DOE/ER/61674--1

GENOME SEQUENCING AND ANALYSIS CONFERENCES

Grant # DE-FG02-93ER61674

Project Period: August 15, 1993 - August 14, 1994

Principal Investigator: J. Craig Venter, Ph.D.

PROGRESS REPORT

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.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED _{ww}

MASTER

pd
gms

DISCLAIMER

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

Report on Genome Sequencing and Analysis Conference V
Hyatt Regency Hotel
Hilton Head, South Carolina
October 23-27, 1993

Conference Co-Chairs:

C. Thomas Caskey, Baylor College of Medicine
J. Craig Venter, The Institute for Genomic Research

The 14 plenary session presentations focused on: nematode (*Caenorhabditis elegans*); yeast (*Saccharomyces cerevisiae*); fly (*Drosophila melanogaster*); plant (*Arabidopsis thaliana* and *Oryza sativa*); mycobacteria (*Mycobacterium leprae* and *M. Tuberculosis*), and man. In addition there were presentations on a variety of technical innovations, including database developments and refinements, bioelectronic genosensors, computer-assisted multiplex techniques, and hybridization analysis with DNA chip technology (cf. plenary session abstracts in conference program).

The two poster sessions displayed 131 posters on three broad subjects: Thirty-three on sequencing and mapping results; sixty-nine on methods; and twenty-nine on informatics. Ingenious technical innovation appears constantly in the posters and is certain to yield a rich harvest of results in the coming years (cf. poster abstracts in conference program).

Attendees seemed determined to get as much as possible from the conference; hence the plenary sessions were very well-attended, as were the concurrent sessions and the poster sessions. But as if these were not enough, the sessions spilled over into numerous hallway and other informal discussions at dinner and between scheduled events.

Attachments:

Agenda
Demographic Analysis
Attendance Graphic

Enclosure:

Conference Program

GENOME SEQUENCING AND ANALYSIS CONFERENCE V

Hyatt Regency, Hilton Head, South Carolina

October 23-27, 1993

Chairmen: Dr. J. Craig Venter (The Institute for Genomic Research (TIGR))
Dr. C. Thomas Caskey (Baylor College of Medicine)

Saturday, October 23, 1993

7:00 p.m. - 10:00 p.m. Registration
Opening Reception (Sponsored by Applied Biosystems Inc.)

Sunday, October 24, 1993

7:00 a.m. - 8:15 a.m. Registration
Breakfast

8:00 a.m. - 8:15 a.m. Welcoming Remarks J.C. Venter (TIGR)#
C.T. Caskey (Baylor)#

8:15 a.m. - 8:30 a.m. NIH Progress and Future Efforts F. Collins (NIH)#

8:30 a.m. - 8:45 a.m. DOE Progress and Future Efforts D. Galas (Darwin Molec. Corp.)#

8:45 a.m. - 12:30 p.m. Session I - Yeast
Chairs: J. Strathern (NCI-Frederick)# and M. Johnston (Wash U.)#

8:45 a.m. - 9:10 a.m. Yeast Overview J. Strathern (NCI-Frederick)#

9:10 a.m. - 9:35 a.m. Yeast Project at the Sanger Centre N. Rowley (MRC)#

9:35 a.m. - 10:00 a.m. Sequencing and Functional Analysis of Yeast
Chromosome I and XVI: A Progress Report M. Clark (McGill U.)#

10:00 a.m. - 10:25 a.m. Sequencing Chromosome V of the Yeast *Saccharomyces cerevisiae* R. Davis (Stanford)#

10:25 a.m. - 10:45 a.m. Coffee Break

10:45 a.m. - 11:15 a.m. Japanese Yeast Genome Project Y. Murakami (RIKEN)*

11:15 a.m. - 11:40 a.m. European Community Yeast Genome Project A. Goffeau (Louvain)#

