**HEALTH PHYSICS/RADIATION PROTECTION
ENROLLMENTS AND DEGREES, 1994**

APPENDIXES

Prepared by:

Oak Ridge Institute for Science and Education
Science/Engineering Education Division
Analysis and Evaluation Programs
Labor and Policy Studies Group
Oak Ridge, Tennessee 37831-0117

Prepared for:

U.S. Department of Energy
Office of Science Education Programs
Washington, D.C. 20585

and

U.S. Nuclear Regulatory Commission
Office of Personnel
Washington, D.C. 20426

May 1995

This report is based on work performed for the U.S. Department of Energy and the U.S. Nuclear Regulatory Commission under Contract No. DE-AC05-76OR00033.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

MASTER

DT

1945

1945

TABLE OF CONTENTS

APPENDIXES

Appendix A. Statistical Tables	1
A-1 Health Physics/Radiation Protection Degrees Granted by Institution, 1984-1994	3
A-2 Total Enrollment of Full-Time and Part-Time Students in Health Physics/Radiation Protection, Fall 1984 through Fall 1994	9
A-3 Health Physics/Radiation Protection Enrollments and Degrees in Subfields by State and Institution, 1994	10
A-4 Health Physics/Radiation Protection Enrollments and Degrees by Subfield, 1994	18
A-5 Undergraduate, Master's, and Doctoral Enrollments and Degrees in Health Physics/Radiation Protection Programs, Percent Distribution, 1990-1994	19
A-6 Foreign National, Female, and Minority Participation in Health Physics/Radiation Protection Programs, 1988-1994	21
A-7 Health Physics/Radiation Protection: Foreign National, Female, and Minority Enrollments and Degrees by State and Institution, 1994	23
A-8 Total Health Physics/Radiation Protection Enrollments and Degrees by Ethnicity and Gender, 1994	35
A-9 Employment or Postgraduation Plans of Health Physics/Radiation Protection Graduates by Degree Level, 1994	36
A-10 Health Physics/Radiation Protection Enrollments and Degrees by Survey Region and State, 1994	37
A-11 Institutions with Undergraduate and Graduate Programs or Options in Health Physics/Radiation Protection, Fall 1994	40
Appendix B. Addresses	43
B-1 Addresses of Institutions in Survey Universe, 1994	45
B-2 Addresses of Institutions in Survey Universe with Inactive, Inapplicable or Suspended Programs, 1994	48
Appendix C. Survey Materials	49

NOTE

Historical data in the Appendixes differ slightly from those shown in previously published reports in that corrections have been made to reflect new information obtained after the initial surveys.

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.

APPENDIX A. STATISTICAL TABLES

1.

2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200.

201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300.

301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400.

401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500.

501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600.

APPENDIX A-1
HEALTH PHYSICS/RADIATION PROTECTION
DEGREES GRANTED BY INSTITUTION, 1984-1994

B = Bachelor's
M = Master's
D = Doctoral

| State and Institution | July -
June - | 1983
1984 | 1984
1985 | 1985
1986 | 1986
1987 | 1987
1988 | 1988
1989 | 1989
1990 | 1990
1991 | 1991
1992 | 1992
1993 | 1993
1994 |
|--|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D |
| Alabama | | | | | | | | | | | | |
| Auburn University | | 1 - | 2 - - | 2 | 2 | Suspended | | | | | | |
| Arizona | | | | | | | | | | | | |
| Arizona State University (see note) | | 3 - | 3 2 | 2 - - | 6 1 | 7 3 - | - 4 1 | 3 - | 5 1 | 1 - | 1 1 | 2 1 |
| Arkansas | | | | | | | | | | | | |
| University of Arkansas for Medical Sciences | | 1 | 1 | 1 | - | 1 | 1 | 1 | - | - | - | 1 |
| California | | | | | | | | | | | | |
| San Diego State University | | - 8 | 1 5 | 6 | 7 | 7 | 5 | 3 | 3 | 9 | 11 | 10 |
| San Jose State University | | - | 10 | 4 | 3 | 2 | 1 2 | 1 1 | - | 1 | 3 | 4 |
| University of California, Irvine | | - - | 2 1 | 1 | 1 | 1 - | 1 - | 2 - | 2 | - 4 | 1 5 | 3 |
| University of California, Los Angeles | | 5* 5* | 3* 3* | 6 7 | 2 6 | - 6 | 1 2 | 1 - | 2 6 | 2 6 | 4 3 | 3 6 |
| University of Southern California (see note) | | 10 1 | 8 - | 8 2 | 2 1 | 1 | - | - | 2 | - | - | 2 |
| Colorado | | | | | | | | | | | | |
| Colorado State University | | 13 1 | 6 1 | 9 - | 4 4 | 7 1 | 4 1 | 8 1 | 4 - | 5 | 7 1 | 10 3 |
| National Technological University | | | | | | | | | | Began '91 | 1 | 1 |
| University of Colorado Health Sciences Ctr. | | 3 | 5 | 4 | 2 | 3 | 6 | 3 | 5 - | 6 - | 5 - | 2 2 |

*Estimated.

NOTES: (Applicable to all pages of Appendix A-1.) Some of the numbers shown here have been changed from previously published reports, as adjustments to historical data have been collected and reported periodically. Dashes indicate enrollments, but no degrees granted at that degree level during the year.

Arizona State University's Nuclear Sciences program has been suspended. The current health physics students enrolled are being allowed to complete their degrees.

The Master's program at the University of Southern California was temporarily suspended in 1988.

APPENDIX A-1 (Continued)

| State and Institution | July -
June - | | | 1983
1984 | | | 1984
1985 | | | 1985
1986 | | | 1986
1987 | | | 1987
1988 | | | 1988
1989 | | | 1989
1990 | | | 1990
1991 | | | 1991
1992 | | | 1992
1993 | | | 1993
1994 | | | |
|--|------------------|----------|---|--------------|---|---|--------------|----|---|--------------|----|---|--------------|----|-----------|--------------|----|---|--------------|----|---|--------------|-----------|---|--------------|----|----|--------------|----|---|--------------|----|---|--------------|--|--|--|
| | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | | | | |
| Connecticut | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Yale University | | | | | - | | | 1 | | - | | | 1 | | Inactive | | | | | | | | | | | | | | | | | | | | | | |
| District of Columbia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Georgetown University Medical Center | | - | | | 2 | | | 5 | | 2 | | | 1 | | 4 | | 1 | | 3 | | 8 | | 3 | | 6 | | | | | | | | | | | | |
| Florida | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| University of Florida, Gainesville | 4 | 9 | 2 | 3 | 6 | 1 | 5 | 14 | 2 | 3 | 15 | - | 4 | 11 | 3 | 2 | 14 | 2 | 4 | 6 | - | 7 | 11 | - | 4 | 10 | - | 2 | 14 | 1 | 7 | 11 | 2 | | | | |
| University of Miami, School of Medicine | | - | | | - | | | 1 | | 1 | | | 1 | | Suspended | | | | | | | | | | | | | | | | | | | | | | |
| Georgia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Emory University, School of Medicine | | 12 | | | 7 | | Suspended | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Georgia Institute of Technology (see note) | 6 | 15 | 6 | 2 | 9 | 1 | 9 | 17 | 1 | 6 | 11 | 3 | 9 | 24 | - | 7 | 29 | 2 | 8 | 13 | - | 3 | 13 | 3 | 21 | - | 25 | | 27 | | | | | | | | |
| Idaho | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Idaho State University | | | | | | | | | | | | | Began '89 | | - | - | | - | - | | 3 | - | 11 | - | 9 | - | 14 | 1 | | | | | | | | | |
| Illinois | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DePaul University | | Inactive | | | | | - | | | 2 | | | 2 | | 2 | | - | | 7 | | 2 | | Suspended | | | | | | | | | | | | | | |
| Northwestern University (see note) | 2 | 4 | 1 | 3 | 3 | - | 2 | 1 | 1 | 5 | 1 | - | 1 | 1 | - | 1 | 1 | - | 1* | 1* | - | 2 | - | 1 | 4 | 3 | 1 | 4 | - | 1 | 3 | | | | | | |
| Rush University | | - | | | - | - | 2 | - | | 1 | - | | 1 | - | | - | - | | 1 | 1 | | - | - | | - | - | | - | - | | 4 | 1 | | | | | |
| University of Illinois, Urbana | | - | - | | 2 | - | | - | - | 1 | 2 | | 1 | 1 | | - | | - | | - | | 1 | | 1 | | | - | | | 1 | | | | | | | |
| Indiana | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purdue University | 39 | 4 | 3 | 17 | 4 | 4 | 28 | - | 2 | 15 | 4 | 3 | 9 | 2 | 1 | 10 | 5 | 1 | 8 | 2 | 1 | 8 | 1 | 1 | 8 | 1 | - | 13 | 1 | - | 9 | 4 | 1 | | | | |
| Iowa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| University of Iowa (see note) | | 1 | 1 | | 3 | 3 | | 2 | 1 | | 1 | - | | 3 | 1 | | 4 | 2 | | 2 | - | | - | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | | | |

*Estimated.

NOTES: Georgia Institute of Technology's undergraduate program was suspended in 1991. Recently, their health physics Ph.D. degrees were reclassified as nuclear engineering degrees.

Northwestern University's program has been suspended. Students are being allowed to complete their degrees.

University of Iowa's health physics program has been suspended. Students are being allowed to complete their degrees.

