67

PATIENT	03-779	BORN	10-11-05	03-779-01
	DECEASED			03-779-02
				03-779-03
	FEMALE			03-779-05
DECEASED	08-05-42			03-779-06
	DEATH CERT. NO.	AUTOPSY	YES	03-779-07
	INTERMENT	GUARDIAN ANGEL CEMETERY, OAKDALE TWP., MINN.		03-779-08
CAUSES OF DEATH		SARCOMA OF THE LUNGS,		03-779-09
		SARCOMA OF THE THIGH		03-779-09A
		AUTOPSY FINDINGS--FASCIAL SARCOMA OF THIGH		03-779-09B
		WITH METASTASIS TO KIDNEY AND LUNGS		03-779-09C
SOURCE OF CASE		SEARCH BY CEM		03-779-10
EXPOSURE		DIAL PAINTER	01	03-779-12
SOURCE	RADIUM DIAL CO., PERU, ILLINOIS: PAINTED DIALS ABOUT 1922.			03-779-13
FAMILY HISTORY				03-779-15
	MARRIED			03-779-15A
MALIGNANT TUMOR		FASCIAL SARCOMA OF LEFT THIGH		03-779-60
297X -879		SARCOMA OF FASCIA OF THIGH, UNSPECIFIED		03-779-66
AUTOPSY REPORT AT ANL				03-779-70

PATIENT	03-784			03-784-01
				03-784-02
				03-784-03
				03-784-05
FEMALE				
OTHER PERTINENT NOS.	AMBH			03-784-05A
SOURCE OF CASE	SYMPTOMS			03-784-10
EXPOSURE	DIAL PAINTER 01			03-784-12
SOURCE	RADIUM DIAL CO., AND LUMINOUS PROCESSES, INC., OTTAWA, ILL.			03-784-13
MEDICAL HISTORY				03-784-20
	PATIENT WAS SEEN AT THE U OF CHICAGO CLINICS BY DR. H. HATCHER,			03-784-20A
	TO WHOM THE PATIENT HAD BEEN REFERRED BY HER DENTIST BECAUSE OF			03-784-20B
	DELAYED HEALING OF SEVERAL TOOTH SOCKETS FOLLOWING EXTRACTION OF			03-784-20C
	TEETH.			03-784-20D
GAMMA-RAY MEASUREMENTS				03-784-25
09-13-54	RAB,RAC	ACRH 2X2 CRYSTAL, 1 M ARC	RJH	03-784-25A
COMPUTED TOTAL-BODY RADIUM				03-784-27
09-13-54	BETWEEN 0.50 AND 1.00 UCI TOTAL			03-784-27A
X-RAY EXAMINATION				03-784-30
	COMPLETE SKELETAL SURVEY			03-784-30A
	09-13-54	U OF CHICAGO CLINICS		03-784-30B
	NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION.			03-784-30C
	PPF NONE.	SCORE 0		03-784-30D

PATIENT 03-785	BORN 08-09-03	03-785-01
DECEASED		03-785-02
		03-785-03
FEMALE		03-785-05
OTHER PERTINENT NOS.	ILL. R.E.	03-785-05A
DECEASED 08-02-55		03-785-06
DEATH CERT.NO.	AUTOPSY YES	03-785-07
INTERMENT	BEVERLY CEMETERY, WORTH, ILL.	03-785-08
CAUSES OF DEATH	ENCEPHALITIS,	03-785-09
	ABSCCESS, TEMPORAL LOBE, RIGHT BRAIN,	03-785-09A
	EPIDERMOID CARCINOMA, RIGHT TEMPORAL BCNE (DEATH CERT.)	03-785-09B
	CARCINOMA, RIGHT MASTOID (ACTUAL)	03-785-09C
SOURCE OF CASE	SEARCH BY CEM	03-785-10
LITERATURE CITATION		03-785-11
	FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING	03-785-11A
	RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).	03-785-11B
EXPOSURE	DIAL PAINTER 01	03-785-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINCIS. WORKED AS DIAL PAINTER	03-785-13
	FOR 8 MONTHS ABOUT 1925.	03-785-13A
MEDICAL HISTORY		03-785-20
ADMITTED TO ILL.R.E. HOSP. 10-27-53 WITH COMPLAINT OF PAINFUL		03-785-20A
MASS IN RIGHT PAROTID AND PARIETAL-CCCIPITAL REGIONS. PAIN WAS		03-785-20B
PRESENT IN RIGHT MASTOID FOR 1 YEAR AND MASS FOR 9 MONTHS. MASS		03-785-20C
WAS RAISED, INDURATED AND SMOOTH, ELEVATED 1.5 CM AND 4 CM DIA-		03-785-20D
METER. ROENTGENOGRAM OF RIGHT MASTOID REVEALED IRREGULAR DESTRUC-		03-785-20E
TIVE PROCESS. BIOPSY REVEALED AN EPIDERMOID CARCINOMA. GYNECOLOG-		03-785-20F
ICAL EXAMINATION 11-08-53 NEGATIVE. RETROGRADE PYELOGRAM AND		03-785-20G
BRONCHOSCOPY WERE PERFORMED. X-RAYS OF RIBS, HUMERI, AND FEMUR		03-785-20H
REVEALED SMALL RADIOLOUCENT AREAS SUGGESTIVE OF METASTASES. CHEST		03-785-20I
X-RAY NORMAL. ON 12-01-53 THERE WAS PARTIAL EXCISION OF TUMOR OF		03-785-20J
MASTOID WHICH WAS FOUND TO BE ADHERENT TO THE DURA. BETWEEN		03-785-20K
12-28-53 AND 01-06-54 4500 R WERE GIVEN TO AREA WITH SUBSEQUENT		03-785-20L
WOUND BREAKDOWN. ON 05-17-54 THERE WAS PAIN AND SWELLING IN THE		03-785-20M
ZYGOMA. FROM 06-22 TO 08-25 9000 R WERE GIVEN TO THE AREA. THERE		03-785-20N
WERE 7 SUBSEQUENT ADMISSIONS TO HOSPITAL FOR PAIN IN RIGHT MASTOID		03-785-20O
AND DISCHARGING RIGHT EAR. FINAL ADMISSION ON 08-02-55 WITH		03-785-20P
SEPTIC DEATH 08-08-55 AS RESULT OF ACUTE INFECTIOUS PROCESS OF		03-785-20Q
BRAIN.		03-785-20R
AUTOPSY ON FILE AT ILLINOIS R.E. HOSPITAL. AUTOPSY SUMMARY--		03-785-21A
1) EPIDERMOID CARCINOMA INVOLVING RIGHT TEMPORAL, OCCIPITAL, AND		03-785-21B
ZYGOMATIC BONES, DURA MATER, AND SOFT TISSUE OVER THE RIGHT		03-785-21C
MASTOID PROCESS. TREATED BY PARTIAL SURGICAL REMOVAL AND IRRADIA-		03-785-21D
TION. WOUND BREAKDOWN.		03-785-21E
2) LEPTOMENINGITIS AND SUPPURATIVE ENCEPHALITIS.		03-785-21F

MALIGNANT TUMOR CARCINOMA, RIGHT MASTOID 1955

03-785-60

2134 -814 EPIDERMOID CARCINOMA OF THE MASTOID (RIGHT)

03-785-66

DATA REVISED 04-10-68

03-785-99

PATIENT	03-792	BORN	07-18-02	03-792-01
	DECEASED			03-792-02
	FEMALE			03-792-05
DECEASED	01-12-39			03-792-06
DEATH CERT.NO.		AUTOPSY	NONE	03-792-07
INTERMENT	OTTAWA, ILLINOIS			03-792-08
CAUSES OF DEATH	UTERINE HEMORRHAGE DURING PARTURITION			03-792-09
SOURCE OF CASE	SEARCH BY CEM			03-792-10
EXPOSURE	DIAL PAINTER, 01			03-792-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS.			03-792-13
7X2	-560.7	POST PARTUM HEMORRHAGE DUE TO UTERINE INERTIA		03-792-67

PATIENT 03-793	BORN 07-18-03	03-793-01
DECEASED		03-793-02
		03-793-02A
FEMALE		03-793-03
		03-793-05
DECEASED 12-10-43		03-793-06
DEATH CERT. NO.	AUTOPSY NONE	03-793-07
INTERMENT	FOREST LAWN CEMETERY, LASALLE, ILLINOIS	03-793-08
CAUSES OF DEATH	POST OPERATIVE SHOCK,	03-793-09
	BILATERAL BREAST AMPUTATION FOR GROWTH,	03-793-09A
	RIGHT SUSPECTED CARCINOMA,	03-793-09B
	FRACTURE UPPER 1/3 LEFT FEMUR (DEATH CERT.)	03-793-09C
SOURCE OF CASE	SEARCH BY CEM	03-793-10
EXPOSURE	DIAL PAINTER 01	03-793-12
SOURCE	RADIUM DIAL CO., PERU, ILLINOIS. SUBJECT ON 1922 PERU PHOTO.	03-793-13
FAMILY HISTORY		03-793-15
MARRIED		03-793-15A
010 -4XX	SHOCK FOLLOWING OPERATION	03-793-67
190 -14	RADICAL MASTECTOMY	03-793-67A
23521-416	FRACTURE OF PROXIMAL THIRD OF FEMUR	03-793-67B
MALIGNANT TUMOR	(SUSPECTED) CARCINOMA RT. BREAST	03-793-60