11:40 a.m. - 12:05 p.m. Gene Discovery in Yeast K. Weinstock (TIGR)#

12:05 p.m. - 12:30 p.m. Sequencing the Yeast Genome: The Contribution
of the European Network H. Mewes (MIPS)#

12:30 p.m. - 12:55 p.m. Strategy for directed Primer Walking on Plasmid and
Cosmid DNA from Chromosome XI of *S. cerevisiae*
Using T7 DNA Polymerase and Cycle Sequencing W. Ansorge (EMBL)#

12:55 noon - 2:00 p.m. Lunch

2:00 p.m. - 5:00 p.m. Session II - Data Fair, Poster Session I and Exhibits

September 24, 1993 DRAFT 13

1

* Invited #Confirmed

5:00 p.m. - 7:00 p.m.	Session III - Concurrent Sessions/Discussion Groups	
	CS 1. cDNA Sequencing Chair: G. Guellaen (INSERM)* and M. Adams (TIGR)#	
	CS 2. Database Interoperability Chair: E. Branscomb (LLNL)# and R. Robbins (Johns Hopkins U.)#	
7:00 p.m.	Dinner (Sponsored by QIAGEN Inc.)	
Monday, October 25, 1993		
8:00 a.m. - 8:30 a.m.	Continental Breakfast	
8:30 a.m. - 9:00 a.m.	Gene Discovery in Man	C.T. Caskey (Baylor)#
9:00 a.m. - 9:30 a.m.	-----	J. Craig Venter (TIGR)#
9:30 a.m. - 12:30 p.m.	Session IV - DNA Sequence Quality Workshop Sponsored by The Human Genome Organisation Chair: C. Thomas Caskey (Baylor) and M. Olson (U. Washington) Scribe: B. Rossiter (Baylor)	
9:30 a.m. - 9:50 a.m.	Sequence Data Fidelity	Mathias Uhlen (Royal Inst. of Tech.) (10 min.)# Ellson Chen (ABI) (10 min.)#
9:50 a.m. - 10:00 a.m.	Discussion	
10:00 a.m. - 10:20 a.m.	Recombinant Sequence Template Authenticity	R. Waterston (Wash. U.) (10 min.)# ----- (10 min.)
10:20 a.m. - 10:30 a.m.	Discussion	
10:30 a.m. - 10:50 a.m.	Database Entry Criteria	D. Lipman (NLM/NIH) (10 min.)# P. Gilna (LANL) (10 min.)#
10:50 a.m. - 11:05 a.m.	Discussion	
11:05 a.m. - 11:20 a.m.	Coffee Break	
11:20 a.m. - 11:40 a.m.	Analytic Criteria for Database Submission	S. Scherer (UC Berkeley) (10 min.)# C. Fields (TIGR) (10 min.)#
11:40 a.m. - 11:55 a.m.	Discussion	
11:55 a.m. - 12:30 p.m.	Panel Discussion	
12:30 p.m. - 2:00 p.m.	Lunch	
2:00 p.m. - 4:00 p.m.	Session V - Concurrent Sessions/Discussion Groups	
	CS 3. Sequencing and Technology Development Chair: C. Tibbetts (Vanderbilt)# and J. Collins (BRU)#	

Monday, October 25, 1993 (cont.)

CS 4. Genome Projects
Chair: K. McKinney (CARB)# and R. Colwell (MBI)*

4:00 p.m. - 4:30 p.m. Coffee Break

4:30 p.m. - 6:30 p.m. Session VI - Concurrent Sessions/Discussion Groups

CS 5. Gene Families
Chairs: J-M. Claverie (NIH)#

CS 6. cDNA Mapping
Chair: D. Maglott (ATCC)# and Julie Korenberg (Cedars-Sinai)*

6:30 p.m. Dinner (Sponsored by Human Genome Sciences Inc.)