APPENDIX A-1 (Continued)

| State and Institution | July -
June - | 1983
1984 | | | 1984
1985 | | | 1985
1986 | | | 1986
1987 | | | 1987
1988 | | | 1988
1989 | | | 1989
1990 | | | 1990
1991 | | | 1991
1992 | | | 1992
1993 | | | 1993
1994 | | |
|--|------------------|--------------|----|---|--------------|----|---|--------------|----|---|--------------|----|---|--------------|----|---|--------------|-----------|----|--------------|----|----|--------------|----|----|--------------|---|--------------|--------------|----|---|--------------|----|---|
| | | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | B | M | D | | | |
| Kansas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| University of Kansas | | 1 | 1 | 1 | | 3 | 2 | | 1 | - | | 1 | | - | | 2 | | Suspended | | | | | | | | | | | | | | | | |
| Kentucky | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| University of Kentucky Medical Ctr. (see note) | | - | 2 | | - | 4 | | 1 | 3 | | 2 | 4 | | 3 | 6 | | - | 7 | | 2 | 5 | | 3 | 4 | | - | 5 | | 1 | 7 | | 2 | 6 | |
| Louisiana | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Louisiana State University | | - | | | - | | | | 2 | | | 1 | | - | | 6 | | Inactive | | - | | | 4 | | | | 3 | | | | 3 | | | |
| Maine | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| University of Maine | | 1 | - | | 3 | - | | 2 | 1 | | - | 1 | | 1 | | 2 | - | | 3 | | - | 1 | - | 2 | - | - | 4 | - | - | 2 | 2 | 1 | | |
| Maryland | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Johns Hopkins Univ., School of Public Health | | | 6 | 1 | | 4 | 1 | | 2 | 1 | | 2 | 1 | | 1 | - | | - | - | | 1 | - | | - | - | | 1 | 2 | | - | 1 | | - | - |
| Massachusetts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harvard University, School of Public Health | | | 2 | 2 | | 2 | 1 | | | 3 | | 1 | - | | - | 2 | | 1 | 1 | | - | - | | 1 | 2 | | 1 | 2 | | 1 | 3 | | - | 2 |
| Massachusetts Institute of Technology | | | 1 | | | 3 | | | | - | | | - | | 3 | | | 1 | | | 4 | - | | - | 1 | | 1 | - | | - | - | | 1 | 1 |
| University of Massachusetts, Lowell | | 4 | 12 | - | 8 | 14 | 2 | 18 | 20 | - | 11 | 8 | 1 | 8 | 11 | 1 | 8 | 16 | 1 | 6 | 16 | 1 | 5 | 15 | 1 | 4 | 7 | 1 | 7 | 12 | 3 | 8 | 11 | 3 |
| University of Massachusetts, Amherst | | 6 | 9 | - | 6 | 8 | 1 | 7 | 8 | - | 8 | 12 | - | See note | | | 7 | 12 | - | 4 | 1 | | 3 | | | 3 | | 3* | | | | Suspended | | |
| Michigan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oakland University | | 6 | | - | 2 | | - | 1 | | - | 2 | | 1 | 2 | | 1 | 2* | - | 3* | 2* | - | 3* | 2* | | 2* | Not provided | | Inapplicable | | | | | | |
| University of Michigan | | | 7 | - | | 6 | - | | 7 | - | | 3 | - | | 4 | 1 | | 9 | 1 | | 6 | - | | 4 | - | 2 | - | | 3 | 1 | | 5 | - | |
| Minnesota | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| University of Minnesota | | | 1 | - | | 1 | - | | | - | | | - | | 1 | | | | - | | | - | | 1 | | | 1 | | Suspended | | | | | |

*Estimated.

NOTE: No health physics courses were offered for the 1987-1988 period at the University of Massachusetts, Amherst. Program suspended; last degrees granted in 1993.

The University of Kentucky's undergraduate program has been suspended; last degrees granted in 1994.

APPENDIX A-1 (Continued)

| State and Institution | July -
June - | 1983
1984 | 1984
1985 | 1985
1986 | 1986
1987 | 1987
1988 | 1988
1989 | 1989
1990 | 1990
1991 | 1991
1992 | 1992
1993 | 1993
1994 |
|--|------------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------|--------------|--------------|--------------|--------------|
| | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D |
| Missouri | | | | | | | | | | | | |
| Northeast Missouri State University | - | | 1 | Suspended | | | | | | | | |
| St. Louis University | - | | 2 | Suspended | | | | | | | | |
| University of Missouri, Columbia | 3 - | | 3 - | 3 | 3 1 | 5 1 | 4 - | 6 2 | 9 1 | 9 2 | 7 2 | 12 1 |
| University of Missouri, Rolla | | | | | Began '87 | - | 3 | 1 | 1 1 | 3 | 4 - | 2 1 |
| Nevada | | | | | | | | | | | | |
| University of Nevada, Las Vegas | | | | | | | Began '89 | - | - | 2 | 4 | 2 |
| New Jersey | | | | | | | | | | | | |
| Rutgers University | 2 - - | - 4 - | 2 4 - | 5 6 2 | 4 8 1 | 4 5 2 | 2 5 - | 1 7 2 | 3 5 1 | 2 11 1 | 2 8 1 | |
| Thomas Edison State College | | | | | | | | | | | | |
| Trenton State College | - | 2 | - | - | 1 | Suspended | | Prior data unavailable | 12 | 22 | | 27 |
| New Mexico | | | | | | | | | | | | |
| University of New Mexico | | | | | | | Began '90 | - | - - | 2 | 5 - | 1 - |
| New Mexico State University | | | | | | | Began '90 | - - | - - | - | Suspended | |
| New York | | | | | | | | | | | | |
| Clarkson University | 1 - | 1 1 | 1 1 | 2 1 | 1 1 | 1 - 1 | - 1 | 3 1 | Suspended | | | 1 |
| Cornell University, Sloan Kettering Division | | 1 | 1 | - | - 1 | Suspended | | | | | | |
| Manhattan College | 18 | 17 | 15 | 6 | 2 | 3 | 4 | Inapplicable | 2 | | | |
| New York University, Medical Center | 2 2 | 2 1 | - 1 | 1 - | - 1 | 1 2 | 1 2 | | | | 1 1 | 1 |
| Rensselaer Polytechnic Institute | 3 1 | 7* 3* 1* | 7* 2* - | See note | | | | | | | | |
| SUNY-Buffalo | 2 3 - | 4 - 1 | 5 2 - | 2 2 - | 4 3 | 6 1 - | 3 - | 8 - | 4 3 | 3 2 | 4 2 | |
| University of Rochester Medical Center | | 1 | Suspended | | | | | | | | | |
| North Carolina | | | | | | | | | | | | |
| University of North Carolina, Chapel Hill | 4 2 | 9 - | 5 - | 3 1 | 2 - | 8 3 | 4 1 | 3 - | 7 - | 6 - | 3 - | |

*Estimated.

NOTE: Rensselaer Polytechnic Institute does not offer a degree program in health physics; however, all RPI students earning a degree in nuclear engineering have course work in health physics which qualifies them to work in the health physics field.

APPENDIX A-1 (Continued)

| State and Institution | July -
June - | 1983
1984 | 1984
1985 | 1985
1986 | 1986
1987 | 1987
1988 | 1988
1989 | 1989
1990 | 1990
1991 | 1991
1992 | 1992
1993 | 1993
1994 |
|--|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D |
| Ohio | | | | | | | | | | | | |
| Ohio State University | | Began '84 | 1 | - | 2 | 4 | 2 1 | 1 1 | 5 - | 2 2 | 4 - | 3 1 |
| University of Cincinnati | | 2 | 1 | 2 | 2 | 5 | 2 | 2 | 3 | 1 | 7 | 4 |
| University of Findlay | | | | | | | | | Began '91 | - | 2 | 2 |
| Oregon | | | | | | | | | | | | |
| Oregon State University | | 1 2 | 1 1 | 6 1 | 1 - | 7 | 3 - | 3 1 | 6 - | 2 1 | 4 - | 7 3 |
| Pennsylvania | | | | | | | | | | | | |
| Bloomsburg University of Pennsylvania | | | | | | Began '87 | - | 1 | 3 | 2 | 5 | 2 |
| Dickinson College | | 1 | - | - | 1 | - | - | 1 | - | 1 | Inactive | - |
| Dusquesne University | | 2 | - | 1 | Inactive | Suspended | | | | | | |
| Hanhemann University (see note) | | 1 - | - - | - 1 | 1 - | - - | - 1 | 1 - | - 1 | Inapplicable | | |
| Temple University, School of Medicine | | 3 | - | 3 | 4 | 3 | - | 3 | 4 | 3 | Inapplicable | |
| University of Pennsylvania, Donner Center/GI | | | - | - | 1 | Suspended | | | | | | |
| Univ. of Pittsburgh, Grad. Sch. of Pub. Health | | 10 1 | 4 - | 9 1 | 5 1 | 9 1 | 7 - | 9 1 | 5 - | 5 - | 5 - | 3 1 |
| Puerto Rico | | | | | | | | | | | | |
| University of Puerto Rico | | 1 | 2 | 1* | Inactive | | | | | | | |
| South Carolina | | | | | | | | | | | | |
| Clemson University | | 1 | 4 | 1 | 2 - | 2 - | 4 - | 2 - | 2 - | 1 - | 2 - | 4 1 |
| Francis Marion University | | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 9 | 5 | 2 |
| Tennessee | | | | | | | | | | | | |
| University of Tennessee, Chattanooga | | 2 | - | 1 | - | 1* | 2 | 3 | 3 | - | Inactive | |
| University of Tennessee, Knoxville | | | | | Began '88 | - | - - | - - | 4 - | 3 - | 6 - | 9 - |

*Estimated.

NOTES: Hanhemann University reported that a total of 5 MS degrees and 6 Ph.D. degrees were awarded from 1970 through 1989. The numbers have been distributed and some appear in the 10 years shown in this Appendix. In 1992, the university reported that the program was inapplicable to the survey.

APPENDIX A-1 (Continued)

| State and Institution | July -
June - | 1983
1984 | 1984
1985 | 1985
1986 | 1986
1987 | 1987
1988 | 1988
1989 | 1989
1990 | 1990
1991 | 1991
1992 | 1992
1993 | 1993
1994 |
|---|------------------|---------------|----------------|--------------|--------------------|--------------|----------------|-----------------------|--------------|--------------|--------------|--------------|
| | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D | B M D |
| Texas | | | | | | | | | | | | |
| Texas A&M University
University of Texas, HSC San Antonio | 3 5 1 | 5 2 - | 3 5 - | 2 - - | 3 5 -
Began '89 | 2 9 3
- | 8 11 3
- - | 3 5 -
Inapplicable | 1 5 2 | 8 11 1 | 7 7 2 | |
| Utah | | | | | | | | | | | | |
| University of Utah (see note) | | | | | | | 1 3 | 1 3 | 3 2 | 2 | - - | |
| Virginia | | | | | | | | | | | | |
| University of Virginia Medical Center
Virginia Polytechnic Inst. and State Univ. | - - | Inactive
1 | -
Suspended | Inactive | | | | | | | | |
| Washington | | | | | | | | | | | | |
| University of Washington (see note)
Washington State Tri Cities (see note) | 2 | 4 | 1 | 1 | 3 | 8 | 3
Began '90 | 5
2 | 2
- - | -
2* | 2
1 | |
| West Virginia | | | | | | | | | | | | |
| West Virginia University (see note) | | 2* | - | Inactive | - | 1 - | - | - | - | 12 | 19 | |
| Wisconsin | | | | | | | | | | | | |
| University of Wisconsin, Madison | 17 11 | 12 3 | 11 1 | 15 4 | 5 4 | 12 7 | 15 12 | 10 6 | 12 8 | 6 4 | 5 5 | |
| TOTALS | 113 181 43 | 92 179 26 | 125 171 26 | 85 136 36 | 71 150 28 | 68 198 39 | 71 144 32 | 78 139 38 | 79 152 34 | 100 194 30 | 102 205 41 | |

*Estimated.