PATIENT 03-795	BORN 09-21-97	03-795-01
DECEASED		03-795-02
		03-795-03
FEMALE		03-795-05
OTHER PERTINENT NOS.	ST. JOSEPH HOSP.	03-795-05A
	ST. JOSEPH AUTOPSY	03-795-05B
DECEASED 11-06-44		03-795-06
DEATH CERT. NO.	AUTOPSY YES	03-795-07
INTERMENT	GRAND RIDGE CEMETERY, GRAND RIDGE, ILLINOIS	03-795-08
CAUSES OF DEATH	CARCINOMA OF HEAD OF PANCREAS, GENERALIZED CARCINOMATOSIS	03-795-09 03-795-09A
SOURCE OF CASE	SEARCH BY CEM	03-795-10
EXPOSURE	DIAL PAINTER 01	03-795-12
FAMILY HISTORY		03-795-15
MARRIED		03-795-15A
MEDICAL HISTORY		03-795-20
AUTOPSY 1921 PERFORMED 11-07-44 AT ST. JOSEPH HOSP., AURORA, ILL.		03-795-20A
HISTOLOGY--IN THE PARAFFIN SECTIONS STAINED WITH H AND E THERE IS		03-795-20B
A PRIMARY TUMOR MASS IN THE PANCREAS. THIS IS ASSOCIATED WITH A		03-795-20C
MARKED FIBROUS CHANGE IN THE INTERTITIAL TISSUE AND SURROUNDING		03-795-20D
CAPSULE AND FAT. THE LESION IS A TYPICAL ADENOCARCINOMA. THE		03-795-20E
STOMACH SEROSA IS INFILTRATED BY SIMILAR TUMOR MATERIAL AS IS		03-795-20F
THAT OF THE DUODENUM, BUT NOWHERE IS THERE CONNECTION WITH THE		03-795-20G
LINING OF THESE STRUCTURES. THE LIVER HAS A MARKED CHRONIC		03-795-20H
PASSIVE HYPEREMIA, AND CONTAINS TUMOR INVASION ALONG THE COMMON		03-795-20I
BILE DUCT. THE BONES ARE INVOLVED BY SIMILAR METASTATIC REGIONS.		03-795-20J
DIAGNOSIS--PRIMARY CARCINOMA OF THE PANCREAS, WITH EXTENSIVE		03-795-20K
METASTASES. (GEORGE J. RUKSTINAT, M.D.)		03-795-20L
X-RAY EXAMINATION		03-795-30
SPECIAL VIEWS--SKULL, PELVIS, RIBS		03-795-30A
11-06-44 ST. JOSEPH HOSP., AURORA, ILL. NO.		03-795-30B
FILMS OF CHEST, SPINE, PELVIS AND HEAD SHOW VERY EXTENSIVE BONE		03-795-30C
CHANGE. THE X-RAY APPEARANCE IS THAT OF GENERALIZED METASTATIC		03-795-30D
CARCINOMA. THE UPPER 6 OR 7 DORSAL VERTEBRAE APPEAR NORMAL. I		03-795-30E
RAISE THIS ONE PARTICULAR POINT IN HELPING TO DIFFERENTIATE THESE		03-795-30F
BONE LESIONS FROM MULTIPLE MYELOMA. THERE IS ENTIRELY TOO MUCH		03-795-30G
BONE REACTION WITH INCREASED DENSITY FOR THESE LESIONS TO BE DUE		03-795-30H
TO MULTIPLE MYELOMA. MULTIPLE MYELOMA WILL NOT BE LIKELY TO SKIP		03-795-30I
THE LOWER DORSAL VERTEBRAE. AS A FURTHER POINT OF ACADEMIC INTER-		03-795-30J
EST FILMS OF LOWER LEG AND LOWER ARM WILL BE MADE. CONCLUSION--		03-795-30K
DIFFUSE METASTATIC CARCINOMA OF BONE FROM SOME UNDETERMINED POINT		03-795-30L
OF ORIGIN. (H.T. MOSTROM, M.D.)		03-795-30M

CLINICAL LABORATORY FINDINGS

11-01-44 HG 11.5 HTC RBC 2.85
WBC 9750 DIFF. P 28 ST 58 L 12 M E 2 B 0

690 -8191 CARCINOMA, NOT OTHERWISE SPECIFIED, OF PANCREAS

MALIGNANT TUMOR CARCINOMA OF HEAD OF PANCREAS

DATA REVISED 04-15-68

03-795-40
03-795-40A
03-795-40B

03-795-67

03-795-60

03-795-99

PATIENT 03-800	BORN 07-01-08	03-800-01
DECEASED		03-800-02
		03-800-03
FEMALE		03-800-05
OTHER PERTINENT NOS.	ILL. R. E.	03-800-05A
	ILL. R. E. AUTOPSY OF 1945	03-800-05B
DECEASED 03-02-45		03-800-06
DEATH CERT. NO.	AUTOPSY YES	03-800-07
INTERMENT OTTAWA, ILLINOIS		03-800-08
CAUSES OF DEATH	BRONCHOPNEUMONIA	03-800-09
	OSTEOGENIC SARCOMA OF LEFT FEMUR	03-800-09A
SOURCE OF CASE	SYMPTOMS	03-800-10
LITERATURE CITATION		03-800-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-800-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-800-11B
EXPOSURE	DIAL PAINTER 01	03-800-12
SOURCE	DETAILS NOT KNOWN.	03-800-13
FAMILY HISTORY	NOT KNOWN.	03-800-15
MEDICAL HISTORY		03-800-20
PATIENT SUSTAINED FRACTURE AND INJURY OF FOOT IN CAR ACCIDENT AT		03-800-20A
AGE 25. PATIENT WAS WELL UNTIL ABOUT 01-44. ON 12-25-43		03-800-20B
PATIENT NOTED FIRST PAIN IN HER RIGHT LEG, WHICH WAS OF SHARP,		03-800-20C
SHOOTING NATURE BUT DISAPPEARED AND NEVER RETURNED. SEVERAL DAYS		03-800-20D
LATER SHE COMPLAINED OF ACHING PAIN IN HER LEFT UPPER LEG RADIAT-		03-800-20E
ING DOWN THE INSIDE OF LEG TO FOOT, PAIN INCREASED WITH MOVEMENT.		03-800-20F
SYMPTOMS BECAME PROGRESSIVELY WORSE UNTIL 07-44, WHEN SHE		03-800-20G
EXPERIENCED BURNING AND THROBBING PAIN IN HER BACK JUST BELOW HER		03-800-20H
SHOULDER BLADES. ABOUT 2 MONTHS LATER PAIN BEGAN TO RADIATE TO		03-800-20I
ANTERIOR CHEST WALL. RIGHT SHOULDER ALSO BECAME PAINFUL. FURTHER		03-800-20J
WEAKNESS FOLLOWED, PATIENT WAS HOSPITALIZED 10-44. PATIENT		03-800-20K
EXPIRED 03-20-45. (FROM AUTOPSY REPORT.)		03-800-20L
X-RAY EXAMINATION		03-800-30
10-26-44, 12-11-44	U OF ILL. RES. HOSP.	03-800-30B
CLINICAL LABORATORY FINDINGS		03-800-40
10-18-44	HG 16. HTC RBC 4.2	03-800-40A
WBC 11,800		03-800-40B
02-09-45	HG 11. HTC RBC 3.1	03-800-41A
WBC 10,000		03-800-41B
23513-876F	OSTEOGENIC SARCOMA, HEAD OF FEMUR (LEFT)	03-800-66
361 -Y10	BRONCHOPNEUMONIA, UNDETERMINED CAUSE	03-800-67
MALIGNANT TUMOR	OSTEOGENIC SARCOMA LEFT FEMUR 1945	03-800-60
AUTOPSY REPORT AT ANL		03-800-70
DATA REVISED 03-22-68		03-800-99

PATIENT 03-801		03-801-01
		03-801-02
FEMALE		03-801-03
		03-801-05
SOURCE OF CASE	SEARCH BY CEM	03-801-10
EXPOSURE	DIAL PAINTER 01	03-801-12
SOURCE RADIUM DIAL CO., OTTAWA, ILL., NOV. 1924 TO JAN. 1925, ABOUT 3 MONTHS. PAINTED CLOCK DIALS ONLY. POINTED BRUSH IN MOUTH.		03-801-13
ASSUMED WORK PERIOD 10-15-1924 TO 01-15-1924		03-801-13A
24.87 YEARS OF AGE WHEN FIRST EMPLOYED.		03-801-13*
		03-801-13Z
FAMILY HISTORY		03-801-15
MARRIED 1935	PARA 2 GRAVIDA 2	03-801-15A
CHILDREN	MALE 1936 L W	03-801-16
	FEMALE 1941 L W	03-801-16A
MEDICAL HISTORY		03-801-20
SURGERY--APPENDECTOMY 1949. SLIPPED ON ICE AND INJURED TAIL BONE WITH SUBSEQUENT COCCYDYNIA AND ARTHRITIS, ABOUT 1939. PATIENT		03-801-20A
HAS BEEN ILL WITH SPASTIC COLON SINCE SPRING 1964. NO FRACTURES		03-801-20B
EXCEPT ONE FINGER THAT WAS INJURED WHILE AT WORK. TEETH--WEARS		03-801-20C
LOWER DENTURE. (02-18-65)		03-801-20D
		03-801-20E
GAMMA-RAY MEASUREMENTS		03-801-25
02-18-65 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-801-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		03-801-27
02-18-65 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-801-27A
X-RAY EXAMINATION		03-801-30
PARTIAL SKELETAL SURVEY		03-801-30A
02-18-65 ANL X-RAY NO. R-237 LOC. ANL		03-801-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-801-30C
PPF NONE		03-801-30D
CLINICAL LABORATORY FINDINGS		03-801-40
02-18-65 HG 12.5 HTC 41 RBC 4.15		03-801-40A
WBC 11,200 DIFF. P 38 ST 26 L 30 M 5 E 1 B		03-801-40B
225 -416 FRACTURE OF THE COCCYX		03-801-67
661 -12 APPENDECTOMY		03-801-67A
DATA REVISED 10-17-67		03-801-99

PATIENT 03-806	10-09-96	03-806-01
DECEASED		03-806-02
FEMALE		03-806-05
DECEASED 08-01-56		03-806-06
DEATH CERT.NO.	AUTOPSY NONE	03-806-07
INTERMENT	ST. MARY'S CEMETERY, UTICA, ILLINOIS	03-806-08
CAUSES OF DEATH	SARCOMA LEFT HIP,	03-806-09
	PAGET'S DISEASE,	03-806-09A
	INTERTROCHANTERIC FRACTURE, LEFT HIP	03-806-09B
SOURCE OF CASE	SEARCH BY CEM	03-806-10
EXPOSURE	DIAL PAINTER 01	03-806-12
FAMILY HISTORY		03-806-15
NEVER MARRIED		03-806-15A
MEDICAL HISTORY		03-806-20
LITTLE IS KNOWN OF PATIENT'S MEDICAL HISTORY BUT SOME DETAILS		03-806-20A
HAVE BEEN RECONSTRUCTED FROM A STUDY OF HOSPITAL RECORDS. PATIENT		03-806-20B
HOSPITALIZED AT EVANGELICAL HOSPITAL OF CHICAGO IN 05-54 WITH A		03-806-20C
FRACTURE OF THE RIGHT FEMUR. THIS OCCURRED WITH MINIMAL TRAUMA		03-806-20D
DURING A SPRAIN OF THE RIGHT ANKLE. PAST HISTORY REVEALED THAT		03-806-20E
SHE HAD HAD 3 EPISODES OF BONE FRACTURE--IN 1938 A FRACTURE OF		03-806-20F
THE DISTAL END OF THE RIGHT FEMUR, IN 1944 AGAIN AT THE SAME SITE		03-806-20G
IN THE RIGHT FEMUR AND IN 1947 A FRACTURE OF A WRIST. HISTORY		03-806-20H
OTHERWISE NEGATIVE. PATIENT NEXT ADMITTED TO EVANGELICAL HOSPITAL		03-806-20I
OF CHICAGO 04-12-56 WITH COMPLAINT OF PAIN IN LEFT HIP. RADIOGRA-		03-806-20J
PHY OF LEFT HIP SHOWED INTERTROCHANTERIC FRACTURE OF THE FEMUR		03-806-20K
APPARENTLY PATHOLOGICAL WITH EXTENSIVE DESTRUCTION OF GREATER		03-806-20L
TROCHANTER. A LARGE MASS DEVELOPED AT THE SITE OVERLYING THE		03-806-20M
GREATER TROCHANTER OF THE LEFT FEMUR, WHICH ULCERATED THROUGH THE		03-806-20N
SKIN. NO BIOPSY OF THIS OBVIOUS TUMOR WAS MADE AND A HISTOLOGICAL		03-806-20O
DIAGNOSIS IS NOT AVAILABLE. IT WAS ASSUMED AND IS ALSO ASSUMED		03-806-20P
BY US THAT THIS WAS A BONE MALIGNANCY ARISING IN THE GREATER		03-806-20Q
TROCHANTER OF THE LEFT FEMUR. THE PATIENT DIED ON 08-01-56. NO		03-806-20R
AUTOPSY WAS DONE.		03-806-20S