Tuesday, October 26, 1993

8:00 a.m. - 8:30 a.m. Continental Breakfast

8:30 a.m. - 10:20 a.m. Session X - Sequencing by Hybridization
Chairs: C. Cantor (Boston Univ.)# and M. Eggers (HARC)#

8:30 a.m. - 8:55 a.m. Sequencing Chips M. Eggers (HARC)#

8:55 a.m. - 9:20 a.m. Sequencing by Hybridization R. Drmanac (ANL)#

9:20 a.m. - 9:55 a.m. Analysis of RNA Structure by Hybridisation to Oligonucleotide Array E. Southern (MRC)#

9:55 a.m. - 10:20 a.m. Sequencing by Hybridization S. Fodor (Affymetrix)#

10:20 a.m. - 10:40 a.m. Coffee Break

10:40 a.m. - 12:20 p.m. Session VII - Genome Progress
Chairs: L. Hood (U. Washington)# and S. Pena (Fed. Univ. Minas Gerais)*

10:20 a.m. - 11:05 a.m. Sequencing the *C. elegans* genome R. Wilson (Wash U.)#

11:05 a.m. - 11:30 a.m. T Cell Receptors L. Hood (U. Washington)*

11:30 a.m. - 11:55 a.m. Directed Genomic Sequencing of Human and *Drosophila* DNA C. Martin (LBL)

11:55 a.m. - 12:20 p.m. Expressed Gene Anatomy Database C. Fields (TIGR)#

12:30 p.m. - 2:00 p.m. Lunch

2:00 p.m. - 5:00 p.m. Session VIII- Data Fair, Poster Session II, and Exhibits

4:00 p.m. - 7:00 p.m. Session IX - Automation Issues
Chairs: C. Dahl (NCHGR) and R. Strausberg (NCHGR)

7:00 p.m. Cocktail Reception (Sponsored by AMGEN)

Evening Free

Wednesday, October 27, 1993

8:00 a.m. - 8:30 a.m.	Continental Breakfast	
8:30 a.m. - 9:30 a.m.	Workshop Reports/Summary of Data Fair Analyses	
9:30 a.m. - 9:55 a.m.	Session VII - Genome Progress cont. Chairs: Carl Woese (U. IL)* and	
8:30 a.m. - 8:55 a.m.	<i>Canine</i>	J. Rine (UC Berkeley)#
8:55 a.m. - 9:20 a.m.	<i>Arabidopsis</i>	C. Somerville (MSU)#
9:20 a.m. - 9:55 a.m.	<i>Rice</i>	T. Sasaki (NIAR/STAFF)#
9:55 a.m. - 10:20 a.m.	<i>Mycoplasma</i>	D. Smith (CRI)#
11:35 a.m.	Concluding Remarks and Adjournment	

Attendees

Demographics/Genome Sequencing and Analysis Conferences
November 9, 1993

1989 Attendance	125
1990 Attendance	165
1991 Attendance	302
1992 Attendance	370
1993 Attendance	535

Number of Exhibitors

1989	0
1990	5
1991	14
1992	18
1993	25

1993 Conference Attendance

Breakdown

Scientific Attendees	426
Exhibitor Personnel	44
Speakers/Invited Participants	34
Students	21
Guest/Spouse	7
One Day	3

Total 535

Totals by State

AL	1	MA	49	OH	5
AZ	2	MD	63	OK	6
CA	124	MI	10	PA	12
CO	6	MN	3	SC	2
CT	6	MO	14	TN	14
DC	4	NC	11	TX	16
FL	2	NE	6	UT	16
GA	3	NH	1	VA	1
IA	1	NJ	12	WA	11
IL	10	NM	16	WI	28
IN	2	NY	10		

Total 467

Totals by Country

Australia	1
Austria	1
Belgium	1
Brazil	1
Canada	4
Finland	1
France	7
Germany	12
Israel	5
Japan	7
Netherlands	2
Norway	1
Sweden	4
United Kingdom	15
USA	467