NOTES: Program at the University of Utah started in the late 1970s. Data prior to 1989-1990 were not available.

Through 1990, the data include University of Washington students in radiological sciences at the Joint Center for Graduate Study, Richland, Washington.

Washington State - degrees are granted through the University of Washington's Radiological Science Program on WSU Tri-Cities Campus.

West Virginia University data unavailable prior to 1984-1985. Current students are within Occupational Health and Safety Engineering program.

Source: U.S. Department of Energy.

APPENDIX A-2
TOTAL ENROLLMENT OF FULL-TIME AND PART-TIME STUDENTS IN
HEALTH PHYSICS/RADIATION PROTECTION,
FALL 1984 THROUGH FALL 1994

FT = FULL-TIME
PT = PART-TIME

YEAR	UNDERGRADUATE						GRADUATE						TOTAL ENROLLMENT		
	JUNIORS			SENIORS			MASTER'S			DOCTORAL					
	FT	PT	TOTAL	FT	PT	TOTAL	FT	PT	TOTAL	FT	PT	TOTAL	FT	PT	TOTAL
1984	108	63	171	123	34	157	323	299	622	133	30	163	687	426	1113
1985	88	62	150	134	31	165	278	243	521	149	37	186	649	373	1022
1986	79	43	122	105	11	116	274	220	494	179	41	220	637	315	952
1987	89	10	99	113	13	126	278	219	497	178	40	218	658	282	940
1988	70	12	82	79	12	91	231	231	462	172	31	203	552	286	838
1989	65	19	84	104	12	116	271	203	474	190	35	225	630	269	899
1990	69	15	84	72	13	85	271	220	491	198	35	233	610	283	893
1991	63	3	66	84	1	85	277	251	528	199	49	248	623	304	927
1992	60	4	64	89	6	95	300	303	603	202	47	249	651	360	1011
1993	50	7	57	110	5	115	355	324	679	207	41	248	722	377	1099
1994	67	42	109	68	83	151	362	273	635	192	42	234	689	440	1129

Source: U.S. Department of Energy

**APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994**

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Arizona											
Arizona State University
Engineering or Basic Sciences			1						2	1	
Arkansas											
University of Arkansas for Medical Sci.
Health Phys., Rad. Prot., or Rad. Health						1				1	
California											
San Diego State University
Health Phys., Rad. Prot., or Rad. Health					10	6				10	
San Jose State University
Health Phys., Rad. Prot., or Rad. Health					4	22				4	
University of California, Irvine
Medical or Radiological Physics								11			3
University of California, Los Angeles
Medical or Radiological Physics					1			45		3	6
University of Southern California
Medical or Radiological Physics								3			2
Engineering or Basic Sciences								3			
Colorado											
Colorado State University
Health Phys., Rad. Prot., or Rad. Health					15			11		10	3

APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
National Technological University
Health Phys., Rad. Prot., or Rad. Health						16				1	
University of Colorado HSC
Medical or Radiological Physics					11	7		1		2	2
District of Columbia											
Georgetown University Medical Center
Health Phys., Rad. Prot., or Rad. Health
Radiobiology or Biophysics
Medical or Radiological Physics | | | | | 2
1
2 | 20 | | | | 6 | |
| Florida | | | | | | | | | | | |
| University of Florida
Health Phys./Rad. Protection Engineering | 4 | | 3 | | 25 | 4 | 8 | 3 | 7 | 11 | 2 |
| Georgia | | | | | | | | | | | |
| Georgia Institute of Technology
Health Phys., Rad. Prot., or Rad. Health | | | | | 4 | 50 | | | | 27 | |
| Idaho | | | | | | | | | | | |
| Idaho State University
Engineering or Basic Sciences | 8 | 1 | 7 | 7 | 9 | 9 | | | 14 | 1 | |
| Illinois | | | | | | | | | | | |
| Northwestern University
Health Phys., Rad. Prot., or Rad. Health | | | 1 | | | 1 | | | 1 | 3 | |

**APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994**

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Rush University
Medical or Radiological Physics					3	2	8	3		4	1
University of Illinois
Health Phys., Rad. Prot., or Rad. Health							1			1	
Indiana											
Purdue University
Health Phys., Rad. Prot., or Rad. Health	12		11		2		1		9	4	1
Iowa											
University of Iowa
Radiobiology or Biophysics						1				1	1
Kentucky											
University of Kentucky Medical Center
Health Phys., Rad. Prot., or Rad. Health
Medical or Radiological Physics | | | | | 6 | 1 | | | 2 | 6 | |
| Louisiana | | | | | | | | | | | |
| Louisiana State University
Health Phys., Rad. Prot., or Rad. Health
Medical or Radiological Physics | | | | | 1
16 | | | | | 3 | |
| Maine | | | | | | | | | | | |
| University of Maine
Engineering or Basic Sciences | | | 3 | | 1 | | | | 2 | 2 | 1 |

APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Maryland											
Johns Hopkins School of Public Health
Health Phys., Rad. Prot., or Rad. Health
Medical or Radiological Physics | | | | | 3 | | 2 | 1 | | | |
| Massachusetts | | | | | | | | | | | |
| Harvard School of Public Health
Health Phys., Rad. Prot., or Rad. Health
Radiobiology or Biophysics | | | | | 1 | | 1
10 | | | | 2 |
| Massachusetts Institute of Technology
Health Phys., Rad. Prot., or Rad. Health | | | | | 2 | | 3 | | 1 | | 1 |
| University of Massachusetts Lowell
Health Phys., Rad. Prot., or Rad. Health | 5 | | 10 | 1 | 17 | 20 | 14 | 8 | 8 | 11 | 3 |
| Michigan | | | | | | | | | | | |
| University of Michigan
Health Phys., Rad. Prot., or Rad. Health | | | | | 16 | | 3 | 2 | | 5 | |
| Missouri | | | | | | | | | | | |
| University of Missouri, Rolla
Health Phys., Rad. Prot., or Rad. Health
Engineering or Basic Sciences | 2 | | 1 | | 1 | | | | 2 | 1 | |
| University of Missouri-Columbia
Health Phys., Rad. Prot., or Rad. Health
Medical or Radiological Physics | | | | | 17
11 | 1
1 | 8
4 | 1
1 | | 5
7 | 1 |

APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Nevada											
University of Nevada
Health Phys., Rad. Prot., or Rad. Health	3	3		2					2		
New Jersey											
Rutgers University
Health Phys., Rad. Prot., or Rad. Health		2	4		3	26			2	5	
Medical or Radiological Physics						18		3		3	
Engineering or Basic Sciences								5			1
Aerosol Physics							1				
Radiation Chemistry								1			
Thomas Edison State College
Health Phys., Rad. Prot., or Rad. Health		36		72					27		
New Mexico											
University of New Mexico
Health Phys., Rad. Prot., or Rad. Health					10	15	1			1	
New York											
New York University Medical Center
Envioronmental Radiation Protection								2	3		1
State University of New York Buffalo
Engineering or Basic Sciences	1		8		1	5			4	2	
North Carolina											
University of North Carolina
Health Phys., Rad. Prot., or Rad. Health					5		1			3	

**APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994**

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Ohio											
The Ohio State University
Health Phys., Rad. Prot., or Rad. Health					9	1	4		3	1	
University of Cincinnati
Health Phys., Rad. Prot., or Rad. Health					11	4			4		
Medical or Radiological Physics					6	5					
University of Findlay
Engineering or Basic Sciences	12		3						2		
Oregon											
Oregon State University
Health Phys., Rad. Prot., or Rad. Health	3		3	1	14	2			7	3	
Pennsylvania											
Bloomsburg University of Pennsylvania
Health Phys., Rad. Prot., or Rad. Health	3		4						2		
Dickinson College
Engineering or Basic Sciences			1								
University of Pittsburgh
Health Phys., Rad. Prot., or Rad. Health					4				3	1	
South Carolina											
Clemson University
Engineering or Basic Sciences					16	1	3		4	1	

APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Francis Marion University
Health Phys., Rad. Prot., or Rad. Health	7		5						2		
Tennessee											
University of Tennessee
Health Phys./Rad. Protection Engineering					17	11	5	2		9	
Texas											
Texas A&M University
Health Phys., Rad. Prot., or Rad. Health	7		3		24	11	10	5	7	7	2
Utah											
University of Utah
Engineering or Basic Sciences
Computer Science w/medical physics program | | | | | 1 | | 13
1 | 1 | | | |
| Washington | | | | | | | | | | | |
| University of Washington
Envioronmental Radiation Protection | | | | | 1 | | | | | 2 | |
| Washington State Univ. Tri-Cities
Envioronmental Radiation Protection | | | | | 1 | 7 | | | | 1 | |
| West Virginia | | | | | | | | | | | |
| West Virginia University
Occupational Health and Safety
Industrial Engineering | | | | | 29
1 | | | | | 19 | |

APPENDIX A-3
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
IN SUBFIELDS BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
AND SUBFIELD	ENROLLMENTS - FALL 1994		DEGREES GRANTED	
	UNDERGRADUATE		GRADUATE	
	JUNIORS	SENIORS	MASTERS	DOCTORAL
	FT
PT	FT
PT	FT
PT	FT
PT
Wisconsin
University of Wisconsin
Medical or Radiological Physics | | | 28 | 15
2 |
| | 67
42 | 68
83 | 362
273 | 192
42 |
| TOTALS | 109
42 | 151 | 635 | 234 |
| | | | 102 | 205 |
| | | | 41 | 5 |