X-RAY EXAMINATION		03-806-30
SPECIAL VIEWS--PELVIS AND RIGHT FEMUR		03-806-30A
05-07-54	EVANGELICAL HOSP., CHICAGO, ILL.	03-806-30B
PPF PAGET'S DISEASE INVOLVING PELVIS BONES OF BOTH FEMURS WITH		03-806-30D
FRACTURE OF THE RIGHT FEMUR AT THE JUNCTION OF MIDDLE AND PROXI-		03-806-30E
MAL THIRDS. THERE IS SLIGHT ANGULATION BUT VERY LITTLE DISPLACE-		03-806-30F
MENT OF THE FRAGMENTS. THERE IS ALSO EXTENSIVE DESTRUCTION OF THE		03-806-30G
HEAD OF THE LEFT FEMUR WITH APPARENT ANKYLOSIS OF THE LEFT HIP		03-806-30H
JOINT. THERE ARE ARTHRITIC CHANGES INVOLVING THE LUMBAR VERTEBRAE.		03-806-30I
THERE ARE SHADOWS IN BOTH GLUTEAL INDICATING HEAVY METAL THERAPY.		03-806-30J
INTERPRETATION OF THIS X-RAY BY OUR GROUP WOULD BE THAT IT POSS-		03-806-30K
IBLY DID NOT REPRESENT PAGET'S DISEASE BUT IS COMPLETELY CONSIS-		03-806-30L
TENT WITH THE COARSENING OF TRABECULAR MARKINGS AND THICKENING		03-806-30M
OF THE CORTEX OF THE FEMUR SEEN IN PATIENTS BEARING A CONSIDERABLE		03-806-30N
BODY BURDEN OF RADIUM. IN ADDITION, THE EXTENSIVE DESTRUCTION OF		03-806-30O
THE HEAD OF THE LEFT FEMUR COUPLED WITH THE HISTORY OF PATHOLOGIC-		03-806-30P
CAL FRACTURES IS CONSISTENT WITH RADIUM-INDUCED ASEPTIC NECROSIS		03-806-30Q
OF THE HEAD OF THE FEMUR.		03-806-30R
SPECIAL VIEWS--LEFT HIP		03-806-31A
04-16-56	EVANGELICAL HOSP., CHICAGO, ILL.	03-806-31B
PPF INTERTROCHANTERIC FRACTURE OF THE FEMUR APPARENTLY PATHOLOGIC-		03-806-31D
GICAL WITH EXTENSIVE DESTRUCTION OF THE GREATER TROCHANTER. THERE		03-806-31E
IS DEMINERALIZATION OR OSTEOPOROSIS OF THE BONY STRUCTURES DISTAL		03-806-31F
TO THE FRACTURE.		03-806-31G
CLINICAL LABORATORY FINDINGS		03-806-40
05-08-54	HG 13.1 HTC RBC 3.98	03-806-40A
WBC 9200	DIFF. P 82 ST L 16 M 2 E 0 B 0	03-806-40B
04-16-56	HG 11.29 HTC 35 RBC	03-806-41A
WBC 11,450	DIFF. P 78 ST L 22 M 0 E 0 B 0	03-806-41B
MALIGNANT TUMOR	POSSIBLE SARCOMA OF THE GREATER TROCHANTER OF	03-806-60
	THE LEFT FEMUR--UNPROVEN	03-806-60A
23517-879	SARCOMA, UNSPECIFIED, OF THE GREATER TROCHANTER OF FEMUR	03-806-66
DATA REVISED 05-07-68		03-806-99

PATIENT 03-815	BORN 01-04-04	03-815-01
DECEASED		03-815-02
		03-815-02A
		03-815-03
FEMALE		03-815-05
DECEASED 02-16-55		03-815-06
DEATH CERT.NO.	AUTOPSY NONE	03-815-07
INTERMENT OAKWOOD MEMORIAL PARK, OTTAWA, ILL.		03-815-08
CAUSES OF DEATH	CARCINOMA OF RIGHT BREAST WITH METASTASES	03-815-09
LITERATURE CITATION		03-815-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		03-815-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		03-815-11B
MEDICAL HISTORY		03-815-20
SURGERY 10-03-52 REVEALED CARCINOMA OF BREAST.		03-815-20A
MALIGNANT TUMOR	CARCINOMA OF RIGHT BREAST 1955	03-815-60
190 -8191	CARCINOMA, UNSPECIFIED, OF THE BREAST (RIGHT)	03-815-67
DATA REVISED 05-07-68		03-815-99

PATIENT 03-822	BORN 08-13-01	03-822-01
DECEASED		03-822-02
		03-822-02A
		03-822-03
		03-822-03A
		03-822-05
FEMALE		
DECEASED 11-05-54		03-822-06
DEATH CERT. NO.	AUTOPSY NONE	03-822-07
INTERMENT	MT. ROSE CEMETERY, MOUNDSVILLE, WEST VIRGINIA	03-822-08
CAUSES OF DEATH	ADENOCARCINOMA COLON WITH METASTASIS	03-822-09
SOURCE OF CASE	SEARCH BY CEM	03-822-10
EXPOSURE	DIAL PAINTER 01	03-822-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINOIS	03-822-13
FAMILY HISTORY		03-822-15
MARRIED		03-822-15A
MEDICAL HISTORY		03-822-20
SURGERY PERFORMED 10-13-54, FINDINGS--COLLOID ADENOCARCINOMA OF COLON WITH METASTASIS.		03-822-20A
		03-822-20B
MALIGNANT TUMOR	ADENOCARCINOMA OF COLON	03-822-60
660 -8091.0 ADENOCARCINOMA OF COLON, WITH METASTASES		03-822-67

PATIENT	03-828	BORN	09-05-15	03-828-01
	MALE			03-828-02
				03-828-05
EXPOSURE	DIAL PAINTER 01			03-828-12
	MISC. JEWELRY REPAIR 03			03-828-12A
SOURCE	GRAND CENTRAL AIRCRAFT, TUCSON, ARIZONA, 1950, ABOUT 7			03-828-13
	MONTHS. PAINTED DIALS USING SILK SCREEN METHOD AND SMALL BRUSH,			03-828-13A
	DID NOT POINT BRUSH IN MOUTH. SINCE 1954 WORKED AS WATCH REPAIRER,			03-828-13B
	EXPOSED TO DUST FROM LUMINOUS DIALS. SINCE 1943 HAS ALSO WORKED			03-828-13C
	AT MISC. JEWELRY REPAIR SHOPS.			03-828-13D
FAMILY HISTORY				03-828-15
	MARRIED 1945			03-828-15A
	WIFE		L W	03-828-15B
	CHILDREN	MALE	1949	L W
		MALE	1955	L W
				03-828-16
				03-828-16A
GAMMA RAY MEASUREMENTS				03-828-25
	06-30-59	RAB,RAC	LESS THAN 0.0003 UCI	HGS 1 TILTING CHAIR CEM 03-828-25A
COMPUTED TOTAL-BODY RADIUM				03-828-27
	06-30-59	LESS THAN 0.0003 UCI	LESS THAN 0.001 UCI TOTAL	0.31 03-828-27A
DATA REVISED	02-07-68			03-828-99

PATIENT 03-836	BORN 07-11-08	03-836-01
		03-836-02
FEMALE		03-836-03
		03-836-05
SOURCE OF CASE	SEARCH BY CEM	03-836-10
EXPOSURE	DIAL PAINTER 01	03-836-12
SOURCE RADIUM DIAL CO., OTTAWA, ILLINOIS. WORKED JUNE THROUGH		03-836-13
NOVEMBER 1924, TOTAL ABOUT 5 OR 6 MONTHS. PAINTED DIALS. POINTEC		03-836-13A
BRUSH BETWEEN LIPS.		03-836-13B
FAMILY HISTORY		03-836-15
MARRIED 1935	PARA 1 GRAVIDA 2 (1 MISC., AGE 19)	03-836-15A
DIVORCED 1948		03-836-15B
CHILDREN MALE 1949 L W		03-836-16
MEDICAL HISTORY		03-836-20
SURGERY FOR PERFORATED PEPTIC ULCER ABOUT 1957. HISTORY OF FRAC-		03-836-20A
TURES OF RIGHT ELBOW IN CHILDHOOD AND OF RIGHT AND LEFT WRISTS AS		03-836-20B
YOUNG ADULT. INQUIRY BY SYSTEMS NEGATIVE EXCEPT FOR GASTROINTES-		03-836-20C
TINAL SYSTEMS. TEETH--EDENTULOUS UPPER JAW WITH FULL DENTURE,		03-836-20D
BUT STILL HAS 14 LOWER TEETH. (10-15-67)		03-836-20E
GAMMA-RAY MEASUREMENTS		03-836-25
10-19-67 RAB,RAC LESS THAN 0.0003 UCI HGS 1 TILTING CHAIR CEM		03-836-25A
COMPUTED TOTAL-BODY RADIUM		03-836-27
10-19-67 LESS THAN 0.0003 UCI LESS THAN 0.001 UCI TOTAL 0.31		03-836-27A
X-RAY EXAMINATION		03-836-30
COMPLETE SKELETAL SURVEY		03-836-30A
10-19-67 ANL X-RAY NO. R-242 LOC. ANL		03-836-30B
NEGATIVE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		03-836-30C
PPF NONE.		03-836-30D
CLINICAL LABORATORY FINDINGS		03-836-40
10-19-67 HG 13.2 HTC 45 RBC 4.25		03-836-40A
WBC 6500 DIFF. P 52 ST 2 L 36 M 7 E 3 B		03-836-40B
651 -951.3 DUODENAL ULCER WITH PERFORATION		03-836-67
DATA REVISED 04-15-68		03-836-99

PATIENT 03-848	BORN 07-21-03	03-848-01
DECEASED		03-848-02
FEMALE	SOC.SEC.NO.	03-848-05
DECEASED 07-05-58		03-848-06
DEATH CERT.NO.	AUTOPSY NONE	03-848-07
INTERMENT	QUEEN OF HEAVEN CEMETERY, HILLSIDE, ILLINOIS	03-848-08
CAUSES OF DEATH	GENERALIZED CARCINOMATOSIS,	03-848-09
	LEIOMYO CARCINOMA OF FEMUR (DEATH CERT.)	03-848-09A
EXPOSURE	DIAL PAINTER 01	03-848-12
FAMILY HISTORY		03-848-15
NEVER MARRIED		03-848-15A
MEDICAL HISTORY		03-848-20
A REVIEW OF THE RECORDS FROM THE PATIENT'S HOSPITALIZATION AT ST. ANNE'S HOSPITAL, CHICAGO, REVEALED THAT SHE ENTERED THE HOSPITAL BECAUSE OF SEVERE PAIN AT THE DISTAL END OF ONE OF HER THIGHS IMMEDIATELY ABOVE THE KNEE. TO THE RADIOLOGIST, IT APPEARED THAT THERE WERE METASTATIC LESIONS IN THE CALVARIUM AND THAT THE LESION IN THE FEMUR ALSO REPRESENTED A METASTASIS. THE ORIGINAL RADIOGRAPHS HAVE BEEN DESTROYED BUT A READING OF THE X-RAY REPORT MAKES IT SEEM THAT THE LESIONS DESCRIBED AS METASTASES IN THE CALVARIUM WERE IN FACT THE MULTIPLE AREAS OF BONE RESORPTION SEEN IN MANY PATIENTS WITH RADIUM POISONING. THE PHYSICAL EXAMINATION DEMONSTRATED AN ENLARGEMENT OF THE UTERUS. A BIOPSY OF THE LESION IN THE FEMUR DEMONSTRATED A TUMOR WHICH LOOKED MOST LIKE LEIOMYOSARCOMA OF THE UTERUS. IT WAS THEREFORE ASSUMED, ALTHOUGH THE GYNECOLOGIC CONSULTANT DID NOT BELIEVE THE PATIENT HAD A LEIOMYOSARCOMA OF THE UTERUS, THAT THE TUMOR METASTASIZED IN THE CALVARIUM AND FEMUR REPRESENTED A SPREAD FROM A PRIMARY UTERINE TUMOR. THE TUMOR SLIDES HAVE BEEN REVIEWED BY DR. HENRY RAPPAPORT, PROFESSOR OF PATHOLOGY, AT THE U OF CHICAGO, AND HIS STAFF. HE IS NOT CONVINCED THAT THIS REPRESENTS A METASTASIS FROM A PRIMARY UTERINE TUMOR. IT CAN ALSO REPRESENT A PRIMARY PRIMITIVE RHABDOMYOSARCOMA OR OTHER ANAPLASTIC SARCOMA ARISING IN OR ADJACENT TO BONE. (10-68)		03-848-20A 03-848-20B 03-848-20C 03-848-20D 03-848-20E 03-848-20F 03-848-20G 03-848-20H 03-848-20I 03-848-20J 03-848-20K 03-848-20L 03-848-20M 03-848-20N 03-848-20O 03-848-20P 03-848-20Q 03-848-20R 03-848-20S 03-848-20T 03-848-20U 03-848-20V
MALIGNANT TUMOR	LEIOMYO CARCINOMA OF FEMUR (DEATH CERT.)	03-848-60
	PRIMARY RHABDOMYOSARCOMA OF FEMUR (POSSIBLE)	03-848-60A
23523-8Y00	TUMOR, TYPE UNDETERMINED, OF DISTAL THIRD OF FEMUR	03-848-67
DATA REVISED 10-02-68		03-848-99

PATIENT	03-864	BORN	01-10-10	03-864-01
	DECEASED			03-864-02
	FEMALE			03-864-03
				03-864-05
DECEASED	10-11-41			03-864-06
DEATH CERT. NO.		AUTOPSY	NONE	03-864-07
INTERMENT	OTTAWA, ILLINOIS			03-864-08
CAUSES OF DEATH	BRONCHIAL PNEUMONIA			03-864-09
	STREPTOCOCCUS,			03-864-09A
	RHEUMATIC MITRAL STENOSIS			03-864-09B
SOURCE OF CASE	SEARCH BY CEM			03-864-10
EXPOSURE	DIAL PAINTER 01			03-864-12
SOURCE	RADIUM DIAL CO., OTTAWA, ILLINCIS. PAINTED DIALS ABOUT 1928.			03-864-13
	WORKED WITH MACHINE ONLY, NOT BRUSHES.			03-864-13A
FAMILY HISTORY				03-864-15
MARRIED				03-864-15A
361 -102	BRONCHOPNEUMONIA, STREPTOCCCCIC			03-864-67
454 -932.6	RHEUMATIC VALVALITIS INACTIVE WITH MITRAL STENOSIS			03-864-67A

PATIENT	03-865	BORN	04-07-04	03-865-01
	DECEASED			03-865-02
				03-865-03
	FEMALE			03-865-05
DECEASED	09-30-45			03-865-06
	DEATH CERT. NO.	AUTOPSY	NONE	03-865-07
	INTERMENT	OTTAWA AVENUE CEMETERY,	OTTAWA, ILLINOIS	03-865-08
CAUSES OF DEATH		CANCER OF CERVIX,		03-865-09
		EXTREME CACHEXIA,		03-865-09A
		CHRONIC MYOCARDITIS		03-865-09B
SOURCE OF CASE		SEARCH BY CEM		03-865-10
EXPOSURE		DIAL PAINTER	01	03-865-12
SOURCE	RADIUM DIAL CO.,	OTTAWA,	ILLINOIS.	03-865-13
FAMILY HISTORY				03-865-15
	MARRIED			03-865-15A
MALIGNANT TUMOR	CANCER OF CERVIX			03-865-60
783 -8191	CARCINOMA OF CERVIX			03-865-67

PATIENT 03-992
DECEASED

03-992-01
03-992-02

OTHER PERTINENT NOS.

MIT 01-239

03-992-05A

RADIOCHEMICAL ANALYSIS

		FEMUR				HFL	03-992-51
09-57	4.72 G	ASH	403	UUG/G	ASH	TH-228	03-992-51A
		TIBIA					03-992-51B
08-58	2.97 G	ASH	577	UUG/G	ASH	TH-228	03-992-51C
							03-992-51D

DATA REVISED 02-07-68

03-992-99

PATIENT 09-001	BORN 03-31-01	09-001-01
		09-001-02
		09-001-03
FEMALE		09-001-05
SOURCE OF CASE	SEARCH BY CEM	09-001-10
EXPOSURE	DIAL PAINTER 01	09-001-12
SOURCE RADIUM DIAL CO., PITTSBURGH, PA., FOR 6 MONTHS, PERIOD 1917		09-001-13
TO 1918. PAINTED DIALS WITH BRUSH. POINTED BRUSH IN HER MOUTH,		09-001-13A
BUT NEVER PAINTED ANY PART OF HER OWN BODY. HISTORY GIVEN ELSE-		09-001-13B
WHERE INDICATED THAT SHE WORKED ABOUT 1 YEAR DURING THIS PERIOD.		09-001-13C
ASSUMED WORK PERIOD 07-01-1917 TO 04-01-1918		09-001-13*
16.24 YEARS OF AGE WHEN FIRST EMPLOYED.		03-001-13Z
FAMILY HISTORY		09-001-15
MARRIED 1923	PARA 1 GRAVIDA 2 (1 MISCARRIAGE)	09-001-15A
CHILDREN	MALE 1929 L W	09-001-16
MEDICAL HISTORY		09-001-20
APPENDECTOMY 1949. NO OTHER SERIOUS ILLNESSES EXCEPT FOR		09-001-20A
OCCASIONAL SPELLS OF NUMBNESS AND CONFUSION SINCE 1928, THOUGHT		09-001-20B
TO BE ANGIOSPASM BY HER PERSONAL PHYSICIAN. INQUIRY BY SYSTEMS		09-001-20C
REVEALS RECENT BLOOD PRESSURE ELEVATION UNDER TREATMENT BY HER		09-001-20D
PERSONAL PHYSICIAN. ALSO HAS FREQUENT SEVERE HEADACHES. DENTAL		09-001-20E
HISTORY--EDENTULOUS SINCE 1942. (07-10-59)		09-001-20F
GAMMA-RAY MEASUREMENTS		09-001-25
07-10-59 RAB,RAC 0.004 UCI HGS 1 TILTING CHAIR CEM		09-001-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-001-27
07-10-59 0.004 UCI 0.014 UCI TOTAL 0.31		09-001-27A
X-RAY EXAMINATION		09-001-30
PARTIAL SKELETAL SURVEY		09-001-30A
07-10-59 ANL X-RAY NO. R-144 LOC. ANL		09-001-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		09-001-30C
PPF NONE		09-001-30D
CLINICAL LABORATORY FINDINGS		09-001-40
07-10-59 HG 12.2 HTC RBC 3.89		09-001-40A
WBC 9400 DIFF. P 57 ST L 35 M 7 E 1 B		09-001-40B
47X -X30 ESSENTIAL HYPERTENSION		09-001-67
661 -12 APPENDECTOMY		09-001-67A
ADDITIONAL INFORMATION		09-001-91
10-22-59 GAMMA-RAY MEASUREMENT MADE AT M.I.T.		09-001-91A

PATIENT 09-002	BORN 01-19-02	09-002-01
		09-002-02
		09-002-03
		09-002-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	09-002-10
EXPOSURE	DIAL PAINTER 01	09-002-12
SOURCE RADIUM DIAL CO., PITTSBURGH, PA., 4 MONTHS DURING SUMMER 1917.		09-002-13
PAINTED WATCH DIALS. POINTED BRUSH IN MOUTH. NEVER PAINTED ANY		09-002-13A
PART OF HER BODY.		09-002-13B
ASSUMED WORK PERIOD 06-01-1917 TO 11-01-1917		09-002-13*
15.36 YEARS OF AGE WHEN FIRST EMPLOYED.		09-002-13Z
FAMILY HISTORY		09-002-15
MARRIED 1922	PARA 2 GRAVIDA 2	09-002-15A
HUSBAND DECEASED 1941		09-002-15B
CHILDREN	MALE 1924 L W	09-002-16
	FEMALE 1932 L W	09-002-16A
MEDICAL HISTORY		09-002-20
NO SURGERY EXCEPT FOR EXCISION OF BENIGN SKIN TUMOR FROM RIGHT		09-002-20A
FIFTH FINGER, JUNE 1959. NO SERIOUS ILLNESSES EXCEPT FOR HEART		09-002-20B
ATTACK 1954, FOR WHICH SHE REMAINED IN BED AT HOME FOR 3 MONTHS.		09-002-20C
INQUIRY BY SYSTEMS NEGATIVE. DENTAL HISTORY--TEETH EXTRACTED		09-002-20D
BECAUSE OF PYORRHEA AND DENTAL CARIES, HAS WORN DOUBLE DENTURES		09-002-20E
SINCE AGE 16. (07-10-59)		09-002-20F
GAMMA-RAY MEASUREMENTS		09-002-25
07-10-59 RAB,RAC 0.009 UCI HGS 1 TILTING CHAIR CEM		09-002-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-002-27
07-10-59 0.009 UCI 0.028 UCI TOTAL 0.31		09-002-27A
X-RAY EXAMINATION		09-002-30
PARTIAL SKELETAL SURVEY		09-002-30A
07-10-59 ANL X-RAY NO. R-143 LOC. ANL		09-002-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 5.5		09-002-30C
PPF AREAS OF BONE RESORPTION IN RIGHT AND LEFT HUMERUS. SLIGHT		09-002-30D
COARSENING OF TRABECULATION IN RIGHT TIBIA AND FIBULA. AREA OF		09-002-30E
BONE SCLEROSIS AND DEFORMITY OF RIGHT FEMUR IN THE REGION OF		09-002-30F
GREATER TROCHANTER. FINAL INTERPRETATION OF THIS QUESTIONABLE		09-002-30G
LESION IS THAT IT REPRESENTS DEGENERATIVE ARTHRITIS OF LEFT HIP		09-002-30H
AND BONE INFARCT IN RIGHT FEMUR, THESE CHANGES ARE PROBABLY NOT		09-002-30I
RELATED TO PRESENCE OF RADIUM.		09-002-30J
CLINICAL LABORATORY FINDINGS		09-002-40
07-10-59 HG 12.1 HTC RBC 4.08		09-002-40A
WBC 8300 DIFF. P 56 ST L 39 M 4 E 1 B		09-002-40B
ADDITIONAL INFORMATION		09-002-91
MEASUREMENTS MADE AT M.I.T.		09-002-91A
DATA REVISED 10-17-67		09-002-99

PATIENT 09-003	BORN 08-31-92	09-003-01
DECEASED		09-003-02
MALE		09-003-05
DECEASED 03-10-63		09-003-06
DEATH CERT. NO.	AUTOPSY YES	09-003-07
INTERMENT	I.O.O.F. CEMETERY, ROCHESTER, INDIANA	09-003-08
CAUSES OF DEATH	BRONCHOGENIC CARCINOMA (DEATH CERT.)	09-003-09
	DOUBLE PRIMARY CARCINOMA OF LUNG.	09-003-09A
	BRONCHOGENIC CARCINOMA, OAT CELL TYPE OF LEFT LOWER LOBE,	09-003-09B
	BRONCHIOLAR CARCINOMA OF LEFT UPPER LOBE (ACTUAL)	09-003-09C
SOURCE OF CASE	REFERRED BY J.E. ROSE	09-003-10
LITERATURE CITATION		03-003-11
FINKEL, ET AL, (IN) SYMP. ON DELAYED EFFECTS OF BONE-SEEKING		09-003-11A
RADIONUCLIDES, U OF UTAH, SALT LAKE CITY (1969).		09-003-11B
EXPOSURE	RA CHEMIST 02	09-003-12
SOURCE	PATIENT WORKED AS RADIUM CHEMIST 1914 TO 1929, AGAIN FROM 1929 TO 1959, IN PITTSBURG, PA. AND ELSEWHERE. PATIENT ESTIMATES THAT HE HANDLED A TOTAL OF 45 GMS OF RADIUM. THESE EXPOSURES OCCURRED ALL OVER THE U.S. IN CONNECTION WITH HIS WORK WITH RA SOURCES. PATIENT HAS PROVIDED US WITH DETAILED RECORD OF THESE VARIOUS JOB ASSIGNMENTS AND EXPOSURES.	09-003-13
		09-003-13A
		09-003-13B
		09-003-13C
		09-003-13D
		09-003-13E
FAMILY HISTORY		09-003-15
MARRIED 1912 WIDOWED 1936		09-003-15A
CHILDREN NONE		09-003-16
MEDICAL HISTORY		09-003-20
1919 TONSILLECTOMY. 1920 OSTEOMYELITIS, DISTAL PHALANX LEFT THUMB WITH SEVEN SURGICAL PROCEDURES. 1938 MULTIPLE KERATOSES ON VOLAR SURFACE OF NAILS, 38 REMOVED BY USE OF RADON SEEDS.		09-003-20A
1939 HISTORY OF MERCURY POISONING WITH EXFOLIATIVE DERMATITIS.		09-003-20B
1947 ACTIVE PULMONARY TUBERCULOSIS, TREATED WITH BED REST.		09-003-20C
1950S HEMORRHOIDECTOMY. 1952 BASAL CELL CARCINOMA REMOVED FROM UPPER LIP. MILD OSTEOSARTHRITIS OF FINGERS IN RECENT YEARS.		09-003-20D
INQUIRY BY SYSTEMS OTHERWISE NEGATIVE. DENTAL HISTORY--PATIENT HAS WORN DENTURES SINCE 1951. (05-05-59)		09-003-20E
		09-003-20F
		09-003-20G
		09-003-20H
		09-003-20I
GAMMA-RAY MEASUREMENTS		09-003-25
05-04-59 RAB,RAC 0.152 UCI HGS 1 TILTING CHAIR CEM		09-003-25A
09-09-59 RAB,RAC 0.139 UCI HGS 1 TILTING CHAIR CEM		09-003-25B
12-23-59 RAB,RAC 0.133 UCI HGS 1 TILTING CHAIR CEM		09-003-25C
COMPUTED TOTAL-BODY RADIUM		09-003-27
05-04-59 0.152 UCI 0.492 UCI TOTAL 0.31		09-003-27A
09-09-59 0.139 UCI 0.449 UCI TOTAL 0.31		09-003-27B
12-23-59 0.133 UCI 0.429 UCI TOTAL 0.31		09-003-27C

X-RAY EXAMINATION		09-003-30
COMPLETE SKELETAL SURVEY		09-003-30A
05-05-59	ANL X-RAY NO. R-124 LOC. ANL	09-003-30B
MILD CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 12		09-003-30C
PPF MULTIPLE AREAS OF BONE RESORPTION IN SKULL, RIGHT AND LEFT		09-003-30D
RADIUS AND ULNA, RIGHT AND LEFT TIBIA AND FIBULA. SMALL AREA OF		09-003-30E
INCREASED DENSITY IN HEAD OF LEFT FEMUR. COARSENING OF TRABECULA-		09-003-30F
TION OF RIGHT AND LEFT RADIUS AND ULNA, AND RIGHT AND LEFT TIBIA		09-003-30G
AND FIBULA.		09-003-30H
CLINICAL LABORATORY FINDINGS		09-003-40
05-05-59	HG 12.8 HTC RBC 4.29	09-003-40A
WBC 8300	DIFF. P 61 ST 1 L 32 M 3 E 3 B	09-003-40B
SPECIMENS AVAILABLE		09-003-50
FROM AUTOPSY	2 PCS RIB, SECTION VERTEBRAE AJF	09-003-50A
MALIGNANT TUMOR DOUBLE PRIMARY CARCINOMA, LEFT LUNG 1963		09-003-60
360 -8191G	UNDIFFERENTIATED (OAT CELL) CARCINOMA OF THE LUNG	09-003-66
134 -812	BASAL CELL CARCINOMA OF THE UPPER LIP	09-003-67
360 -123	PULMONARY TUBERCULOSIS	09-003-67A
360 -8072	BRONCHIOLAR (ALVEOLAR CELL) CARCINOMA OF THE LUNG	09-003-67B
634 -12	TONSILLECTOMY	09-003-67C
TOOTH MEASUREMENT		09-003-73
SAMPLE 8.00	TOOTH MOLAR	09-003-73A
TOTAL WT. 1.0426	CALC.GMS.CA. 0.2919	09-003-73B
UNSEALED EQUILIBRIUM	PCT RET UUCI RA/GM CA RATIO-TOOTH/BODY	09-003-73C
113.4	388.4 0.79	09-003-73D
DATA REVISED 11-09-67		09-003-99

PATIENT 09-004	BORN 02-24-90	09-004-01
DECEASED		09-004-02
		09-004-03
FEMALE		09-004-05
DECEASED 01-09-61		09-004-06
DEATH CERT. NO.	AUTOPSY NONE	09-004-07
INTERMENT	ST. MARY CEMETERY, E. PITTSBURGH, PA.	09-004-08
CAUSES OF DEATH	ACUTE CORONARY OCCLUSION	09-004-09
SOURCE OF CASE	SEARCH BY CEM	09-004-10
EXPOSURE	DIAL PAINTER 01	09-004-12
SOURCE	RADIUM DIAL CO., PITTSBURGH, PA., FROM ABOUT 1912 TO ABOUT 1920. WORKED CHIEFLY AS INSPECTOR, OFTEN CARRIED RADIUM TO VARIOUS HOSPITALS. DID VERY LITTLE DIAL PAINTING AND PROBABLY DID NOT POINT BRUSH IN MOUTH. PATIENT STOPPED WORKING WITH RADIUM ON ADVICE OF HER PERSONAL PHYSICIAN BECAUSE OF ANEMIA AND EXTREME SENSITIVITY TO TOUCH AS A RESULT OF EXPOSURE TO RADIATION. PATIENT RECEIVED COMPENSATION AS RESULT OF LEGAL ACTION AGAINST THE COMPANY.	09-004-13
		09-004-13A
		09-004-13B
		09-004-13C
		09-004-13D
		09-004-13E
		09-004-13F
		09-004-13G
	ASSUMED WORK PERIOD 07-01-1912 TO 07-01-1920	09-004-13*
	19.82 YEARS OF AGE WHEN FIRST EMPLOYED.	03-004-13Z
FAMILY HISTORY		09-004-15
MARRIED		09-004-15A
MEDICAL HISTORY		09-004-20
	PATIENT WAS ALWAYS IN EXCELLENT HEALTH. NO SURGERY. SUSTAINED FRACTURE OF LEG AT AGE 13 WHILE RIDING SLED. (INFORMATION OBTAINED 01-07-63 FROM SISTER OF PATIENT, MRS. .)	09-004-20A
		09-004-20B
		09-004-20C
GAMMA-RAY MEASUREMENTS		09-004-25
06-20-60 RAB,RAC 0.171 UCI HGS 1 TILTING CHAIR CEM		09-004-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-004-27
06-20-60 0.171 UCI 0.550 UCI TOTAL 0.31		09-004-27A

X-RAY EXAMINATION

COMPLETE SKELETAL SURVEY

06-20-60

ANL

X-RAY NO. R-201

LOC. ANL

09-004-30

09-004-30A

09-004-30B

09-004-30C

09-004-30D

09-004-30E

09-004-30F

09-004-30G

09-004-30H

09-004-30I

09-004-30J

09-004-30K

MODERATE CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 27.5

PPF AREAS OF BONE RESORPTION SEEN IN SKULL, RIGHT AND LEFT

CLAVICLE, RIGHT AND LEFT HUMERUS, RIGHT AND LEFT RADIUS AND ULNA,

RIGHT AND LEFT FEMUR, RIGHT AND LEFT TIBIA AND FIBULA, AND LEFT

TARSAL BONES. AREAS OF SCLEROSIS SEEN IN THE PELVIS, LEFT HUMERUS

AND DISTAL LEFT FEMUR. BILATERAL THICKENING OF THE CORTEX OF THE

MID-SHAFT OF EACH FEMUR. HEALED FRACTURE OF THE MID-SHAFT OF THE

LEFT TIBIA AND FIBULA. COARSENING OF TRABECULATION THROUGHOUT

THE SKELETON.

CLINICAL LABORATORY FINDINGS

NOT DONE

09-004-40

23722-416

FRACTURE OF MIDDLE THIRD OF TIBIA

09-004-66

23822-416

FRACTURE OF MID SHAFT OF FIBULA

09-004-66A

430 -516.7 MYOCARDIAL INFARCTION

09-004-67

DATA REVISED 10-17-67

09-004-99

PATIENT	09-007	BORN	03-10-01	09-007-01
DECEASED				09-007-02
				09-007-02A
				09-007-03
FEMALE				09-007-05
DECEASED	12-01-65			09-007-06
CAUSES OF DEATH				09-007-09
SOURCE OF CASE	SEARCH BY CEM			09-007-10
EXPOSURE	DIAL PAINTER	01		09-007-12
SOURCE	RADIUM DIAL CO., PITTSBURGH, PA., 1917 TO 1919, TOTAL ABOUT 2 YEARS. PAINTED DIALS, POINTED BRUSH IN HER MOUTH, BUT NEVER PAINTED ANY PART OF HER BODY. REMEMBERS THAT HER LOWER LIP GLOWED IN DARK.			09-007-13
	ASSUMED WORK PERIOD 07-01-1917 TO 07-01-1919			09-007-13A
	16.30 YEARS OF AGE WHEN FIRST EMPLOYED.			09-007-13B
				09-007-13C
				09-007-13*
				03-007-13Z
FAMILY HISTORY				09-007-15
MARRIED 1920	PARA 3	GRAVIDA 3		09-007-15A
HUSBAND	1896	L W		09-007-15B
CHILDREN	MALE	1923	L W	09-007-16
	MALE	1925	L W	09-007-16A
	MALE	1930	L W	09-007-16B
MEDICAL HISTORY				09-007-20
TONSILLECTOMY 1925, TUMOR REMOVED FROM BETWEEN TOES OF BOTH FEET				09-007-20A
1930, CHOLECYSTECTOMY 1932, REPAIR OF INCISIONAL HERNIA 1942,				09-007-20B
REPAIR OF UMBILICAL HERNIA 1947, HYSTERECTOMY 1955. PATIENT HAD				09-007-20C
INFLAMMATORY RHEUMATISM AT AGE 12 WITH RESIDUAL SPINAL CURVATURE,				09-007-20D
TREATED WITH BRACE AS YOUNG GIRL WITHOUT EFFECT. ALSO HAD SEVERE				09-007-20E
SCARLET FEVER, POST PARTUM AFTER HER SECOND PREGNANCY 1925.				09-007-20F
HISTORY OF CYSTITIS FOR 3 YEARS UP TO 1959. INQUIRY BY SYSTEMS				09-007-20G
REVEALS CHRONIC LOW BACKACHE. DENTAL HISTORY--18 OF HER TEETH				09-007-20H
REMAIN. (05-26-60)				09-007-20I
PATIENT STATED THAT SHE HAD A SKIN CANCER REMOVED FROM HER FACE.				09-007-21
(11-10-61)				09-007-21A
GAMMA-RAY MEASUREMENTS				09-007-25
05-25-60	RAB,RAC	0.010 UCI	HGS 1 TILTING CHAIR. CEM	09-007-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS				09-007-27
05-25-60	0.010 UCI	0.033 UCI TOTAL	0.31	09-007-27A

X-RAY EXAMINATION		09-007-30
PARTIAL SKELETAL SURVEY		09-007-30A
05-25-60	ANL X-RAY NO. R-198 LOC. ANL	09-007-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 3		09-007-30C
SOLITARY AREA OF BONE RESORPTION 12 MM. IN DIAMETER IN THE SKULL.		09-007-30D
SLIGHT COARSENING OF TRABECULATION IN THE RIGHT RADIUS AND ULNA.		09-007-30E
CLINICAL LABORATORY FINDINGS		09-007-40
05-26-60	HG 13.6 HTC RBC 4.29	09-007-40A
WBC 9600	DIFF. P 56 ST 1 L 33 M 8 E 2 B	09-007-40B
MALIGNANT TUMOR	SKIN CANCER, FACE	09-007-60
010 -102	SCARLET FEVER	09-007-67
010 -932	RHEUMATIC FEVER	09-007-67A
044 -50	UMBILICAL HERNIORRHAPHY	09-007-67B
634 -12	TONSILLECTOMY	09-007-67C
687 -12	CHOLECYSTECTOMY	09-007-67D
782 -10	HYSTERECTOMY	09-007-67E
DATA REVISED 05-07-68		09-007-99

PATIENT	09-008	09-008-01
		09-008-02
		09-008-03
FEMALE		09-008-05
SOURCE OF CASE	SEARCH BY CEM	09-008-10
EXPOSURE	DIAL PAINTER 01	09-008-12
SOURCE	RADIUM DIAL CO., PITTSBURGH, PA., ABOUT 1917 OR 1918,	09-008-13
	SUMMER ONLY. PAINTED WATCH DIALS. COULD NOT REMEMBER WHETHER OR	09-008-13A
	NOT SHE POINTED BRUSH IN MOUTH.	09-008-13B
FAMILY HISTORY	NOT ELICITED	09-008-15
MEDICAL HISTORY	NOT ELICITED	09-008-20
GAMMA-RAY MEASUREMENTS		09-008-25
	06-08-60 RAB,RAC LESS THAN 0.006 UCI U.PITT. MOD.TILT.CH. CEM	09-008-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-008-27
	06-08-60 LESS THAN 0.006 UCI LESS THAN 0.020 UCI TOTAL CEM	09-008-27A
X-RAY EXAMINATION	NOT DONE	09-008-30
CLINICAL LABORATORY FINDINGS	NOT DONE	09-008-40
DATA REVISED	10-17-67	09-008-99

PATIENT	09-009	09-009-01
		09-009-02
		09-009-03
FEMALE		09-009-05
SOURCE OF CASE	SEARCH BY CEM	09-009-10
EXPOSURE	DIAL PAINTER 01	09-009-12
SOURCE	RADIUM DIAL CO., AND VANADIUM CHEMICAL CO., PITTSBURGH, PA.,	09-009-13
	ABOUT 1913 TO 1919. PAINTED WATCH, AIRPLANE DIALS. POINTED BRUSH	09-009-13A
	IN MOUTH.	09-009-13B
FAMILY HISTORY	NOT ELICITED	09-009-15
MEDICAL HISTORY	NOT ELICITED	09-009-20
GAMMA-RAY MEASUREMENTS		09-009-25
	07-15-60 RAB,RAC LESS THAN 0.001 UCI HGS 1 TILTING CHAIR CEM	09-009-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-009-27
	07-15-60 LESS THAN 0.001 UCI : LESS THAN 0.0003 UCI TOTAL 0.31	09-009-27A
X-RAY EXAMINATION	NOT DONE	09-009-30
CLINICAL LABORATORY FINDINGS	NOT DONE	09-009-40
DATA REVISED	10-17-67	09-009-99

PATIENT	09-010		09-010-01
			09-010-02
			09-010-03
	FEMALE		09-010-05
SOURCE OF CASE	SEARCH BY CEM		09-010-10
EXPOSURE	DIAL PAINTER 01		09-010-12
SOURCE	RADIUM DIAL CO., AND VANADIUM CHEMICAL CO., PITTSBURGH, PA.,		09-010-13
	1914 TO 11-01-21. PAINTED WATCH, AIRPLANE DIALS. POINTED BRUSH		09-010-13A
	IN MOUTH. ALSO CLEANED BRUSH WITH PIECE OF CLOTH AND WASHED		09-010-13B
	BRUSH IN BANANA OIL.		09-010-13C
FAMILY HISTORY	NOT ELICITED		09-010-15
MEDICAL HISTORY	NOT ELICITED		09-010-20
GAMMA-RAY MEASUREMENTS			09-010-25
	06-09-60 RAB,RAC	LESS THAN 0.003 UCI	U.PITT. MOD.TILT.CH. CEM
			09-010-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS			09-010-27
	06-09-60	LESS THAN 0.003 UCI	LESS THAN 0.010 UCI TOTAL 0.31
			09-010-27A
X-RAY EXAMINATION	NOT DONE		09-010-30
CLINICAL LABORATORY FINDINGS	NOT DONE		09-010-90
DATA REVISED	10-17-67		09-010-99

PATIENT	09-029	BORN	01-06-01	09-029-01
DECEASED				09-029-02
				09-029-02A
				09-029-03
FEMALE				09-029-05
DECEASED	11-01-62			09-029-06
DEATH CERT. NO.				09-029-07
INTERMENT				09-029-08
CAUSES OF DEATH	LYMPHOSARCOMA (RETICULUM CELL)			09-029-09
SOURCE OF CASE	SEARCH BY CEM			09-029-10
EXPOSURE	DIAL PAINTER 01			09-029-12
SOURCE	RADIUM DIAL CO., PITTSBURGH, PA., 3 MONTHS 1917. PAINTED			09-029-13
	DIALS BUT DOES NOT RECALL POINTING BRUSH IN HER MOUTH.			09-029-13A
	ASSUMED WORK PERIOD 06-01-1917 TO 09-01-1917			09-029-13*
	16.39 YEARS OF AGE WHEN FIRST EMPLOYED.			03-029-13Z
FAMILY HISTORY				09-029-15
MARRIED 1923	PARA 2	GRAVIDA 3 (1 MISC.)		09-029-15A
HUSBAND	1896	L W		09-029-15B
CHILDREN	MALE 1927	L W		09-029-16
	FEMALE 1934	L W		09-029-16A
MEDICAL HISTORY				09-029-20
	APPENDECTOMY 1920. NO OTHER SURGERY. NO HISTORY FRACTURES OR			09-029-20A
	SERIOUS ILLNESSES. INQUIRY BY SYSTEMS REVEALS OCCASIONAL SINUS			09-029-20B
	HEADACHE, HISTORY OF EPIGASTRIC DISTRESS THAT LED TO DISCOVERY			09-029-20C
	OF DIVERTICULUM OF SMALL INTESTINE BY X-RAY 1 YEAR AGO, PAINFUL			09-029-20D
	RIGHT SHOULDER FOR PAST YEAR. DENTAL HISTORY--ABOUT 5 TEETH			09-029-20E
	EXTRACTED. (05-25-60)			09-029-20F
	PATIENT HAD SURGERY 05-61 FOR CANCER OF INTESTINE. (11-10-61)			09-029-21
GAMMA-RAY MEASUREMENTS				09-029-25
05-25-60	RAB,RAC	0.005 UCI	HGS 1 TILTING CHAIR	09-029-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS				09-029-27
05-25-60	0.005 UCI	0.016 UCI TOTAL	0.31	09-029-27A
X-RAY EXAMINATION				09-029-30
PARTIAL SKELETAL SURVEY				09-029-30A
05-25-60	ANL	X-RAY NO. R-195	LOC. ANL	09-029-30B
	Negative for changes typical of radium deposition.		SCORE 0	09-029-30C
PPF	NONE			09-029-30D

CLINICAL LABORATORY FINDINGS

05-25-60 HG 12.5 HTC RBC 4.42
WBC 6000 DIFF. P 55 ST L 42 M 2 E 1 B 0

09-029-40
09-029-40A
09-029-40B

MALIGNANT TUMOR LYMPHOSARCOMA (RETICULUM CELL)

09-029-60

650 -036 DIVERTICULOSIS OF THE SMALL INTESTINE
650 -831 RETICULUM CELL SARCOMA OF SMALL INTESTINE
661 -12 APPENDECTOMY

09-029-67
09-029-67A
09-029-67B

DATA REVISED 11-14-68

09-029-99

PATIENT 09-031	BORN 10-23-97	09-031-01
		09-031-02
FEMALE		09-031-03
		09-031-05
SOURCE OF CASE	SEARCH BY CEM	09-031-10
EXPOSURE	OTHER OCCUPATION--SECRETARY (03)	09-031-12
SOURCE RADIUM CHEMICAL CO., RADIUM STANDARD CO., PITTSBURGH, PA.,		09-031-13
FROM 1913 TO 1920, WORKED AT LATTER COMPANY FOR 1 YEAR IN 1915.		09-031-13A
WORKED AS SECRETARY TO MEDICAL DIRECTOR OF RADIUM CHEMICAL CO.		09-031-13B
(DR. W C) FOR 5 YEARS AND AS SECRETARY TO PRESI-		09-031-13C
DENT OF RADIUM CHEMICAL CO. FOR 2 YEARS. NEVER WORKED IN LABOR-		09-031-13D
ATORY. BUT OCCASIONALLY TRANSPORTED RADIUM FROM FACTORY TO WEST		09-031-13E
PENNSYLVANIA HOSPITAL IN PITTSBURGH.		09-031-13F
ASSUMED WORK PERIOD 07-01-1913 TO 07-01-1920		09-031-13*
15.68 YEARS OF AGE WHEN FIRST EMPLOYED.		03-031-13Z
FAMILY HISTORY		09-031-15
MARRIED 1920	PARA 3	09-031-15A
HUSBAND	1898 GRAVIDA 3	09-031-15B
	L W	
CHILDREN	FEMALE 1920	09-031-16
	MALE 1924	09-031-16A
	FEMALE 1934	09-031-16B
	L W	
MEDICAL HISTORY		09-031-20
TONSILLECTOMY 1917. PNEUMONIA 1933. NO OTHER SERIOUS ILLNESSES		09-031-20A
OR SURGERY, NO FRACTURES. RADIUM WAS APPLIED LOCALLY FOR TREAT-		09-031-20B
MENT OF WART ON RIGHT FOURTH FINGER 1915. INQUIRY BY SYSTEMS--		09-031-20C
HISTORY OF INFECTED RIGHT URETER FOR PAST 2 YEARS. ARTHRITIS OF		09-031-20D
SPINE WITH CHRONIC BACKACHES. DENTAL HISTORY--PATIENT IS CURRENT-		09-031-20E
LY LOSING TEETH BUT HAS 21 REMAINING. (05-25-60)		09-031-20F
GAMMA-RAY MEASUREMENTS		09-031-25
05-25-60 RAB,RAC 0.089 UCI HGS 1 TILTING CHAIR CEM		09-031-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-031-27
05-25-60 0.089 UCI 0.286 UCI TOTAL 0.31		09-031-27A
X-RAY EXAMINATION		09-031-30
COMPLETE SKELETAL SURVEY		09-031-30A
05-26-60 ANL X-RAY NO. R-197 LOC. ANL		09-031-30B
MINIMAL CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 8.5		09-031-30C
PPF ISOLATED AREA OF RESORPTION IN THE OCCIPUT, OTHER AREAS OF		09-031-30D
BONE RESORPTION SEEN IN RIGHT HUMERUS AND LEFT RADIUS. COARSENING		09-031-30E
OF TRABECULATION IN RIGHT AND LEFT RADIUS AND ULNA, AND RIGHT		09-031-30F
AND LEFT TIBIA AND FIBULA.		09-031-30G
CLINICAL LABORATORY FINDINGS		09-031-40
05-26-60 HG 13.0 HTC RBC 4.23		09-031-40A
WBC 7000 DIFF. P 44 ST L 44 M 8 E 4 B		09-031-40B

634 -12 TONSILLECTOMY

09-031-67

TOOTH MEASUREMENT

SAMPLE 21.00

TOOTH CANINE FRAGMENT

TOTAL WT. 0.8865

CALC. GMS. CA. 0.2482

UNSEALED EQUILIBRIUM

PCT RET

UUCI RA/GM CA

RATIO-TOOTH/BODY

13.84

12.2

100

49.1

0.17

09-031-73

09-031-73A

09-031-73B

09-031-73C

09-031-73D

DATA REVISED 10-17-67

09-031-99

PATIENT 09-032

09-032-01
09-032-02
09-032-03
09-032-04
09-032-05

FEMALE

SOURCE OF CASE

SEARCH BY CEM

09-032-10

EXPOSURE

DIAL PAINTER 01

09-032-12

SOURCE RADIUM DIAL CO., PITTSBURGH, PA., ABOUT 1918-1919, 1 YEAR.
PAINTED WATCH AND LARGER DIALS. POINTED BRUSH IN MOUTH.

09-032-13
09-032-13A

FAMILY HISTORY

NOT ELICITED

09-032-15

MEDICAL HISTORY

NOT ELICITED

09-032-20

GAMMA-RAY MEASUREMENTS

06-09-60 RAB,RAC 0.051 UCI U.PITT. MCD.TILT.CHAIR CEM

09-032-25
09-032-25A

COMPUTED TOTAL GAMMA-RAY MEASUREMENTS

06-09-60 0.051 UCI 0.165 UCI TOTAL 0.31

09-032-27
09-032-27A

X-RAY EXAMINATION

NOT DONE

09-032-30

CLINICAL LABORATORY FINDINGS

NOT DONE

09-032-40

DATA REVISED 10-17-67

09-032-99

PATIENT 09-046	BORN 07-13-02	09-046-01
		09-046-02
FEMALE		09-046-03
		09-046-05
SOURCE OF CASE	SEARCH BY CEM	09-046-10
EXPOSURE	DIAL PAINTER 01	09-046-12
SOURCE RADIUM DIAL CO., PITTSBURGH, PA., 1917 TO 1919, 2 YEARS.		09-046-13
PAINTED RADIUM ON DIALS AND POINTED BRUSH IN HER MOUTH. NEVER		09-046-13A
PAINTED ANY PART OF HER BODY.		09-046-13B
ASSUMED WORK PERIOD 07-01-1917 TO 07-01-1919		09-046-13*
14.96 YEARS OF AGE WHEN FIRST EMPLOYED.		03-046-13Z
FAMILY HISTORY		09-046-15
MARRIED 1942	PARA 0 GRAVIDA 0	09-046-15A
MEDICAL HISTORY		09-046-20
NO SURGERY, NO FRACTURES, NOR ANY SERIOUS ILLNESSES. NEVER HAS		09-046-20A
BEEN HOSPITALIZED. INQUIRY BY SYSTEMS NEGATIVE. TEETH--FRONT		09-046-20B
UPPER INCISORS AND RIGHT LOWER MOLARS EXTRACTED. (02-24-60)		09-046-20C
GAMMA-RAY MEASUREMENTS		09-046-25
02-24-60 RAB,RAC 0.003 UCI HGS 1 TILTING CHAIR CEM		09-046-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-046-27
02-24-60 0.003 UCI 0.010 UCI TOTAL 0.31		09-046-27A
X-RAY EXAMINATION		09-046-30
PARTIAL SKELETAL SURVEY		09-046-30A
02-24-60 ANL X-RAY NO. R-192 LOC. ANL		09-046-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		09-046-30C
PPF NONE		09-046-30D
CLINICAL LABORATORY FINDINGS		09-046-40
05-24-60 HG 12.6 HTC RBC 3.96		09-046-40A
WBC 6300 DIFF. P 71 ST L 24 M 5 E B		09-046-40B

PATIENT 09-051		09-051-01
		09-051-02
		09-051-03
FEMALE		09-051-05
SOURCE OF CASE	SEARCH BY CEM	09-051-10
EXPOSURE	DIAL PAINTER 01	09-051-12
SOURCE RADIUM DIAL CO., PITTSBURGH, PA., 1917-1918, ABOUT 2 YEARS		09-051-13
TOTAL. PAINTED WATCH, AIRPLANE, CLOCK DIALS. POINTED BRUSH IN		09-051-13A
MOUTH.		09-051-13B
FAMILY HISTORY	NOT ELICITED	09-051-15
MEDICAL HISTORY	NOT ELICITED	09-051-20
GAMMA-RAY MEASUREMENTS		09-051-25
06-09-60 RAB,RAC LESS THAN 0.015 UCI U.PITT.MOD.TILT.CH. CEM		09-051-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-051-27
06-09-60 LESS THAN 0.015 UCI LESS THAN 0.050 UCI TOTAL CEM		09-051-27A
X-RAY EXAMINATION	NOT DONE	09-051-30
CLINICAL LABORATORY FINDINGS	NOT DONE	09-051-40
DATA REVISED 10-17-67		09-051-99

PATIENT 09-052		09-052-01
		09-052-02
		09-052-03
		09-052-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	09-052-10
EXPOSURE	DIAL PAINTER 01	09-052-12
SOURCE RADIUM DIAL CO., PITTSBURGH, PA., 1916-1917, ABOUT 1 YEAR.		09-052-13
PAINTED WATCH DIALS. POINTED BRUSH IN MOUTH.		09-052-13A
FAMILY HISTORY	NOT ELICITED	09-052-15
MEDICAL HISTORY	NOT ELICITED	09-052-20
GAMMA-RAY MEASUREMENTS		09-052-25
06-08-60 RAB,RAC LESS THAN 0.006 UCI U.PITT.MOD.TILT.CH. CEM		09-052-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-052-27
06-08-60 LESS THAN 0.006 UCI LESS THAN 0.020 UCI TOTAL 0.31		09-052-27A
X-RAY EXAMINATION	NOT DONE	09-052-30
CLINICAL LABORATORY FINDINGS	NOT DONE	09-052-40
DATA REVISED 10-17-67		09-052-99