Source: U.S. Department of Energy

APPENDIX A-4
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES BY SUBFIELD, 1994

FT = FULL-TIME
PT = PART-TIME

SUBFIELD	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Health Phys.,Rad. Prot., or Rad Health	42	41	42	76	174	196	60	16	69	119	13
Radiobiology or Biophysics	0	0	0	0	1	1	10	0	0	1	3
Medical or Radiological Physics	0	0	0	0	84	39	86	11	0	33	19
Engineering or Basic Sciences	21	1	23	7	29	15	19	6	26	10	3
Health Phys./Rad. Protection Engineering	4	0	3	0	42	15	13	5	7	20	2
Other	0	0	0	0	32	7	4	4	0	22	1
TOTALS	67	42	68	83	362	273	192	42	102	205	41
	109		151		635		234				

Source: U.S. Department of Energy

APPENDIX A-5
 UNDERGRADUATE, MASTER'S, AND DOCTORAL ENROLLMENTS AND DEGREES IN
 HEALTH PHYSICS/RADIATION PROTECTION PROGRAMS, PERCENT DISTRIBUTION, 1990 - 1994

| SUBFIELD | ENROLLMENTS (Fall Term) | | | DEGREES GRANTED
(Year Ending June 30) | | |
|--|-------------------------|----------|----------|--|------|-------|
| | UNDERGRADUATE | MASTER'S | DOCTORAL | B.S. | M.S. | PH.D. |
| | % | % | % | % | % | % |
| <u>Health Phys., Rad. Prot., or Rad Health</u> | | | | | | |
| 1990 | 28.2 | 53.4 | 24.9 | 51.4 | 59.7 | 34.4 |
| 1991 | 33.8 | 61.6 | 37.5 | 66.2 | 59.4 | 26.3 |
| 1992 | 51.6 | 55.2 | 28.9 | 56.7 | 55.3 | 23.5 |
| 1993 | 57.0 | 57.7 | 19.4 | 76.0 | 55.7 | 13.3 |
| 1994 | 77.3 | 58.3 | 32.5 | 67.6 | 58.0 | 31.7 |
| <u>Radiobiology or Biophysics</u> | | | | | | |
| 1990 | 1.2 | 0.8 | 8.2 | 0.0 | 2.1 | 3.1 |
| 1991 | 0.0 | 0.9 | 8.1 | 3.9 | 1.4 | 7.9 |
| 1992 | 0.0 | 0.8 | 8.4 | 0.0 | 0.7 | 8.8 |
| 1993 | 0.0 | 0.4 | 7.3 | 0.0 | 1.0 | 13.3 |
| 1994 | 0.0 | 0.3 | 4.3 | 0.0 | 0.5 | 7.3 |
| <u>Medical or Radiological Physics</u> | | | | | | |
| 1990 | 0.0 | 16.9 | 41.2 | 0.0 | 20.8 | 43.8 |
| 1991 | 2.6 | 14.8 | 44.4 | 2.6 | 24.6 | 44.7 |
| 1992 | 0.0 | 18.1 | 40.6 | 0.0 | 26.3 | 55.9 |
| 1993 | 0.0 | 16.9 | 42.7 | 0.0 | 19.1 | 46.7 |
| 1994 | 0.0 | 19.4 | 41.5 | 0.0 | 16.1 | 46.3 |
| <u>Engineering or Basic Sciences</u> | | | | | | |
| 1990 | 18.1 | 6.7 | 14.2 | 14.3 | 2.1 | 9.4 |
| 1991 | 13.5 | 10.2 | 5.2 | 6.5 | 8.0 | 0.0 |
| 1992 | 40.9 | 14.8 | 11.2 | 35.9 | 15.8 | 8.8 |
| 1993 | 30.8 | 10.0 | 17.3 | 21.8 | 7.2 | 20.0 |
| 1994 | 20.0 | 6.9 | 10.7 | 25.5 | 4.9 | 7.3 |

APPENDIX A-5
 UNDERGRADUATE, MASTER'S, AND DOCTORAL ENROLLMENTS AND DEGREES IN
 HEALTH PHYSICS/RADIATION PROTECTION PROGRAMS, PERCENT DISTRIBUTION, 1990 - 1994

| SUBFIELD | ENROLLMENTS (Fall Term) | | | DEGREES GRANTED
(Year Ending June 30) | | |
|---|-------------------------|----------|----------|--|------|-------|
| | UNDERGRADUATE | MASTER'S | DOCTORAL | B.S. | M.S. | PH.D. |
| | % | % | % | % | % | % |
| <u>Health Phys./Rad. Protection Engineering</u> | | | | | | |
| 1990 | 6.9 | 9.2 | 5.2 | 17.1 | 11.1 | 0.0 |
| 1991 | 4.5 | 0.6 | 0.0 | 11.7 | 0.0 | 0.0 |
| 1992 | 0.0 | 4.5 | 4.0 | 0.0 | 2.0 | 0.0 |
| 1993 | 7.0 | 8.5 | 8.1 | 2.6 | 10.3 | 3.3 |
| 1994 | 2.7 | 9.0 | 7.7 | 6.9 | 9.8 | 4.9 |
| <u>Other</u> | | | | | | |
| 1990 | 45.6 | 13.0 | 6.4 | 17.1 | 4.2 | 9.4 |
| 1991 | 45.5 | 11.9 | 4.8 | 9.1 | 6.5 | 21.1 |
| 1992 | 7.5 | 6.6 | 6.8 | 9.4 | 0.0 | 2.9 |
| 1993 | 5.2 | 6.3 | 5.2 | 6.4 | 6.7 | 3.3 |
| 1994 | 0.0 | 6.1 | 3.4 | 0.0 | 10.7 | 2.4 |

Source: U.S. Department of Energy

APPENDIX A-6
FOREIGN NATIONAL, FEMALE, AND MINORITY PARTICIPATION
IN HEALTH PHYSICS/RADIATION PROTECTION PROGRAMS, 1988 - 1994

| ETHNIC GROUP
AND GENDER | ENROLLMENTS (Fall Term) | | | | | | | | DEGREES GRANTED
(Year Ending June 30) | | | | | |
|---------------------------------|-------------------------|----|---------|----|----------|----|----------|----|--|----|------|----|-------|----|
| | JUNIORS | | SENIORS | | MASTER'S | | DOCTORAL | | B.S. | | M.S. | | PH.D. | |
| | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % |
| <u>Foreign Nationals</u> | | | | | | | | | | | | | | |
| 1988 | 0 | 0 | 1 | 1 | 52 | 11 | 75 | 37 | 2 | 3 | 17 | 11 | 5 | 18 |
| 1989 | 0 | 0 | 3 | 3 | 50 | 11 | 67 | 30 | 0 | 0 | 19 | 10 | 11 | 28 |
| 1990 | 0 | 0 | 4 | 4 | 60 | 12 | 92 | 39 | 2 | 3 | 23 | 16 | 10 | 31 |
| 1991 | 6 | 4 | 1 | 1 | 51 | 10 | 91 | 37 | 5 | 6 | 22 | 16 | 14 | 37 |
| 1992 | 5 | 8 | 1 | 1 | 74 | 12 | 101 | 41 | 0 | 0 | 22 | 14 | 13 | 38 |
| 1993 | 2 | 4 | 6 | 5 | 64 | 9 | 89 | 36 | 1 | 1 | 31 | 16 | 16 | 53 |
| 1994 | 0 | 0 | 2 | 1 | 84 | 13 | 72 | 31 | 2 | 2 | 31 | 15 | 19 | 46 |
| <u>Women</u> | | | | | | | | | | | | | | |
| 1988 | 31 | 38 | 40 | 44 | 110 | 24 | 50 | 25 | 22 | 31 | 47 | 31 | 4 | 14 |
| 1989 | 26 | 31 | 47 | 41 | 124 | 26 | 46 | 20 | 27 | 42 | 63 | 32 | 4 | 10 |
| 1990 | 24 | 16 | 26 | 25 | 121 | 25 | 53 | 23 | 23 | 33 | 34 | 24 | 3 | 9 |
| 1991 | 19 | 13 | 24 | 21 | 141 | 27 | 49 | 20 | 22 | 29 | 21 | 15 | 5 | 13 |
| 1992 | 16 | 25 | 30 | 32 | 161 | 27 | 55 | 22 | 16 | 25 | 50 | 33 | 7 | 21 |
| 1993 | 17 | 30 | 31 | 27 | 173 | 25 | 53 | 21 | 18 | 23 | 60 | 31 | 3 | 10 |
| 1994 | 19 | 17 | 23 | 15 | 153 | 24 | 45 | 19 | 18 | 18 | 52 | 25 | 4 | 10 |
| <u>Blacks</u> | | | | | | | | | | | | | | |
| 1988 | 4 | 5 | 7 | 8 | 7 | 2 | 1 | 0 | 6 | 8 | 0 | 0 | 0 | 0 |
| 1989 | 5 | 6 | 5 | 4 | 9 | 2 | 2 | 1 | 4 | 6 | 4 | 2 | 0 | 0 |
| 1990 | 5 | 3 | 0 | 0 | 9 | 2 | 2 | 1 | 2 | 3 | 4 | 3 | 0 | 0 |
| 1991 | 2 | 1 | 1 | 1 | 20 | 4 | 4 | 2 | 1 | 1 | 3 | 2 | 0 | 0 |
| 1992 | 1 | 2 | 2 | 2 | 16 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 0 | 0 |
| 1993 | 2 | 4 | 4 | 3 | 22 | 3 | 2 | 1 | 5 | 6 | 3 | 2 | 1 | 3 |
| 1994 | 5 | 5 | 4 | 3 | 25 | 4 | 2 | 1 | 3 | 3 | 2 | 1 | 0 | 0 |

APPENDIX A-6
FOREIGN NATIONAL, FEMALE, AND MINORITY PARTICIPATION
IN HEALTH PHYSICS/RADIATION PROTECTION PROGRAMS, 1988 - 1994

| ETHNIC GROUP
AND GENDER | ENROLLMENTS (Fall Term) | | | | | | | | DEGREES GRANTED
(Year Ending June 30) | | | | | |
|---|-------------------------|---|---------|---|----------|---|----------|----|--|---|------|---|-------|---|
| | JUNIORS | | SENIORS | | MASTER'S | | DOCTORAL | | B.S. | | M.S. | | PH.D. | |
| | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % | NO. | % |
| <u>Hispanic U.S. Citizens</u> | | | | | | | | | | | | | | |
| 1988 | 2 | 2 | 2 | 2 | 5 | 1 | 6 | 3 | 2 | 3 | 4 | 3 | 1 | 4 |
| 1989 | 0 | 0 | 2 | 2 | 7 | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 0 | 0 |
| 1990 | 1 | 1 | 2 | 2 | 7 | 1 | 4 | 2 | 4 | 6 | 3 | 2 | 0 | 0 |
| 1991 | 0 | 0 | 2 | 2 | 13 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 1992 | 1 | 2 | 3 | 3 | 15 | 2 | 3 | 1 | 0 | 0 | 2 | 1 | 0 | 0 |
| 1993 | 2 | 4 | 4 | 3 | 20 | 3 | 3 | 1 | 0 | 0 | 4 | 2 | 0 | 0 |
| 1994 | 2 | 2 | 4 | 3 | 19 | 3 | 4 | 2 | 4 | 4 | 4 | 2 | 0 | 0 |
| <u>Asian Americans/Pacific Islanders</u> | | | | | | | | | | | | | | |
| 1988 | 2 | 2 | 1 | 1 | 11 | 2 | 9 | 4 | 2 | 3 | 3 | 2 | 2 | 7 |
| 1989 | 1 | 1 | 4 | 3 | 16 | 3 | 16 | 7 | 0 | 0 | 6 | 3 | 3 | 8 |
| 1990 | 6 | 4 | 2 | 2 | 17 | 3 | 11 | 5 | 2 | 3 | 9 | 6 | 2 | 6 |
| 1991 | 2 | 1 | 2 | 2 | 13 | 2 | 11 | 4 | 1 | 1 | 5 | 4 | 2 | 5 |
| 1992 | 1 | 2 | 4 | 4 | 13 | 2 | 13 | 5 | 2 | 3 | 4 | 3 | 0 | 0 |
| 1993 | 0 | 0 | 0 | 0 | 28 | 4 | 26 | 10 | 3 | 4 | 4 | 2 | 2 | 7 |
| 1994 | 0 | 0 | 0 | 0 | 26 | 4 | 26 | 11 | 1 | 1 | 8 | 4 | 2 | 5 |
| <u>American Indians/Alaskan Natives</u> | | | | | | | | | | | | | | |
| 1988 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1990 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1992 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1993 | 0 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 1994 | 0 | 0 | 1 | 1 | 4 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |

NOTE: All zeros in the table represent values of less than 0.5 percent.
Source: U.S. Department of Energy

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Arizona											
Arizona State University											
Foreign National Males				1							
White Males, Not Hispanic, U.S. Citizens									2	1	
Arkansas											
University of Arkansas for Medical Sci.											
White Males, Not Hispanic, U.S. Citizens							1			1	
California											
San Diego State University											
White Females, Not Hispanic, U.S. Citizens						2	1			2	
White Males, Not Hispanic, U.S. Citizens						5	3			6	
Black Males, Not Hispanic, U.S. Citizens							2				
Hispanic Males, U.S. Citizens										1	
Asian/Pacific Isl. Males, U.S. Citizens						3				1	
San Jose State University											
Foreign National Females						1					
White Females, Not Hispanic, U.S. Citizens							1			1	
White Males, Not Hispanic, U.S. Citizens						2	17			3	
Black Females, Not Hispanic, U.S. Citizens							1				
Black Males, Not Hispanic, U.S. Citizens						1					
Hispanic Females, U.S. Citizens							1				
Asian/Pacific Isl. Males, U.S. Citizens							2				
University of California, Irvine											
Foreign National Males									5		3
White Males, Not Hispanic, U.S. Citizens									3		
Asian/Pacific Isl. Males, U.S. Citizens									3		
University of California, Los Angeles											
Foreign National Females									6		

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
University of California, Los Angeles											
Foreign National Males							5			1	3
White Females, Not Hispanic, U.S. Citizens											1
White Males, Not Hispanic, U.S. Citizens							18			1	1
Black Males, Not Hispanic, U.S. Citizens							1				
Hispanic Males, U.S. Citizens							1				
Asian/Pacific Isl Females, U.S. Citizens							3				
Asian/Pacific Isl. Males, U.S. Citizens							11			1	1
Am. Ind., Alas. Nat. Females, U.S. Citizens					1						
University of Southern California											
Foreign National Females							1				1
Foreign National Males											1
White Males, Not Hispanic, U.S. Citizens							2				
Hispanic Males, U.S. Citizens							1				
Asian/Pacific Isl. Males, U.S. Citizens							2				
Colorado											
Colorado State University											
Foreign National Males						1					
White Females, Not Hispanic, U.S. Citizens						4		2		1	
White Males, Not Hispanic, U.S. Citizens						7		7		8	2
Black Females, Not Hispanic, U.S. Citizens						1					
Hispanic Females, U.S. Citizens						1					
Asian/Pacific Isl. Males, U.S. Citizens						1		2		1	1
National Technological University											
White Females, Not Hispanic, U.S. Citizens							2			1	
White Males, Not Hispanic, U.S. Citizens							11				
Hispanic Females, U.S. Citizens							1				
Hispanic Males, U.S. Citizens							2				
University of Colorado HSC											
Foreign National Females						1	1		1		
Foreign National Males						1	1				2

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED			
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994			
	JUNIORS		SENIORS		MASTER'S		DOCTORAL					
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.	
University of Colorado HSC												
White Females, Not Hispanic,U.S.Citizens					1	1				1		
White Males, Not Hispanic, U.S. Citizens					7	4				1		
Unknown					1							
District of Columbia												
Georgetown University Medical Center												
Foreign National Females					1							
Foreign National Males					1	1				1		
White Females, Not Hispanic,U.S.Citizens					1	4				2		
White Males, Not Hispanic, U.S. Citizens					2	7				3		
Black Females, Not Hispanic,U.S.Citizens						3						
Black Males, Not Hispanic, U.S. Citizens						3						
Hispanic Females,U.S. Citizens						1						
Hispanic Males, U.S. Citizens						1						
Florida												
University of Florida												
Foreign National Females								1				
Foreign National Males					5			3			1	
White Females, Not Hispanic,U.S.Citizens	1		1		5	3			1	4		
White Males, Not Hispanic, U.S. Citizens	3		2		11			4	2	4	6	1
Black Females, Not Hispanic,U.S.Citizens					1							
Black Males, Not Hispanic, U.S. Citizens					1	1				2	1	
Hispanic Males, U.S. Citizens					1							
Am. Ind.,Alas. Nat. Males,U.S.Citizens					1					1		
Georgia												
Georgia Institute of Technology												
Foreign National Males					1						1	
White Females, Not Hispanic,U.S.Citizens					1	4					5	
White Males, Not Hispanic, U.S. Citizens					2	42					19	
Black Males, Not Hispanic, U.S. Citizens						4						

**APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994**

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Georgia Institute of Technology
Asian/Pacific Isl Females,U.S.Citizens										2	
Idaho											
Idaho State University											
White Females, Not Hispanic,U.S.Citizens	1	1	1	1	3	4			4		
White Males, Not Hispanic, U.S. Citizens	7		6	6	5	4			10	1	
Asian/Pacific Isl. Males,U.S.Citizens						1					
Asian/Pacific Isl. Males,U.S.Citizens					1						
Illinois											
Northwestern University											
Foreign National Males										2	
White Females, Not Hispanic,U.S.Citizens			1						1		
White Males, Not Hispanic, U.S. Citizens						1				1	
Rush University											
Foreign National Females								2			
Foreign National Males								3		3	
White Females, Not Hispanic,U.S.Citizens					1			1			
White Males, Not Hispanic, U.S. Citizens					2			2	3		1
Black Males, Not Hispanic, U.S. Citizens						1					
Asian/Pacific Isl. Males,U.S.Citizens						1				1	
University of Illinois											
Foreign National Males								1			
White Males, Not Hispanic, U.S. Citizens										1	
Indiana											
Purdue University											
Foreign National Females									1	1	
Foreign National Males				1							
White Females, Not Hispanic,U.S.Citizens	6		5						4		

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Purdue University
White Males, Not Hispanic, U.S. Citizens	6		5		2		1		4	3	1
Iowa											
University of Iowa
Foreign National Females
White Males, Not Hispanic, U.S. Citizens | | | | | | 1 | | | | 1 | 1 |
| Kentucky | | | | | | | | | | | |
| University of Kentucky Medical Center
Foreign National Males
White Females, Not Hispanic, U.S. Citizens
White Males, Not Hispanic, U.S. Citizens | | | | | 3 | 1 | | | 2 | 3 | |
| Louisiana | | | | | | | | | | | |
| Louisiana State University
Foreign National Females
Foreign National Males
White Females, Not Hispanic, U.S. Citizens
White Males, Not Hispanic, U.S. Citizens | | | | | 2 | | | | | 1 | |
					6					2	
					4	2					
					5	3					
Maine											
University of Maine
Foreign National Females
White Females, Not Hispanic, U.S. Citizens
White Males, Not Hispanic, U.S. Citizens					1				1		
			3						1	2	1
Maryland											
Johns Hopkins School of Public Health
Foreign National Females
Foreign National Males					2						
					1		1				

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Johns Hopkins School of Public Health											
White Males, Not Hispanic, U.S. Citizens								1			
Black Males, Not Hispanic, U.S. Citizens								1			
Massachusetts											
Harvard School of Public Health											
Foreign National Females								2			
Foreign National Males						1		2			1
White Females, Not Hispanic, U.S. Citizens								5			1
White Males, Not Hispanic, U.S. Citizens								2			
Massachusetts Institute of Technology											
Foreign National Males						1		3			
White Males, Not Hispanic, U.S. Citizens						1				1	1
University of Massachusetts Lowell											
Foreign National Females						1	2	2		1	
Foreign National Males						2	1	6			1
White Females, Not Hispanic, U.S. Citizens	1		1			5	2	1	1	1	1
White Males, Not Hispanic, U.S. Citizens	4		8	1		7	12	5	6	5	1
Black Males, Not Hispanic, U.S. Citizens			1			1	1				
Hispanic Males, U.S. Citizens						1	1			1	
Asian/Pacific Isl. Males, U.S. Citizens							1				
Am. Ind., Alas. Nat. Males, U.S. Citizens									1		
Michigan											
University of Michigan											
Foreign National Males									1		
White Females, Not Hispanic, U.S. Citizens						4		1		1	
White Males, Not Hispanic, U.S. Citizens						10		2	1	3	
Black Females, Not Hispanic, U.S. Citizens						1					
Asian/Pacific Isl. Males, U.S. Citizens										1	
Am. Ind., Alas. Nat. Males, U.S. Citizens						1					