PATIENT 09-072	BORN 05-24-93	09-072-01
		09-072-02
		09-072-03
		09-072-05
FEMALE		
SOURCE OF CASE	SEARCH BY CEM	09-072-10
EXPOSURE	DIAL PAINTER 01	09-072-12
SOURCE RADIUM DIAL CO., PITTSBURGH, PA., 9 MONTHS 1917. PAINTED		09-072-13
DIALS. POINTED BRUSH IN HER MOUTH MANY TIMES.		09-072-13A
ASSUMED WORK PERIOD 02-01-1917 TO 12-01-1918		09-072-13*
23.68 YEARS OF AGE WHEN FIRST EMPLOYED.		03-072-13Z
FAMILY HISTORY		09-072-15
MARRIED 1920	PARA 3	GRAVIDA 5 (2 MISCARRIAGES)
HUSBAND	1894	L W
		09-072-15A
		09-072-15B
CHILDREN	FEMALE 1922	L W
	FEMALE 1926	L W
	MALE 1931	L W
		09-072-16
		09-072-16A
		09-072-16B
MEDICAL HISTORY		09-072-20
NO SURGERY AND NO SERIOUS ILLNESSES. FRACTURED HER LEFT WRIST		09-072-20A
ABOUT 1954 IN FALL ON WAXED FLOORS. ALSO SUSTAINED RECENT SMALL		09-072-20B
FRACTURE IN LEFT SIDE OF NECK IN AUTO ACCIDENT 01-16-60. INQUIRY		09-072-20C
BY SYSTEMS NEGATIVE EXCEPT FOR SOME SCRENNESS AT BASE OF SPINE		09-072-20D
NOTICED DURING EXTENSIVE AUTOMOBILE TRIP 1960. DENTAL HISTORY--		09-072-20E
4 TEETH EXTRACTED. (05-25-60)		09-072-20F
GAMMA-RAY MEASUREMENTS		09-072-25
05-25-60 RAB,RAC C.002 UCI HGS 1 TILTING CHAIR CEM		09-072-25A
COMPUTED TOTAL GAMMA-RAY MEASUREMENTS		09-072-27
05-25-60 0.002 UCI 0.055 UCI TOTAL 0.31		09-072-27A
X-RAY EXAMINATION		09-072-30
PARTIAL SKELETAL SURVEY		09-072-30A
05-25-60 ANL X-RAY NO. R-196 LOC. ANL		09-072-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		09-072-30C
PPF NONE		09-072-30D
CLINICAL LABORATORY FINDINGS		09-072-40
05-25-60 HG 13.2 HTC RBC 4.78		09-072-40A
WBC 6600 DIFF. P 42 ST L 44 M 7 E 7 B		09-072-40B
23123-416 FRACTURE OF THE DISTAL THIRD OF THE RADIUS		09-072-67
23223-416 FRACTURE OF THE DISTAL THIRD OF THE ULNA		09-072-67A

PATIENT 09-073	BORN 10-23-00	09-073-01
MALE		09-073-02
		09-073-05
SOURCE OF CASE	SEARCH BY CEM	09-073-10
EXPOSURE	RA CHEMIST 02	09-073-12
SOURCE PATIENT WORKED AS RADIUM CHEMIST FOR STANDARD CHEMICAL CO.,		09-073-13
PITTSBURGH, PA., FROM JUNE 1922 THROUGH DEC. 1928. IN CONNECTION		09-073-13A
WITH HIS WORK, HE WAS ENGAGED IN QUALITY CONTROL WORK IN RADIUM		09-073-13B
REFINING IN 1922 AND 1923. THEN ASSOCIATED WITH		09-073-13C
AT RADON PLANT IN CHICAGO FOR 1 YEAR, AFTER WHICH HE RETURNED TO		09-073-13D
PITTSBURGH IN 1924 WHERE HE CRYSTALLIZED RADIUM INTERMITTENTLY		09-073-13E
AND MADE ALL THE RADIUM DIAL PAINT FOR STANDARD CHEMICAL CO.,		09-073-13F
WHICH INCLUDED RADIUM DIAL CO., AS A SUBSIDIARY. NO MESOTHORIUM		09-073-13G
WAS INVOLVED IN THIS WORK AND THE RADIUM CAME FROM MINES IN COLO-		09-073-13H
RADG. ALSO WORKED AT PREPARATION OF RADIUM NEEDLES FOR RADIO-		09-073-13I
THERAPY WORK AT MEMORIAL HOSP., NEW YORK CITY. NO EXPOSURE TO		09-073-13J
RADIUM SINCE 1928.		09-073-13K
FAMILY HISTORY		09-073-15
MARRIED 1931		09-073-15A
CHILDREN	NONE	09-073-16
MEDICAL HISTORY		09-073-20
APPENDECTOMY 1943. HOSPITALIZED FOR CERVICAL ARTHRITIS 1953.		09-073-20A
NO OTHER SERIOUS ILLNESSES, INQUIRY BY SYSTEMS NEGATIVE. DENTAL		09-073-20B
HISTORY--THREE TEETH EXTRACTED BEFORE EXPOSURE TO RADIUM.		09-073-20C
GAMMA-RAY MEASUREMENTS		09-073-25
07-16-59	RAB,RAC 0.750 UCI HGS 1 TILTING CHAIR CEM	09-073-25A
COMPUTED TOTAL-BODY RADIUM		09-073-27
07-16-59	0.750 UCI 0.024 UCI TOTAL 0.31	09-073-27A
X-RAY EXAMINATION		09-073-30
COMPLETE SKELETAL SURVEY		09-073-30A
07-16-59	ANL X-RAY NO. R-146 LOC. ANL	09-073-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		09-073-30C
PPF LOCULATED CYSTIC MASS AT DISTAL END OF RIGHT RADIUS. THIS		09-073-30D
LESION WAS THOUGHT BY DR. ROBERT MOSELEY (U OF C RADIOLOGY DEPT.)		09-073-30E
TO BE A NON-OSSIFYING FIBROMA, SOMETIMES ALSO CALLED A BENIGN		09-073-30F
CORTICAL DEFECT.		09-073-30G
CLINICAL LABORATORY FINDINGS		09-073-40
07-16-59	HG 14.5 HTC RBC 4.94	09-073-40A
WBC 6500	DIFF. P 57 ST 1 L 25 M 7 E B	09-073-40B
2313 -870A	FIBROMA, NON-OSSIFYING, RIGHT DISTAL RADIUS	09-073-67
661 -12	APPENDECTOMY	09-073-67A

PATIENT 09-074	BURN 08-21-90	09-074-01
MALE		09-074-02
		09-074-05
SOURCE OF CASE	SEARCH BY CEM	09-074-10
EXPOSURE	RA CHEMIST 02	09-074-12
SOURCE PATIENT WORKED AT STANDARD CHEMICAL CO., PITTSBURGH, PA. FROM		09-074-13
AUTUMN 1915 TO APRIL 1917, AND AGAIN FROM JAN. 1919 TO AUG. 1919.		09-074-13A
WORKED IN CRYSTALLIZATION LABORATORY AND HANDLED ABOUT 10 GRAMS		09-074-13B
OF RADIUM DURING FIRST PERIOD OF EMPLOYMENT. DURING SECCND PERIOD		09-074-13C
OF EMPLOYMENT, HE WORKED IN MEASURING LABORATORY AND HAS NOT BEEN		09-074-13D
IN CONTACT WITH RADIUM SINCE 1919.		09-074-13E
ASSUMED WORK PERIOD 10/01/1915 TO 04/01/1917		09-074-13*
25.10 YEARS OF AGE WHEN FIRST EMPLOYED.		03-074-13Z
FAMILY HISTORY		09-074-15
MARRIED 1925		09-074-15A
CHILDREN FEMALE 2		09-074-16
MEDICAL HISTORY		09-074-20
TYPHOID FEVER IN CHILDHOOD, MILD CASE OF JAUNDICE 1916 THAT WAS		09-074-20A
NOT SEVERE ENOUGH TO INTERFERE WITH WORK. NO SURGERY AND HAS		09-074-20B
NEVER BEEN HOSPITALIZED. INQUIRY BY SYSTEMS REVEALS PRESENCE OF		09-074-20C
PSORIASIS, STIFFNESS OF KNEES FOR PAST 2 YEARS, AND SHORTNESS OF		09-074-20D
BREATH FOR MANY YEARS. DENTAL HISTORY--WEARS COMPLETE DENTURES.		09-074-20E
GAMMA-RAY MEASUREMENTS		09-074-25
07-23-59 RAB,RAC 0.020 UCI HGS 1 TILTING CHAIR CEM		09-074-25A
COMPUTED TOTAL-BODY RADIUM		09-074-27
07-23-59 0.020 UCI 0.064 UCI TOTAL 0.31		09-074-27A
X-RAY EXAMINATION		09-074-30
PARTIAL SKELETAL SURVEY		09-074-30A
07-23-59 ANL X-RAY NO. R-150 LOC. ANL		09-074-30B
NEGATIVE FOR CHANGES TYPICAL OF RADIUM DEPOSITION. SCORE 0		09-074-30C
PPF NONE.		09-074-30D
CLINICAL LABORATORY FINDINGS		09-074-40
07-23-59 HG 14.0 HTC RBC 4.46		09-074-40A
WBC 4800 DIFF. P 68 ST 1 L 24 M 6 E 1 B		09-074-40B
010 -115 TYPHOID FEVER		09-074-67

PATIENT 09-077		09-077-01
FEMALE		09-077-05
SOURCE OF CASE	SEARCH BY CEM	09-077-10
EXPOSURE	DIAL PAINTER 01	09-077-12
SOURCE HISTORY AS DIAL PAINTER, DETAILS NOT KNOWN.		09-077-13
GAMMA-RAY MEASUREMENTS	NOT DONE	09-077-25
X-RAY EXAMINATION		09-077-30
PARTIAL SKELETAL SURVEY		09-077-30A
03-14-53 DR. EDWARD SCHOLTZ		09-077-30B
IT IS NOT POSSIBLE TO MAKE A COMPLETE ASSESSMENT OF THE RELATION-		09-077-30C
SHIP OF THE PRESENCE OF RADIUM IN THE SKELETON TO THESE FINDINGS.		09-077-30D
IF FRACTURES ARE PATHOLOGICAL FRACTURES, HOWEVER, THEN THESE		09-077-30E
WOULD BE ADVANCED CHANGES FROM PRESENCE OF RADIUM IN THE SKELETON.		09-077-30F
IF THESE ARE NOT PATHOLOGICAL FRACTURES BUT WERE RESULTS OF		09-077-30G
TRAUMA ADEQUATE TO ACCOUNT FOR THEM, THEN MANDIBULAR CHANGES		09-077-30H
WOULD BE RATED AS MILD ASSOCIATED WITH RADIUM DEPOSITION.		09-077-30I
CLINICAL LABORATORY FINDINGS	NOT DONE	09-077-40
DATA REVISED 10-17-67		09-077-99