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED					
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994					
	JUNIORS		SENIORS		MASTER'S		DOCTORAL							
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.			
Missouri														
University of Missouri, Rolla														
Foreign National Females												1		
Foreign National Males												1		
White Females, Not Hispanic, U.S. Citizens												1		
White Males, Not Hispanic, U.S. Citizens												1		
University of Missouri-Columbia														
Foreign National Females												2		
Foreign National Males												9		
White Females, Not Hispanic, U.S. Citizens												2		
White Males, Not Hispanic, U.S. Citizens												12		
Hispanic Males, U.S. Citizens												1		
Asian/Pacific Isl Females, U.S. Citizens												1		
Asian/Pacific Isl. Males, U.S. Citizens												1		
Nevada														
University of Nevada														
White Females, Not Hispanic, U.S. Citizens												1		
White Males, Not Hispanic, U.S. Citizens												3		
Black Females, Not Hispanic, U.S. Citizens												1		
New Jersey														
Rutgers University														
Foreign National Males												1		
White Females, Not Hispanic, U.S. Citizens												1		
White Males, Not Hispanic, U.S. Citizens												4		
Black Females, Not Hispanic, U.S. Citizens												1		
Thomas Edison State College														
White Females, Not Hispanic, U.S. Citizens												4		
White Males, Not Hispanic, U.S. Citizens												33		
Black Females, Not Hispanic, U.S. Citizens												1		

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Thomas Edison State College											
Black Males, Not Hispanic, U.S. Citizens		2		2							
Hispanic Males, U.S. Citizens		1		3							
Asian/Pacific Isl. Males,U.S.Citizens									1		
Am. Ind.,Alas. Nat. Males,U.S.Citizens				1							
New Mexico											
University of New Mexico											
White Females, Not Hispanic,U.S.Citizens					2	2					
White Males, Not Hispanic, U.S. Citizens					5	11		1			
Black Males, Not Hispanic, U.S. Citizens										1	
Hispanic Females,U.S. Citizens							1				
Hispanic Males, U.S. Citizens					2	1					
Asian/Pacific Isl Females,U.S.Citizens					1						
New York											
New York University Medical Center											
Foreign National Males								1			
White Males, Not Hispanic, U.S. Citizens								1			
White Males, Not Hispanic, U.S. Citizens									3		1
State University of New York Buffalo											
White Females, Not Hispanic,U.S.Citizens	1		1		1						
White Males, Not Hispanic, U.S. Citizens			6			5			4	2	
Hispanic Males, U.S. Citizens			1								
North Carolina											
University of North Carolina											
White Females, Not Hispanic,U.S.Citizens					3		1			1	
White Males, Not Hispanic, U.S. Citizens					2					2	

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Ohio											
The Ohio State University											
Foreign National Females											
Foreign National Males											
White Females, Not Hispanic, U.S. Citizens											
White Males, Not Hispanic, U.S. Citizens											
Hispanic Males, U.S. Citizens											
University of Cincinnati											
Foreign National Females											
Foreign National Males											
White Females, Not Hispanic, U.S. Citizens											
White Males, Not Hispanic, U.S. Citizens											
Asian/Pacific Isl. Males, U.S. Citizens											
University of Findlay											
White Males, Not Hispanic, U.S. Citizens											
Oregon											
Oregon State University											
Foreign National Females											
Foreign National Males											
White Females, Not Hispanic, U.S. Citizens											
White Males, Not Hispanic, U.S. Citizens											
Hispanic Males, U.S. Citizens											
Pennsylvania											
Bloomsburg University of Pennsylvania											
White Females, Not Hispanic, U.S. Citizens											
White Males, Not Hispanic, U.S. Citizens											
Dickinson College											
White Females, Not Hispanic, U.S. Citizens											

**APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994**

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
University of Pittsburgh											
Foreign National Males											1
White Females, Not Hispanic,U.S.Citizens										2	
White Males, Not Hispanic, U.S. Citizens					4					1	
South Carolina											
Clemson University											
White Females, Not Hispanic,U.S.Citizens					4					1	
White Males, Not Hispanic, U.S. Citizens					12	1		3		3	1
Francis Marion University											
White Males, Not Hispanic, U.S. Citizens	5		5						2		
Black Males, Not Hispanic, U.S. Citizens	2										
Tennessee											
University of Tennessee											
Foreign National Females								1			
Foreign National Males					3			1			
White Females, Not Hispanic,U.S.Citizens					4	3				3	
White Males, Not Hispanic, U.S. Citizens					8	6		2	1	5	
Black Males, Not Hispanic, U.S. Citizens					1						
Asian/Pacific Isl Females,U.S.Citizens								1	1		
Asian/Pacific Isl. Males,U.S.Citizens					1	2				1	
Texas											
Texas A&M University											
Foreign National Females					1			1		1	
Foreign National Males					3					1	1
White Females, Not Hispanic,U.S.Citizens	2		2		1	2		1		1	
White Males, Not Hispanic, U.S. Citizens	4		1		15	7		7	5	4	1
Hispanic Females,U.S. Citizens	1				1			1			
Hispanic Males, U.S. Citizens						2				2	1
Asian/Pacific Isl. Males,U.S.Citizens					3						

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Utah											
University of Utah											
Foreign National Females					1		2				
Foreign National Males							7				
White Females, Not Hispanic, U.S. Citizens							1				
White Males, Not Hispanic, U.S. Citizens							4	1			
Washington											
University of Washington											
Foreign National Males										1	
White Males, Not Hispanic, U.S. Citizens					1					1	
Washington State Univ. Tri-Cities											
White Females, Not Hispanic, U.S. Citizens					1	4				1	
White Males, Not Hispanic, U.S. Citizens						3					
West Virginia											
West Virginia University											
Foreign National Males					3					2	
White Females, Not Hispanic, U.S. Citizens					11					8	
White Males, Not Hispanic, U.S. Citizens					12					8	
Black Females, Not Hispanic, U.S. Citizens					1						
Hispanic Males, U.S. Citizens										1	
Asian/Pacific Isl Females, U.S. Citizens					1						
Asian/Pacific Isl. Males, U.S. Citizens					2						
Wisconsin											
University of Wisconsin											
Foreign National Females					2						
Foreign National Males					2		1				2
White Females, Not Hispanic, U.S. Citizens					4		1	1			
White Males, Not Hispanic, U.S. Citizens					15		10	1		4	3

APPENDIX A-7
HEALTH PHYSICS/RADIATION PROTECTION: FOREIGN NATIONAL, FEMALE, AND MINORITY
ENROLLMENTS AND DEGREES BY STATE AND INSTITUTION, 1994

FT = FULL-TIME
PT = PART-TIME

| STATE - INSTITUTION
ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
University of Wisconsin
Black Males, Not Hispanic, U.S. Citizens
Hispanic Females,U.S. Citizens
Hispanic Males, U.S. Citizens
Asian/Pacific Isl. Males,U.S.Citizens | | | | | 1 | | | | | 1 | |
					1		1				
					3		2				
TOTALS	67	42	68	83	362	273	192	42	102	205	41
		109		151		635		234			

Source: U.S. Department of Energy

APPENDIX A-8
TOTAL HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
BY ETHNICITY AND GENDER, 1994

FT = FULL-TIME
PT = PART-TIME

ETHNICITY AND GENDER	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
Foreign National Females	0	0	0	0	17	3	19	1	2	7	1
Foreign National Males	0	0	2	0	55	9	51	1	0	24	18
White Females, Not Hispanic, U.S.Citizens	15	2	15	7	68	47	14	5	15	42	3
White Males, Not Hispanic, U.S. Citizens	49	36	49	69	181	180	77	33	76	118	17
Black Females, Not Hispanic, U.S.Citizens	0	1	0	1	4	4	0	0	1	0	0
Black Males, Not Hispanic, U.S. Citizens	2	2	1	2	5	12	2	0	2	2	0
Hispanic Females, U.S. Citizens	1	0	0	0	2	4	1	0	0	1	0
Hispanic Males, U.S. Citizens	0	1	1	3	7	7	3	0	4	3	0
Asian/Pacific Isl Females, U.S.Citizens	0	0	0	0	3	0	4	1	0	2	0
Asian/Pacific Isl. Males, U.S.Citizens	0	0	0	0	16	7	21	0	1	6	2
Am. Ind., Alas. Nat. Females, U.S.Citizens	0	0	0	0	1	0	0	0	0	0	0
Am. Ind., Alas. Nat. Males, U.S.Citizens	0	0	0	1	2	0	0	1	1	0	0
Unknown	0	0	0	0	1	0	0	0	0	0	0
TOTALS	67	42	68	83	362	273	192	42	102	205	41
	109		151		635		234				

Source: U.S. Department of Energy

APPENDIX A-9
EMPLOYMENT OR POSTGRADUATION PLANS OF HEALTH PHYSICS/RADIATION
PROTECTION GRADUATES BY DEGREE LEVEL, 1994

| EMPLOYMENT OR
POSTGRADUATION PLANS	BACHELOR'S			MASTER'S			DOCTORAL		
	NUMBER	PERCENT	NUMBER OF
FOREIGN
NATIONALS | NUMBER | PERCENT | NUMBER OF
FOREIGN
NATIONALS | NUMBER | PERCENT | NUMBER OF
FOREIGN
NATIONALS |
Continued study	31	30	1	23	11	10	7	17	4
Academic employment, U.S.	6	6	0	8	4	1	4	10	0
Federal government employment	0	0	0	14	7	0	0	0	0
DOE contractor facilities (M&Os)	11	11	0	27	13	1	3	7	0
State and local government employment	3	3	0	4	2	1	0	0	0
Medical facilities employment	2	2	1	41	20	3	10	24	4
Nuclear utility employment, U.S.	19	19	0	18	9	0	0	0	0
Other industrial employment, U.S.	8	8	0	26	13	1	6	15	3
Employment with foreign employer	0	0	0	8	4	7	8	20	7
U.S. military service	5	5	0	8	4	0	0	0	0
Other	1	1	0	4	2	2	2	5	1
Still seeking employment	7	7	0	10	5	2	1	2	0
Unknown	9	9	0	14	7	3	0	0	0
TOTALS	102	100	2	205	100	31	41	100	19

NOTE: Percentages are rounded to nearest whole number.
Source: U.S. Department of Energy

**APPENDIX A-10
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
BY SURVEY REGION AND STATE, 1994**

FT = FULL-TIME
PT = PART-TIME

REGION - STATE	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
REGION I - NEW ENGLAND											
Maine	0	0	3	0	1	0	0	0	2	2	1
Massachusetts	5	0	10	1	20	20	28	8	8	12	6
TOTAL	5	0	13	1	21	20	28	8	10	14	7
REGION II - MIDDLE ATLANTIC											
New Jersey	0	38	4	72	3	44	1	9	29	8	1
New York	1	0	8	0	1	5	2	3	4	2	1
Pennsylvania	3	0	5	0	4	0	0	0	2	3	1
TOTAL	4	38	17	72	8	49	3	12	35	13	3
REGION III - EAST NORTH-CENTRAL											
Illinois	0	0	1	0	3	3	9	3	1	8	1
Indiana	12	0	11	0	2	0	1	0	9	4	1
Michigan	0	0	0	0	16	0	3	2	0	5	0
Ohio	12	0	3	0	26	10	4	0	2	7	1
Wisconsin	0	0	0	0	28	0	15	2	0	5	5
TOTAL	24	0	15	0	75	13	32	7	12	29	8
REGION IV - WEST NORTH-CENTRAL											
Iowa	0	0	0	0	0	1	0	0	0	1	1
Missouri	2	0	1	0	29	2	12	2	2	13	1
TOTAL	2	0	1	0	29	3	12	2	2	14	2
REGION V - SOUTH ATLANTIC											

APPENDIX A-10
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
BY SURVEY REGION AND STATE, 1994

FT = FULL-TIME
PT = PART-TIME

REGION - STATE	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE 1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
REGION V - SOUTH ATLANTIC											
District of Columbia	0	0	0	0	5	20	0	0	0	6	0
Florida	4	0	3	0	25	4	8	3	7	11	2
Georgia	0	0	0	0	4	50	0	0	0	27	0
Maryland	0	0	0	0	3	0	2	1	0	0	0
North Carolina	0	0	0	0	5	0	1	0	0	3	0
South Carolina	7	0	5	0	16	1	3	0	2	4	1
West Virginia	0	0	0	0	30	0	0	0	0	19	0
TOTAL	11	0	8	0	88	75	14	4	9	70	3
REGION VI - EAST SOUTH-CENTRAL											
Tennessee	0	0	0	0	17	11	5	2	0	9	0
TOTAL	0	0	0	0	17	11	5	2	0	9	0
REGION VII - WEST SOUTH-CENTRAL											
Arkansas	0	0	0	0	0	1	0	0	0	1	0
Louisiana	0	0	0	0	17	5	0	0	0	3	0
Texas	7	0	3	0	24	11	10	5	7	7	2
TOTAL	7	0	3	0	41	17	10	5	7	11	2
REGION VIII - MOUNTAIN											
Arizona	0	0	1	0	0	0	0	0	2	1	0
Colorado	0	0	0	0	26	23	11	1	0	13	5
Idaho	8	1	7	7	9	9	0	0	14	1	0
New Mexico	0	0	0	0	10	15	1	0	0	1	0
Utah	0	0	0	0	1	0	14	1	0	0	0

APPENDIX A-10
HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES
BY SURVEY REGION AND STATE, 1994

FT = FULL-TIME
PT = PART-TIME

REGION - STATE	ENROLLMENTS - FALL 1994								DEGREES GRANTED		
	UNDERGRADUATE				GRADUATE				JULY 1993 - JUNE.1994		
	JUNIORS		SENIORS		MASTER'S		DOCTORAL				
	FT	PT	FT	PT	FT	PT	FT	PT	B.S.	M.S.	Ph.D.
REGION VIII - MOUNTAIN											
TOTAL	8	1	8	7	46	47	26	2	16	16	5
REGION IX - PACIFIC											
California	0	0	0	0	15	28	62	0	0	17	11
Nevada	3	3	0	2	0	0	0	0	2	0	0
Oregon	3	0	3	1	14	2	0	0	7	3	0
Washington	0	0	0	0	2	7	0	0	0	3	0
TOTAL	6	3	3	3	31	37	62	0	9	23	11

Source: U.S. Department of Energy

APPENDIX A-11
INSTITUTIONS WITH UNDERGRADUATE AND GRADUATE PROGRAMS OR OPTIONS
IN HEALTH PHYSICS/RADIATION PROTECTION, FALL 1994

UG - UNDERGRADUATE
G - GRADUATE

Health Phys., Rad. Prot., or Rad. Health

AR - University of Arkansas for Medical Sci. - G	CA - San Diego State University - G
CA - San Jose State University - G	CO - Colorado State University - G
CO - National Technological University - G	DC - Georgetown University Medical Center - G
GA - Georgia Institute of Technology - G	IL - Northwestern University - UG G
IL - University of Illinois - G	IN - Purdue University - UG G
KY - University of Kentucky Medical Center - UG	LA - Louisiana State University - G
MD - Johns Hopkins School of Public Health - G	MA - Harvard School of Public Health - G
MA - Massachusetts Institute of Technology - G	MA - University of Massachusetts Lowell - UG G
MI - University of Michigan - G	MO - University of Missouri, Rolla - UG G
MO - University of Missouri-Columbia - G	NV - University of Nevada - UG
NJ - Rutgers University - UG G	NJ - Thomas Edison State College - UG
NM - University of New Mexico - G	NC - University of North Carolina - G
OH - The Ohio State University - G	OH - University of Cincinnati - G
OR - Oregon State University - UG G	PA - Bloomsburg University of Pennsylvania - UG
PA - University of Pittsburgh - G	SC - Francis Marion University - UG
TX - Texas A&M University - UG G	

Radiobiology or Biophysics

DC - Georgetown University Medical Center - G	IA - University of Iowa - G
MA - Harvard School of Public Health - G	

Medical or Radiological Physics

CA - University of California, Irvine - G	CA - University of California, Los Angeles - G
CA - University of Southern California - G	CO - University of Colorado HSC - G
DC - Georgetown University Medical Center - G	IL - Rush University - G
KY - University of Kentucky Medical Center - G	LA - Louisiana State University - G
MD - Johns Hopkins School of Public Health - G	MO - University of Missouri-Columbia - G
NJ - Rutgers University - G	OH - University of Cincinnati - G
WI - University of Wisconsin - G	

APPENDIX A-11
INSTITUTIONS WITH UNDERGRADUATE AND GRADUATE PROGRAMS OR OPTIONS
IN HEALTH PHYSICS/RADIATION PROTECTION, FALL 1994

UG - UNDERGRADUATE
G - GRADUATE

Engineering or Basic Sciences

AZ - Arizona State University - UG G
ID - Idaho State University - UG G
MO - University of Missouri, Rolla - UG G
NY - State University of New York Buffalo - UG G
PA - Dickinson College - UG
UT - University of Utah - G

CA - University of Southern California - G
ME - University of Maine - UG G
NJ - Rutgers University - G
OH - University of Findlay - UG
SC - Clemson University - G

Health Phys./Rad. Protection Engineering

FL - University of Florida - UG G

TN - University of Tennessee - G

Aerosol Physics

NJ - Rutgers University - G

Environmental Radiation Protection

NY - New York University Medical Center - G
WA - Washington State Univ. Tri-Cities - G

WA - University of Washington - G

Computer Science w/medical physics program

UT - University of Utah - G

Occupational Health and Safety

WV - West Virginia University - G

Industrial Engineering

WV - West Virginia University - G

APPENDIX A-11
INSTITUTIONS WITH UNDERGRADUATE AND GRADUATE PROGRAMS OR OPTIONS
IN HEALTH PHYSICS/RADIATION PROTECTION, FALL 1994

UG - UNDERGRADUATE
G - GRADUATE

Radiation Chemistry

NJ - Rutgers University - G

NOTE: The health physics/radiation protection major and various health physics/radiation protection option programs listed above reflect only those programs in which students are currently enrolled. The institutions may offer health physics/radiation protection option programs in which no one is currently enrolled.

Source: U.S. Department of Energy

APPENDIX B. ADDRESSES

**APPENDIX B-1
ADDRESSES OF INSTITUTIONS IN SURVEY UNIVERSE, 1994**

University of Arkansas for Medical Sci.
College of Pharmacy
Little Rock, AR 72205

Arizona State University
Nuclear Engineering Science
College of Engineering & Applied Science
Tempe, AZ 85287-5706

San Diego State University
Radiological Health Physics Program
Department of Physics
San Diego, CA 92182

San Jose State University
Nuclear Science Programs
San Jose, CA 95192-0163

University of California, Irvine
Department of Radiological Sciences
Irvine, CA 92717-5000

University of California, Los Angeles
Department of Radiological Sciences
Los Angeles, CA 90024-1721

University of Southern California
School of Pharmacy
Radiopharmacy Program
Los Angeles, CA 90033

Colorado State University
Radiological Health Sciences
Fort Collins, CO 80523

National Technological University
Admissions and Records
Ft. Collins, CO 80526-1842

University of Colorado HSC
Department of Radiology
Denver, CO 80262

Georgetown University Medical Center
Dept. of Rad Science/Radiation Medicine
Washington, DC 20007

University of Florida
Dept. of Nuclear Engineering Sciences
Gainesville, FL 32611-8300

Georgia Institute of Technology
Mechanical Engineering
Program in Health Physics
Atlanta, GA 30332-0405

University of Iowa
Radiation Research Laboratory
Iowa City, IA 52242

Idaho State University
Health Physics Program
Department of Physics
Pocatello, ID 83209-8106

Northwestern University
Department of Civil Engineering
Evanston, IL 60208

Rush University
Dept. of Medical Physics
College of Health Sciences
Chicago, IL 60612

University of Illinois
Dept. of Nuclear Engineering
Urbana, IL 61801

Purdue University
School of Health Sciences
West Lafayette, IN 47906

University of Kentucky Medical Center
Department of Clinical Sciences
Division of Radiation Sciences
Lexington, KY 40536-0080

Louisiana State University
Nuclear Science Center
Baton Rouge, LA 70803-5820

APPENDIX B-1
ADDRESSES OF INSTITUTIONS IN SURVEY UNIVERSE, 1994

Harvard School of Public Health
Radiation Biology Program
Boston, MA 02115

Massachusetts Institute of Technology
Health Physics Program
Dept. of Nuclear Engineering
Cambridge, MA 02139

University of Massachusetts Lowell
Physics/Rad Sciences
Department of Physics & Applied Physics
Lowell, MA 01854

Johns Hopkins School of Public Health
Division of Radiation Health Sciences
Baltimore, MD 21205-2179

University of Maine
Department of Physics
Orono, ME 04469

University of Michigan
Dept. of Environmental & Industrial Health
Ann Arbor, MI 48109-2029

University of Missouri, Rolla
Department of Nuclear Engineering
Rolla, MO

University of Missouri-Columbia
Nuclear Engineering Program
Columbia, MO 65211

University of North Carolina
Dept. of Environ. Sciences & Engineering
CB #7400 Rosenau Hall
Chapel Hill, NC 27599-7400

Rutgers University
Radiation Science
New Brunswick, NJ 08903

Thomas Edison State College
Nuclear Engineering Technology
Coordinator, Applied Science & Technology
Trenton, NJ 08608

University of New Mexico
Dept. of Chemical and Nuclear Engineering⁴
Albuquerque, NM 87131-1341

University of Nevada
Health Physics Program
Las Vegas, NV 89154-3037

New York University Medical Center
Nelson Institute of Environmental Medicine
Tuxedo, NY 10987

State University of New York Buffalo
Radiation Protection Services
Buffalo, NY 14214-3007

The Ohio State University
Nuclear Engineering Program
Columbus, OH 43210-1107

University of Cincinnati
Depts. of Rad Physics and
Nuclear Engineering
Cincinnati, OH 45267-0757

University of Findlay
Natural Science Division
Findlay, OH 45840

Oregon State University
Dept. of Nuclear Engineering
Corvallis, OR 97331-5902

Bloomsburg University of Pennsylvania
Health Physics Program
Department of Physics
Bloomsburg, PA 17815

Dickinson College
Dept. of Physics & Astronomy
Carlisle, PA 17013

**APPENDIX B-1
ADDRESSES OF INSTITUTIONS IN SURVEY UNIVERSE, 1994**

University of Pittsburgh
Dept. of Environ. & Occupational Health
Pittsburgh, PA 15238

Clemson University
Environmental Systems Engineering
Clemson, SC 29634-0919

Francis Marion University
Department of Physics
Florence, SC 29501-0547

University of Tennessee
Dept. of Nuclear Engineering
Knoxville, TN 37996

Texas A&M University
Department of Nuclear Engineering
College Station, TX 77843-3133

University of Utah
Department of Radiology
Salt Lake City, UT 84132

University of Washington
SC-34
Dept of Environmental Health
Seattle, WA 98195

Washington State Univ. Tri-Cities
Environmental Science Program
Richland, WA 99352

University of Wisconsin
Medical Physics Department
Madison, WI 53706

West Virginia University
Industrial Engineering
Morgantown, WV 26506-6401

NOTES

The Health Physics Programs at Arizona State University and Northwestern University are suspended; students are being allowed to complete their degrees.

The Health Physics Undergraduate Program at the University of Kentucky has been suspended; last degrees were granted in 1994.

APPENDIX B-2
ADDRESSES OF INSTITUTIONS IN SURVEY UNIVERSE WITH INACTIVE,
INAPPLICABLE OR SUSPENDED PROGRAMS, 1994

SUSPENDED

University of Massachusetts Amherst
Div. of Public Health
Amherst, MA 01003

APPENDIX C. SURVEY MATERIALS

Department of Energy

Washington, DC 20585

October 14, 1994

Dear Professor:

Enclosed is the annual *Health Physics/Radiation Protection Enrollments and Degrees Survey* sponsored by the Department of Energy. The survey is designed to include those programs offering a major in health physics or course work equivalent to a major in other disciplines that prepare the graduates to perform as health physicists. This survey provides a unique source of data on health physics enrollments and degrees for use in labor market analyses, information on education programs for students, and information on new graduates to employers, government agencies, academia and professional societies. We appreciate your voluntary effort in helping us provide this information.

For several years, health physicists experienced strong demand and plentiful job opportunities. Currently, the labor market and employment opportunities for new graduates in health physics are more balanced. There are, however, strong indications that in future years the demand for health physicists may again increase faster than the supply of new graduates. Thus, it continues to be important to collect health physics education data in order to assess likely future labor market trends.

Instructions for completing the form are on the back of this letter, and a self-addressed stamped envelope is provided for your convenience. We would appreciate your response within **four weeks**. If you have questions, please contact Duveen L. Shirley, Science/Engineering Education Division, Oak Ridge Institute for Science and Education (615) 576-3409, Fax (615) 241-2727, Internet SHIRLEYD@ORAU.GOV.

Sincerely

A handwritten signature in black ink, appearing to read "Michael L. Wolfe", is written over the word "Sincerely".

Michael L. Wolfe
Senior Program Manager
Office of University and Science
Education Programs

MLW:ds
Enclosures

Note: Information provided through this survey is not considered to be confidential and may be disclosed to the public.

INSTRUCTIONS AND DEFINITIONS FOR COMPLETING DOE FORM ER-617

WHO SHOULD COMPLETE AND SUBMIT FORM: All departments with programs offering a major in health physics or course work equivalent to a major (i.e., an "option") that prepares the graduates **TO PERFORM AS HEALTH PHYSICISTS**, i.e., *to take the major role in conducting, coordinating, directing, or planning a program for the evaluation and control of radiation hazards for an installation, community, or state agency.* Each major program should be reported on the appropriate line or on separate lines in the write-in space. Very small specialties should be combined.

WHEN AND WHERE TO SUBMIT FORM: The form should be submitted within four weeks of receipt or earlier, depending upon your institution's enrollment schedule. Send completed form to:

Duveen L. Shirley
Oak Ridge Institute for Science and Education
P.O. Box 117
Oak Ridge, Tennessee 37831-0117
(615) 576-3409, Fax (615) 241-2727
Internet SHIRLEYD@ORAU.GOV

A self-addressed, postage-paid envelope is enclosed for your convenience.

SPECIAL INSTRUCTIONS: Report only students enrolled in a degree program. Count on-campus semester Co-op students (see definition below) as full-time students. If exact figures are not available, give your best estimate and indicate by an "E" after each number that is estimated. (Report numbers in spaces where appropriate leaving all other spaces blank.)

DEFINITIONS:

Junior: A student who is more than one and less than two academic years short of a Bachelor's degree or equivalent.

Senior: A student who is one year or less short of a Bachelor's degree or equivalent.

Master's Candidate: A student enrolled in a program leading to any degree above the B.S. or B.A. level and below the Ph.D. level.

CO-OP Student: A student who alternates sessions of schooling with sessions of employment in a position related to the academic specialty.

Foreign National: Any student who is a citizen of another country and who has not applied for U.S. citizenship.

White not of Hispanic origin: A person having origin in any of the original peoples of Europe, North Africa, or the Middle East.

Black not of Hispanic origin: A person having origin in any of the black racial groups of Africa.

Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race.

Asian or Pacific Islander: A person having origin in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

American Indian or Alaskan Native: A person having origin in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.

U.S. Department of Energy

This is a voluntary survey
authorized by Public Law 95-91.

HEALTH PHYSICS/RADIATION PROTECTION ENROLLMENTS AND DEGREES SURVEY: 1994

Contact Person _____ Phone _____

Department(s) _____ Fax _____

Signature _____ Internet _____

While you are not required to respond, your cooperation is needed to make the results comprehensive, accurate, and timely. Information will NOT be held confidential, and is supplied to government and industry recruiters.

SECTION A — Curriculum or Option	CODE
Health physics, radiation protection, or radiation health program	10
Health physics option within radiobiology or biophysics program	20
Health physics option within medical or radiological physics program	30
Health physics option within engineering or basic sciences program	40
Health physics/radiation protection engineering program	50
Other: (Specify those not listed)	

TOTALS

SECTION B — Racial, Ethnic and Gender Breakdown		CODE
Foreign nationals (Temporary Visas)	Male	1 M
	Female	1 F
White U.S. citizens or permanent residents,
not of Hispanic origin	Male	2 M
	Female	2 F
Black U.S. citizens or permanent residents,
not of Hispanic origin	Male	3 M
	Female	3 F
Hispanic U.S. citizens or permanent residents	Male	4 M
	Female	4 F
Asian or Pacific Islander U.S. citizens or
permanent residents	Male	5 M
	Female	5 F
American Indian or Alaskan native U.S. citizens or
permanent residents	Male	6 M
	Female	6 F

TOTALS

ENROLLMENTS — FALL 1994

[illegible]

Totals for Section A and Section B should agree -

(Survey continued on the back)

| SECTION C – Employment or Postgraduation Plans

For degrees granted
July 1, 1993 through June 30, 1994	CODE	BACHELOR'S		MASTER'S		DOCTORAL	
		Total Graduates	Number of Foreign Nationals in Totals	Total Graduates	Number of Foreign Nationals in Totals	Total Graduates	Number of Foreign Nationals in Totals
Continued study for higher degree or postdoctoral study. (Include students employed part-time.)	1						
Academic employment, U.S.	2						
Federal government employment, U.S.	3						
DOE contractor R&D and production facilities (M&Os)	4						
State and local government employment, U.S.	5						
Medical facilities employment, U.S. (including teaching hospital)	6						
Nuclear utility employment, U.S.	7						
Other industrial employment, U.S.	8						
Employment with foreign employer	9						
U.S. military service	10						
Other (specify)	11						
Seeking employment	12						
Unknown	13						
TOTALS ("Total Graduates" column at each degree level should agree with "Degrees Granted" totals on the front side.)							

Remarks: