

National Defense Science and Engineering Graduate Fellowships

Starting in Academic Year 1993-1994



As a means of increasing the number of U.S. citizens trained in disciplines of science and engineering of military importance, the Department of Defense plans to award approximately 100 new three-year graduate fellowships in April 1993. National Defense Science and Engineering Graduate Fellowships will be awarded for study and research leading to doctoral degrees in, or closely related to, the following disciplines:

**AERONAUTICAL AND ASTRONAUTICAL
ENGINEERING**
BIOSCIENCES (*includes Toxicology*)
CHEMICAL ENGINEERING
CHEMISTRY
**COGNITIVE, NEURAL, AND BEHAVIORAL
SCIENCE**
COMPUTER SCIENCE
ELECTRICAL ENGINEERING
GEOSCIENCES (*includes terrain, water, and air*)
MANUFACTURING SCIENCES AND ENGINEERING
(*includes Industrial Engineering*)
MATERIALS SCIENCE AND ENGINEERING
MATHEMATICS
MECHANICAL ENGINEERING
NAVAL ARCHITECTURE AND OCEAN ENGINEERING
OCEANOGRAPHY
PHYSICS (*includes Optics*)

National Defense Science and Engineering Graduate Fellows selected in 1993 will receive a stipend in addition to full tuition and required fees. Last year, the annual amount of the stipend averaged \$16,000. Also, the fellow's graduate academic department will receive \$2,000 per year.

Recipients of National Defense Science and Engineering Graduate Fellowships do not incur any military or other service obligation.

Specific information regarding the fellowship and an application package is available from Battelle Memorial Institute, a not-for-profit research institution, which is administering the program for the Department of Defense.

The application package will also contain information about the Office of Naval Research Graduate Fellowship program administered by ASEE and the Air Force Laboratory Graduate Fellowship program administered by SCEEE.

To request a copy of the application materials to be mailed directly to you next fall, contact Battelle at the following address:

NDSEG Fellowship Program
200 Park Drive, Suite 211
P.O. Box 13444
Research Triangle Park, NC 27709-3444
ATTN: Dr. George Outterson
(919) 549-8505.

Completed applications must be received by Battelle by January 20, 1993.



MINORITY STUDENTS

AT&T can help you earn your PhD.

AT&T's Cooperative Research Fellowship Program (CRFP) was initiated twenty years ago to provide financial support for high-potential African Americans, Hispanics, and Native Americans, who are underrepresented in science and engineering. The program helps these individuals pursue doctoral studies in mathematics, computer science, engineering, and the physical sciences. Once you are accepted, the program pays for your tuition, fees, and books. In addition, it grants you an annual stipend (\$13,200 for the 1992-1993 academic year) and makes it possible for you to attend conferences. It provides you with a summer job at AT&T Bell Laboratories in a field related to your program. And it supplies you with a Bell Labs mentor to help guide you through the early years of your career.

Today, the program's graduates are part of the fabric of American science and engineering, and they are found throughout industry, academia, and government. Of the sixty-seven Fellows awarded PhDs, twenty-nine (43%) are

working in industry and twenty (30%) in academia. The remaining eighteen (27%) are either working in government or pursuing post-doctoral degrees.

A study by the National Action Council for Minorities in Engineering (NACME) concluded that AT&T's CRFP significantly affects the graduate experience and subsequent career paths of the Fellows. As Willetta Greene-Johnson, a 1987 graduate of the University of Chicago and current Professor of Chemistry at Chicago's Loyola University said, "CRFP was a definite, positive experience. The program helped me make my decision to pursue science as a career. My summer job at the Labs gave me an opportunity to see how 'real science' was done."

To obtain an AT&T CRFP application and brochure, call the Program Administrator at 908 949-2943 or mail or fax the coupon below. All applications and supporting materials must be received by January 15, 1993.

Mail or fax this coupon for your AT&T CRFP application and brochure

Mail to: CRFP Program Administrator, AT&T Bell Laboratories,
101 Crawfords Corner Road, Room 1E-230,
Holmdel NJ 07733-3030
FAX : (908) 949-1534

Name _____

Address _____

City _____

State _____

Zip _____





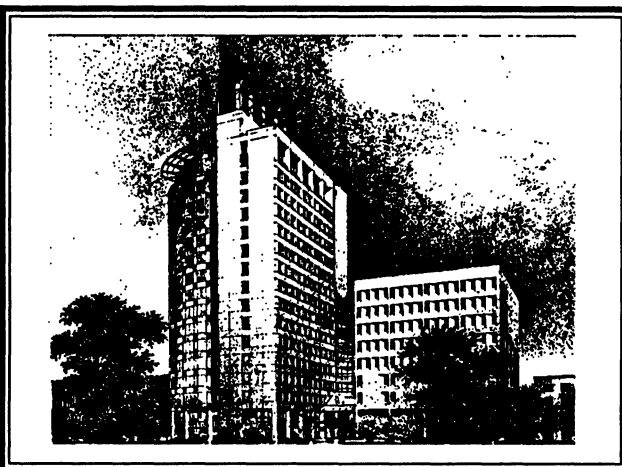
The Graduate School Baylor College of Medicine Houston, Texas

Research Training Opportunities in the Biological Sciences

- Graduate studies leading to Ph.D. or M.D./Ph.D. degrees
- Post-doctoral research positions

Located within the Texas Medical Center, Baylor offers research specializations within the following programs and departments. Over 250 Ph.D. candidates share the outstanding research environment with a training faculty of productive and dedicated scientists. These programs offer unexcelled laboratory, classroom and seminar experiences in all disciplines of biomedical science. Stipends are competitive with other major centers. For specific program details, contact the indicated persons below c/o their program, Baylor College of Medicine, Houston, Texas 77030.

- **Department of Biochemistry:** Dr. Rod Kellems, Director of Graduate Studies (713) 798-4527.
- **Center for Biotechnology:** Dr. Michael Hogan, The Center for Biotechnology, 4000 Research Forest Drive, The Woodlands, TX 77381. (713) 363-8404.
- **Program in Cardiovascular Sciences:** Dr. J. C. Allen, Program Director, Dept. of Medicine. (713) 798-6657
- **Department of Cell Biology:** JoKaye Highstrete, Administrator. (713) 798-4598.
- **Program in Cell and Molecular Biology:** Debbie Martin, Administrator. (713) 798-6557
- **Program in Developmental Biology:** Debbie Martin, Administrator. (713) 798-5197.
- **Dept. of Microbiology and Immunology:** Dr. Dorothy Lewis, Director of Graduate Studies. (713) 798-6427
- **Institute for Molecular Genetics:** Dr. Craig Chinault, Director of Graduate Studies. (713) 798-5056.
- **Dept. of Molec. Physiology and Biophysics:** Dr. William Schilling, Director of Graduate Studies. (713) 798-4700.
- **Division of Molecular Virology:** Dr. R. F. Ramig, Director of Graduate Studies. (713) 798-4830.
- **Division of Neuroscience:** Dr. Dan Johnston, Director of Graduate Studies. 1-800-367-9149.
- **Department of Pharmacology:** Dr. Ram Reddy, Director of Graduate Studies. (713) 798-7906.
- **M.D./Ph.D. Program:** Drita Almeida, Administrator. (713) 798-6613.
- **Audiology/Acoustics:** Dr. James Jerger, Director of Graduate Studies. (713) 798-5916.



Artist's rendition of the new 15-story Alkek Graduate Sciences Building containing graduate student teaching, study, lounge and computer facilities, as well as modern advanced research laboratory floors. Completion date, 1993.

**To receive an application package
call or write to:**

**The Graduate School
Office of Admissions
Baylor College of Medicine
Houston, TX 77030 U.S.A.
tel.: (713) 798-4060 (or 4028)
FAX: (713) 798-6325**

(For information on how to apply to these programs electronically, contact schrader@bcm.tmc.edu.)

Baylor College of Medicine is a private, nonsectarian research institution and an equal opportunity employer. The Graduate School welcomes applications from minority and foreign applicants.

SCIENCE

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

- **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Advertisements must be submitted in writing.
- **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training.
- **Mail or FAX materials to:**
Science Classified Advertising
 1333 H Street, N.W., Room 814
 Washington, DC 20005
 Telephone: 202-326-6555
 FAX: 202-682-0816
- **Rates:** Ads are \$42 per line; \$420 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads.
- **Ads from Outside the U.S.:** A discount of \$30 will be offered to advertisers making payment in U.S. dollars by checks drawn on U.S. banks. Contact Annemarie Vis at +44 223 424695 (24-hour FAX and phone).
- **Credit Cards:** *Science* accepts MasterCard and VISA. Discount does not apply to credit cards.
- **Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

DISPLAY PERSONNEL ADVERTISEMENTS

For rates and info. about fractional display ads (all ads 1/2 page and larger), contact:

Recruitment Advertising
 Deborah Cummings
 Telephone: 202-326-6541

Janis Crowley, Recruitment
 Advertising Manager
 Telephone: 212-496-7704
 FAX: 202-682-0816

Annemarie Vis
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 (24-hour FAX and phone)

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

POSITIONS OPEN

ASSISTANT PROFESSOR, MARINE BIOLOGY. The Department of Biology at Occidental College invites applications for a tenure-track position beginning September 1993. The successful candidate will be expected to participate in introductory biology, teach comparative anatomy of vertebrates and courses in area of specialty, and develop an active research program involving undergraduates and the marine environment. Excellent teaching and research facilities, including the 85' research vessel the Vantuna, will be provided. Send curriculum vitae, statement of teaching and research interests and three letters of recommendation to: **Dr. Gary Martin, Department of Biology, Occidental College, Los Angeles, CA 90041** by December 31, 1992. *Occidental College is an Equal Opportunity/Affirmative Action Employer.*

EVOLUTIONARY/POPULATION GENETICIST

ASSISTANT PROFESSOR, tenure-track, to establish a research program in evolutionary and/or population genetics. Preference will be given to candidates who study the genetics of natural populations or use molecular genetic approaches to understand the evolution of genetic systems, populations, species, or higher taxonomic levels in any biological system. Modest teaching is required. Generous start-up funds are available. Send curriculum vitae, a research plan, and have at least three letters of reference sent by January 15, 1993, to: **Dr. Richard J. Hoffmann, Department of Zoology and Genetics, Iowa State University, Ames, Iowa 50011.** *Iowa State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and members of other protected groups are encouraged to apply.*

BIOLOGY: ASSISTANT PROFESSOR IN NEUROBIOLOGY. Participate in Human Anatomy and Physiology I & II courses for biology and nursing students, developing and teaching an upper level course in one's discipline and helping with introductory courses as need arises. A strong background in neuroanatomy and/or neurophysiology is required. Applicants must have a Ph.D. and a strong commitment to teaching and maintaining an active research program involving undergraduates. One of the letters of recommendation must address competence in teaching. Full consideration given to applications received by December 20, 1992. Send letter of application, curriculum vitae, copies of official graduate transcripts, and at least three current letters of recommendation. Reply to: **Dr. LaVern Whisenton, Search Committee Chair, Biology Department, S1113, MILLERSVILLE UNIVERSITY, P.O. Box 1002, Millersville, PA 17551-0302.** *Affirmative Action/Equal Opportunity Employer.*

VERTEBRATE PHYSIOLOGIST

Tenure-track **ASSISTANT PROFESSORSHIP** to start September, 1993. Salary dependent upon experience. Duties to include teaching Human Anatomy & Physiology, Mammalian Physiology, Introductory Biology and a graduate course in the area of expertise. Research must have an environmental orientation. Ph.D. required. Send curriculum vitae, transcripts, three reference letters and a brief statement of goals to: **Chair, Hiring Committee, Biology Department, Towson State University, Towson, MD 21204.** Deadline for applications December 18, 1992. *An Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF CALIFORNIA, SAN DIEGO, DEPARTMENT OF CHEMISTRY invites applications for tenure-track faculty positions in all fields of **CHEMISTRY** and **BIOCHEMISTRY** at the **ASSISTANT PROFESSOR** level. Candidates must have a Ph.D. and a demonstrated ability for creative research and teaching at the undergraduate and graduate levels. Salary commensurate with qualifications and based on University of California pay scale. Open position subject to availability of funds. Candidates should send curriculum vitae, a list of publications, reprints of up to five representative papers, a summary of research plans and names and addresses of three references to: **Chairman, Staffing Committee, University of California, San Diego, Department of Chemistry—0332, La Jolla, CA 92093-0332.** Prompt response is recommended but all applications received by January 31, 1993 will be given thorough consideration. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR-BIOCHEMISTRY: Continuing position to start August 1993 at small, public, liberal arts honors college, 68 miles southeast of Washington, D.C. Applicants must have a Ph.D. in chemistry or biochemistry with a B.S./B.A. in chemistry preferred, and be committed to undergraduate teaching. Teaching responsibilities include biochemistry and related areas, organic chemistry, chemistry for non-science majors, and directing undergraduate research. Forward résumé, transcripts, and three letters of reference by January 11, 1993 to: **Dr. A. Hovland, Biochemist Search Committee, St. Mary's College of Maryland, St. Mary's City, MD 20686.** *St. Mary's College of Maryland is an Equal Opportunity/Affirmative Action Employer.*

ECOSYSTEM ECOLOGIST/ BIOGEOCHEMIST University of Louisville

Applications are invited for a joint, tenure-track position as **ASSISTANT PROFESSOR** in the Water Resources Laboratory and Biology Department. Preferred research areas include biogeochemistry, floodplain/lotic interactions, or the ecosystem ecology of streams, wetlands, or groundwater habitats. Candidates must have a Ph.D. in an environmental field, strong abilities in geochemical analysis and statistics, and publications in national, refereed journals; postdoctoral experience and evidence of grantsmanship favored. Teaching in the Biology Department and eventual supervision of M.S. and Ph.D. students required. Send curriculum vitae, graduate transcripts, representative publications, and names of five references to: **Dr. James H. Thorp, Director, Water Resources Laboratory, University of Louisville, Louisville, KY 40292.** Review of applicants will begin January 11, 1993 and continue until a suitable candidate is hired. *The University of Louisville is an Equal Opportunity/Affirmative Action Employer. African Americans, women, and other minorities are encouraged to apply.*

The Department of Biology at Illinois Wesleyan University has a tenure-track opening at the **ASSISTANT PROFESSOR** level in **ECOLOGY**. Candidate must have a Ph.D., a broad background in biology, a commitment to teaching excellence and the promise of research. Responsibilities include teaching Ecology (introductory and advanced), Genetics, Environmental Issues, and supervision of student research. Applicants should submit a letter of application, curriculum vitae, three letters of recommendation (including comments on teaching effectiveness), a one-page statement of teaching philosophy and an outline of future research plans to: **Dr. Bruce B. Criley, Chairman, Department of Biology, Illinois Wesleyan University, Bloomington, IL 61702-2900.** *Illinois Wesleyan is an Equal Opportunity Employer; women and minorities are encouraged to apply.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY. A tenure-track position will be available beginning in August 1993. This position will be offered to an individual who has demonstrated ability to carry on an independent research program in **membrane protein biochemistry** with an emphasis on **signal transduction**. Required qualifications include a Ph.D. in Biochemistry or a closely related field, at least two years of postdoctoral training and an established record of research productivity. A commitment to developing an independent, nationally competitive and externally funded research program as well as to excellence in undergraduate and graduate teaching is essential. Please submit curriculum vitae, a synopsis of future research plans (two to three pages), and have three letters of recommendation sent to: **Faculty Search Committee, Department of Biochemistry, WLS M407, The University of Tennessee, Knoxville, TN 37996-0840.** Application review will commence on December 1, 1992. *UTK is an Equal Employment Opportunity/Title IX/Section 504/ADA Employer and encourages applications from women and minorities.*

ASSISTANT PROFESSOR OF PHYSIOLOGY. Applications invited for physiology faculty position effective July 1993. Must have a doctoral degree; broad teaching experience highly desirable. Submit curriculum vitae and names of three references by February 15, 1992 to: **H. Jay Lyons, Ph.D., Chairman, Department of Physiology, Southeastern University of the Health Sciences, 1750 N.E. 168th Street, North Miami Beach, FL 33162.**

POSITIONS OPEN

THREE ASSISTANT PROFESSORS BIOLOGY

Jacksonville State University, located in northeast Alabama, is accepting applications for three nine-month tenure-track positions. Nature of specialization areas and duties: (1) Vertebrate Ecology—Ecology (sophomore core); ornithology; physiological ecology desired; general biology; advanced course in specialty. (2) Developmental Biology (marine orientation desired)—Developmental Biology; Molecular Cell Biology (sophomore core); General Biology; advanced course in specialty. (3) Immunology/Microbiology—Immunology; Microbiology (health); Genetics (sophomore core); General Biology; advanced course in specialty. Nature of scholarly activity expectations: All three positions—Undergraduate and graduate student research with some publication expected. **Qualifications required:** All three positions—Ph.D. in Biology. **Salary:** Commensurate with experience. Please submit résumé, three letters of reference and copies of transcripts to: **Personnel Services, Jacksonville State University, 700 Pelham Road North, Jacksonville, AL 36265.**

An Equal Opportunity/Affirmative Action Employer.

OHIO UNIVERSITY ASSISTANT PROFESSOR

ANATOMY/BIOMECHANICS. Applications are being accepted for this tenure-track position available September 1, 1993 (pending adequate funding). We seek a vertebrate morphologist with research interests in experimental biomechanics. Related research interests of faculty in our department include functional/comparative morphology, muscle biology, neurobiology, developmental biology and exercise physiology. Teaching involves participation in the lecture and laboratory components of a two-quarter dissection-based medical gross anatomy course as well as a course in biological sciences. A Ph.D. and postdoctoral experience are required; previous teaching experience in human gross anatomy is desirable. This position is a joint appointment in the Department of Biological Sciences between the College of Arts and Sciences and the College of Osteopathic Medicine. Minimum salary is \$32,000. Our department has 50 faculty members, 75 graduate students and excellent research facilities. Ohio University has 18,000 students and is located in a small town in the hills of rural southeastern Ohio where costs of living are moderate. Please send curriculum vitae, statement of research and teaching interests, a few representative publications and three letters of recommendation by 10 January 1993 to: **Ms. Jean Witkowski, Department of Biological Sciences, Ohio University, Athens, OH 45701-2979.**

Ohio University is an Equal Opportunity/Affirmative Action Employer.

DEVELOPMENTAL NEUROPHYSIOLOGY/ NEUROPHARMACOLOGY

ASSISTANT PROFESSOR, tenure-track, to establish a program in developmental neurophysiology/neuropharmacology. Projects should include studying effects of toxic insults or early (neurochemical behavioral) drug exposure and CNS dysfunction. Send curriculum vitae and research plans to: **Dr. William Rayburn, Professor and Chief, Maternal-Fetal Medicine Section, Department of Obstetrics and Gynecology, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. FAX: 405/271-8547.** Application deadline is November 30, 1992. *The University of Oklahoma is an Equal Opportunity Employer.*

VERTEBRATE PHYSIOLOGIST. The Department of Biology at Swarthmore College invites applications for a tenure-track faculty position, preferably at the **ASSISTANT PROFESSOR** level, beginning September 1993. We seek applicants with a Ph.D. in vertebrate biology who have strong interests in research and undergraduate teaching. Teaching includes an intermediate course in the area of comparative vertebrate biology or physiology, an advanced course in an area of specialty, and participation in introductory biology. Interested individuals should submit: (i) curriculum vitae, (ii) three letters of recommendation, and (iii) a statement of teaching and research interests by January 11, 1993 to: **Dr. Mark Jacobs, Department of Biology, Swarthmore College, Swarthmore, PA 19081.** *Minority candidates and women are encouraged to apply. Swarthmore College is an Equal Opportunity Employer.*

POSITIONS OPEN

NEUROENDOCRINOLOGIST

The Department of Biology of the University of Massachusetts at Amherst invites applications for a non-tenure-track **ASSISTANT PROFESSOR.** The successful applicant will teach one course per year in experimental vertebrate endocrinology and participate in research on circadian rhythms and/or seasonal influences on reproduction. Candidate may elect to participate in strong interdisciplinary programs in Neuroscience and Behavior, Molecular and Cellular Biology, and/or Organismal and Evolutionary Biology. This position is funded for a five-year period; salary commensurate with experience. Submit curriculum vitae, statement of research interests, and reprints or preprints, and arrange to have three letters of reference sent by December 15, 1992 to: **Dr. Eric L. Bittman, Department of Biology, University of Massachusetts, Amherst, MA 01003.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

BIOLOGY: The Department of Biology, University of Central Arkansas, invites applications for a tenure-track **ASSISTANT PROFESSOR** position to begin August 1993. Recent Ph.D.'s or postdoctorates are encouraged to apply. Preference will be given to applicants with expertise in two or more of the following areas: molecular biology, cell biology, genetics, microbiology, immunology, physiology, neurobiology, developmental biology, endocrinology. The individual will teach and conduct research in the area of his/her specialty, teach lower division courses for biology majors, and occasionally general biology for non-science majors. Submit letter of application, curriculum vitae, copies of all transcripts, a brief description of teaching philosophy and research career goals, and three letters of recommendation to: **Dr. Edmond Griffin, Chairman, Department of Biology, University of Central Arkansas, Conway, AR 72035, (Telephone: 501-450-3146; FAX: 501-450-5914).** The deadline for receipt of applications is January 10, 1993. *The University of Central Arkansas is an Affirmative Action/Equal Opportunity Employer.*

The Department of Chemistry at Michigan State University (MSU) invites applications from **NMR SPECTROSCOPISTS** with research interests in applying the technique to biomolecular systems for a tenure-system faculty position that will be available starting Fall 1993. The position will be filled at the **ASSISTANT PROFESSOR** level. The appointee is expected to establish a strong research program and to be committed to excellence in teaching at both the undergraduate and graduate levels. We would appreciate receiving curriculum vitae, a list of publications, a research plan, and three letters of recommendation by January 1, 1993. Please send them to: **Professor Gerald T. Babcock, Chairperson, Department of Chemistry, Michigan State University, East Lansing, MI 48824-1322.** *M.S.U. is an Affirmative Action/Equal Opportunity Institution.*

POPULATION/QUANTITATIVE GENETICS THE UNIVERSITY OF MICHIGAN ASSISTANT PROFESSOR

The Department of Biology at the University of Michigan solicits applications for a tenure-track position in the field of Population/Quantitative Genetics. The individual hired will be joining a well established group of ecologists, evolutionists, and organismal biologists who are part of a large department of biology, with research interests that embrace a wide range of basic biological phenomena. The specific subfield of interest within population/quantitative genetics is of less concern than a record of excellence. In addition to establishing a successful research program, the candidate will be expected to participate in both the undergraduate and graduate-level teaching programs of the Department. Applications should include current curriculum vitae, copies of up to five relevant reprints, a brief statement of future research plans, and three letters of reference. Application deadline is January 15, 1993. Minorities and women are especially encouraged to apply. Application materials should be sent to:

**Chair, Population Genetics Search Committee
Department of Biology
University of Michigan
Natural Science Building
Ann Arbor, MI 48109-1048**

The University of Michigan is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, SANTA BARBARA. Tenure-track position in geography available July 1, 1993. Salary and rank open and dependent upon qualifications. Applicants at the **ASSISTANT PROFESSOR** level are encouraged to apply. The Geography Department seeks an outstanding scientist with teaching and research interests in remote sensing, preferably microwave remote sensing, combined with expertise in Earth System Science, for example terrestrial ecosystem modeling, soil science or vegetation science. Substantial qualifications in geographic research and a strong commitment to graduate and undergraduate teaching are essential. Ph.D. normally required at time of appointment. Submit résumé, statement of research and teaching interests, and names of three references to: **Chair, Search Committee; Department of Geography; University of California; Santa Barbara, CA 93106.** Deadline: **January 4, 1993.** *Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. Tenure-track, Fall 1993. Seeking individual to participate in new molecular biology program with ability to teach a broad range of undergraduate courses as well as specialized courses at Master's level. Small college atmosphere in magnificent part of North Shore Long Island, 45 minutes from Manhattan. Ph.D. required; postdoctoral experience and prior teaching desirable. Please send curriculum vitae and supporting materials to: **Dr. N. Meiselman, Chairman, Biology Department, C.W. Post Campus/LIU, Northern Boulevard, Brookville, NY 11548.** Closing date: **February 12, 1993.** *Equal Opportunity Employer.*

ASSISTANT PROFESSOR

Department of Biochemistry and Molecular Biology

A tenure-track faculty position at the Assistant Professor level is available in the Department of Biochemistry and Molecular Biology at Marshall University School of Medicine. We are seeking outstanding candidates who are using molecular and cellular approaches to investigate problems related to cancer or cardiovascular disease. The successful candidate will be expected to maintain a vigorous, independent research program, and participate in the teaching of medical and graduate students. Interested individuals should send a letter of application, curriculum vitae, a statement of present and future research activities and names, addresses and telephone numbers of three references to:

**Dr. Michael R. Moore
Search Committee Chairman
Department of Biochemistry &
Molecular Biology
Marshall University School of Medicine
Huntington, WV 25755-9320**

**Deadline for application is January 15, 1993. Marshall University encourages applications from women and minorities and is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR/INVERTEBRATE BIOLOGIST. The Department of Biology of Dickinson College seeks applicants for a tenure-track position in Invertebrate Biology with emphasis in neurobiology or symbiosis. Teaching responsibilities include upper level and introductory courses. The successful candidate will have access to institutional start-up and research funds and will be expected to develop an active research program involving undergraduates. Send curriculum vitae, statement of teaching and research interests, transcripts, and three letters of recommendation by January 15, 1993 to: **Dr. Janet S. Wright, Department of Biology, Carlisle, PA 17013.** Dickinson College is a highly selective liberal arts college with an emphasis on innovative undergraduate science education. *Dickinson is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR of Medicine/Rheumatology—Position to conduct research, from planning to publishing, M.D. or Ph.D. with minimum of three years of experience in research in the area of signal transduction and translation of immune and inflammatory mediator cells. Must have experience with Western blotting and the production, generation and use of monoclonal antibodies. Applicants should send résumé to: **John L. Skosey, M.D., Ph.D., Professor of Medicine, The University of Illinois at Chicago, P.O. Box 6998 (M/C 787), Chicago, IL 60680.**

The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

Enzymologist/Protein Chemist

The Procter & Gamble Company has an immediate opening for a biochemist/enzymologist in the Research, Pharmaceutical, Procter & Gamble, USA Division. This position requires an M.D. or Ph.D. in biochemistry, protein chemistry, or related field, with at least two years post-doctoral experience. Experience in enzyme biochemistry and kinetics is essential, with knowledge of protein structure/function and protein-protein and receptor interactions desirable. Experience with protease enzymes is highly desirable.

The successful candidate will be part of a multi-disciplinary team focused on discovering the role of enzymatic processes in disease, and developing therapeutic interventions targeted at these processes. Exceptional oral and written communication skills are required, as well as the ability to design and execute a successful laboratory program utilizing a variety of techniques such as cell culture, protein purification, enzyme kinetics, immunochemistry, electrophoresis and column chromatography.

Procter & Gamble is a world leader in the research, development, manufacture and marketing of a wide variety of consumer products in the health and beauty care, food and beverage, laundry and cleaning and paper products areas. Annual sales exceed \$30 billion, and the R&D budget is over \$800 million.

We offer excellent opportunities for professional growth, with significant expansion under way in the health care area. We provide competitive salaries and benefits packages, placing us among the top 5% of U.S. firms.

Candidates must be presently authorized to work in the U.S. on a full-time basis. Resumes, with a list of publications and references, should be sent to:

Dr. N.G. Howell, Dept. JM
The Procter & Gamble Company
P.O. Box 398707
Cincinnati, OH 45239-8707

No Agency referrals, please. Allow 6-8 weeks for response. An Equal Opportunity Employer.

Procter & Gamble

NATIONAL INSTITUTES OF HEALTH THE GRANTS ASSOCIATES PROGRAM

Biomedical and behavioral scientists interested in a career in research administration with the National Institutes of Health (NIH) are invited to compete for the Grants Associates Program. The Program is administered by the Office Extramural Programs in the Office of the Director, NIH. Independent research experience, motivation for a career in health science administration, good interpersonal skills, and evidence of executive potential are important. U.S. citizenship and a doctorate degree or equivalent experience are required.

The Program prepares the Grants Associate for a leading role in health science administration. Grants Associates participate in one (1) year of individually structured training, including on-the-job assignments, courses and seminars. Grants Associates may be appointed either in the U.S. Civil Service with a salary range of \$38,861 to \$54,607 (GS 12-14) or in the Commissioned Corps of the U.S. Public Health Service at ranks beginning with Senior Assistant Grade (0-3).

For further information please write to:
Director, HSA Development Programs
National Institutes of Health
Building 31, Room 5B35
9000 Rockville Pike
Bethesda, MD 20892



*NIH is an Equal Opportunity Employer
Women and minorities are encouraged to
apply.*

Recruitment Ad for University of California Institute on Global Conflict and Cooperation

The University of California Institute on Global Conflict and Cooperation (IGCC) invites applications for two positions as Coordinator of Policy Research.

IGCC is a systemwide research unit of the University of California, headquartered on the U.C. San Diego campus. It was established to conduct and encourage research and instructional programs in the causes of international conflict and the opportunities for international cooperation.

The Coordinators of Policy Research report to the Director of IGCC and are responsible for assisting in the organization and conduct of IGCC policy-related projects—for example, on conventional arms control, nuclear proliferation, and nuclear arms control, Asian security relations, international environmental policy, and economic competitiveness and national security. The main responsibilities of the persons occupying these positions are to provide an effective link between scholarship in international affairs conducted in the UC system and the world of foreign policymaking in the United States and abroad. The Coordinators of Policy Research at one and the same time must possess scholarly credentials and enjoy the respect of academics, while being conversant with the major foreign policy issues of the day and having demonstrated experience in the foreign policymaking process. Among the specific tasks of the Coordinators of Policy Research are organizing international conferences addressing major foreign-policy issues, preparing discussion papers for these, disseminating the findings of IGCC policy-relevant studies as widely as possible, working with research directors and development personnel on fundraising, and supervising postdoctoral fellows in related research fields. Teaching one class a year is possible.

IGCC seeks candidates who have a Ph.D. in international relations, political science, or natural science, experience in the policy world, and a demonstrated capacity to contribute effectively to the IGCC policy studies program.

Salary and rank commensurate with qualifications and based on UC payscale. Send vitae, names of five referees, samples of written work and any other relevant materials indicating professional accomplishments directly to the following address: **University of California, San Diego, Policy Research Search Committee (SCI), Institute on Global Conflict and Cooperation (0518), 9500 Gilman Drive, La Jolla, CA 92093-0518.** All applications received by February 1, 1993 or thereafter until positions are filled will receive thorough consideration. UC is an AA/EEO employer.

SCIOS NOVA

Scios Nova is a biopharmaceutical company with five key innovative products in various phases of clinical testing, and several others in preclinical evaluation. Scios Nova is headquartered in Mountain View, California with additional research and development facilities in Baltimore, Maryland.

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SCIENTIST Analytical Methods Development

Your responsibilities will include methods development and validation for recombinant biological products, coordination of stability studies within the AMD group, and supervision of 1-2 Research Associates. You will also generate data and reports suitable for PLA submission. PhD in Biochemistry or Analytical Chemistry, coupled with 1-3 years' experience in analytical methods development and a strong HPLC background are required. Excellent communication and organizational skills are necessary. Experience with GLP/cGMP compliance is a plus. Job Code: 155/V5

SR. RESEARCH ASSOCIATE Analytical Methods Development

In this challenging opportunity, you must be able to work in close collaboration with other group members. A BS/MS in Biochemistry or Chemistry, plus 1-3 years' experience in methods development with a strong HPLC background is required. Experience with computerized data analysis, methods validation or cGMP compliance is an added asset. Job Code: 162/V5

Scios Nova offers a stimulating work environment and an outstanding compensation/benefits package. Please send your resume, indicating Job Code, to: Scios Nova Inc., Human Resources, 2450 Bayshore Parkway, Mountain View, CA 94043. Or FAX to: (415) 962-5966. Equal Opportunity Employer.

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For more information, contact:

HUNTER COLLEGE

RCMI Program, Room 1323 HN [212-772-5532]

MBRS Program, Room 314 HN [212-772-5243]

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| • Molecular Neurobiology | • Neurotoxicology |
| • Neurobiology of Aging | |

Applications are accepted in the Fall and must be received no later than January 15 of each year. Awards are announced by March 1. Funding is provided by the National Institute of Mental Health.

For Information write:

**The American Psychological Association
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Please submit a CV, a photo and a hand-written letter to
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DIRECTOR
DIVISION OF BIOLOGY
UNIVERSITY OF TENNESSEE



The University of Tennessee, Knoxville, seeks a Director for its proposed Division of Biology, which includes the Departments of Biochemistry, Botany, Microbiology and Zoology, the Graduate Program in Ecology and other interdisciplinary life sciences graduate programs. UTK is the major research campus and center for graduate education of the University of Tennessee system and has numerous collaborative interactions with the Oak Ridge National Laboratory. The Director will have budgetary authority and will be responsible for future development and structure of the Division and its academic programs. Applicants should have a broad perspective on biology as well as the interactive skills necessary for dealing with a faculty having diverse scientific interests. Candidates should provide evidence of administrative skills and significant research achievement commensurate with a professorial appointment. The successful candidate will have an understanding and demonstrated commitment to equal employment opportunity and affirmative action. Inquiries and applications, with *curriculum vitae* and names, addresses and phone numbers of three individuals able to provide recommendation, should be directed to: **Prof. Mary Ann Handel, Biology Consortium, M303 Walters Life Sciences Building, University of Tennessee, Knoxville, TN 37996-0830 (Tel: 615/974-6841).** Review of applications will begin early in January, 1993. *UTK is an EEO/Title IX/Section 504/ADA Employer.*

FACULTY POSITIONS
UCR/UCLA PROGRAM
IN BIOMEDICAL SCIENCES

The UCR/UCLA Program in Biomedical Sciences, which offers an accelerated M.D. curriculum jointly between the University of California, Riverside (UCR), and the University of California, Los Angeles (UCLA), School of Medicine, has two tenure-track openings at the level of ASSISTANT PROFESSOR in the Division of Biomedical Sciences at UCR available July 1, 1993.

NEUROSCIENCES. Primary teaching responsibilities will be in cellular neurobiology, including electrophysiology, for first-year medical students.

PHYSIOLOGY. Primary teaching responsibilities will be in cardiovascular, respiratory and gastrointestinal physiology for first-year medical students.

Applicants must have a Ph.D. and/or M.D. degree, postdoctoral research experience, and must be able to develop a strong independent research program. The specific area of research is open, but preference will be given to cell biologists or physiologists who are using molecular and cellular techniques in their studies. Applicants should also have a strong commitment to teaching both medical and graduate students. Prior teaching experience in a medical school basic science curriculum is preferred. Applicants should send a curriculum vitae, bibliography, two or three representative reprints, a statement of present and future research goals, current grant support, and the names of three references. The deadline for applications and nominations is December 1, 1992.

Send applications to: David A. Johnson, Chair (Neurosciences) or Paul M. Quinton, Chair (Physiology), Division of Biomedical Sciences, University of California, Riverside, CA 92521-0121.

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POSITIONS OPEN

BIOLOGY/PLANT PHYSIOLOGY

Ball State University
Muncie, Indiana

Applications are invited for a tenure-track plant physiology position at the ASSISTANT PROFESSOR level in the Department of Biology available fall 1993. Candidates are expected to have a commitment to excellence in teaching, to be competent in current approaches used in the study of plant physiology, and to establish an active research program. Responsibilities: teach courses in plant physiology, introductory biology, and additional courses in the botany program; conduct research in specialty area and promote student involvement in research; and be an active member of the academic community. Examples of research specialties include (but are not limited to) general plant physiology, plant pathology, stress physiology, physiological plant ecology and developmental physiology. Minimum Qualifications: Earned doctorate in a biological science; effective oral and written communication skills. Preferred Qualifications: Demonstrated teaching ability and publications and/or evidence of other scholarly activity. Please send letter of application, résumé, three (3) letters of reference and transcripts to: Dr. Carl E. Warnes, Search and Selection Committee, Department of Biology, Ball State University, Muncie, IN 47306. Review of applications will begin immediately and continue until the position is filled.

Ball State University is an Equal Opportunity/Affirmative Action Employer and is strongly and actively committed to diversity within its community.

ASSISTANT PROFESSOR OF GENETICS

Harvard Medical School and
Dana-Farber Cancer Institute

The Dana-Farber Cancer Institute and the Department of Genetics, Harvard Medical School invite applications for a tenure-track position of Assistant Professor of Genetics. Candidates should have strong credentials in specialized areas of eukaryotic molecular genetics such as cell cycle, differentiation, tumor suppression or gene regulation. Major responsibilities will include supervision of an active research program and participation in the teaching of genetics and molecular biology to graduate and medical students. Applicants should submit a research summary, curriculum vitae, and three letters of reference by December 31, 1992 to: Dr. Priscilla Schaffer, Chairperson of the Search Committee, Dana-Farber Cancer Institute, B406, 44 Binney Street, Boston, MA 02115.

ASSISTANT PROFESSOR, GENETICS. Department of Biochemistry, University of Alabama at Birmingham. Several tenure-track faculty positions are available in 1993. Areas of particular interest include chromosome structure and function, transcriptional regulation, RNA processing and control of development in lower and higher eukaryotes; however, outstanding candidates in any area of genetics are encouraged to apply. Successful candidates will teach in graduate and medical/dental curricula as well as direct active research programs. Please send curriculum vitae, a brief statement of present and future research interests, selected reprints and the names/addresses of three references by January 31, 1993 to: Dr. Tim Townes, Search Committee Chairman, Department of Biochemistry, Schools of Medicine/Dentistry, University of Alabama at Birmingham, Birmingham, AL 35294. An Equal Opportunity/Affirmative Action Employer.

ANIMAL POPULATION GENETICIST/ MOLECULAR SYSTEMATIST

Full-time, tenure-track ASSISTANT PROFESSOR position; begins August 1993. Teaching responsibilities will include an interdisciplinary, team-taught "Science in Context" course for non-majors, possibly in conservation biology or evolution, and an upper division course in the candidate's specialty. Participation in a junior level genetics course or freshman level diversity of life course expected. Faculty are expected to develop research programs that actively involve undergraduate students in the research process. Ph.D. in the biological sciences, and commitment to liberal arts and science education and cultural diversity. Submit interest letter, curriculum vitae and three reference letters by December 11, 1992, to: Population Genetics Search, University of Puget Sound, P.O. Box 7297, Tacoma, WA 98407. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR CELL BIOLOGY

The Department of Biology at Virginia Polytechnic Institute and State University invites applications for a tenure-track faculty position at the rank of assistant professor to begin August 1993. Candidates should have postdoctoral experience in a contemporary area of Cell Biology. The successful candidate will be expected to build on existing strengths within the Molecular and Cell Biology Group of the 43 member Biology Department. Responsibilities include graduate and undergraduate teaching in cellular/molecular biology, and developing a competitive research program in the individual's specific area of interest. A letter of application, curriculum vitae, statement of professional goals, and names of three references should be received by January 15, 1993. All correspondence should be directed to: Dr. Joseph O. Falkinham, Chair of the Search Committee, Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0406. Virginia Polytechnic Institute and State University has a strong commitment to the principle of diversity, and, in that spirit, seeks a broad spectrum of candidates including women, members of minority groups, and people with disabilities.

Four ASSISTANT PROFESSORS. The Department of Biology at Georgia Southern University is seeking to fill four tenure-track positions, one in BOTANY (search #23332) with teaching responsibilities in General Botany and perhaps Plant Physiology, and three in VERTEBRATE BIOLOGY (search #23331), with teaching responsibilities in human anatomy and physiology. Individuals hired may participate in General Biology and other lower- and upper-level Biology courses. All positions begin September 1, 1993. Ph.D. and commitment to excellence in teaching, and research are required. Send letter of application indicating position desired, curriculum vitae, brief statement of personal teaching and research goals, three letters of reference (include names and telephone numbers of referees), and unofficial copies of all college transcripts to: Dr. John W. Parrish, Chair, Department of Biology, Georgia Southern University, Statesboro, GA 30460-8042. Postmark deadline is 15 December 1992. The names of applicants and nominees, résumés and other general non-evaluative information are subject to public inspection under the Georgia Open Records Act. Georgia Southern is an Affirmative Action/Equal Opportunity Institution.

FACULTY POSITION IN BIOMEDICAL ENGINEERING

The Biomedical Engineering Institute of the Université de Montréal, has an opening for an ASSISTANT PROFESSOR in the domain of biomedical modeling and biomedical engineering (major axes of cardiac or neuromuscular electrophysiology or joint biomechanics). Functions: develop an independent research program; contribute to graduate teaching of the Institute as well as the supervision of graduate students; participate in undergraduate teaching according to needs. Requirements: Ph.D. in biomedical engineering or equivalent background; list of pertinent publications; appropriate research/teaching experience; fluency in written and spoken French is required. Expected starting date: June 1993. Salary: according to the collective agreements. Please send curriculum vitae and three reference letters before December 31, 1992 to: A-Robert LeBlanc, directeur, Institut de génie biomédical, Université de Montréal, C.P. 6128, succursale A, Montréal (Québec), H3C 3J7. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents.

BOTANIST. The Biology Department, University of Puerto Rico, Rio Piedras has a tenure-track position at the ASSISTANT PROFESSOR level beginning August 1993. The position has been defined to include any subdiscipline of botany excepting plant ecology and angiosperm systematics. The successful candidate will be expected to teach undergraduate botany, participate in the graduate program (M.S. and Ph.D.) and develop an active research program. A Ph.D. is required and knowledge of Spanish is desirable. The application (curriculum vitae, statement of research and teaching interests, and three letters of reference) should be received by January 15, 1993. Send to: T. Mitchell, Aide/Botany Search Committee, Department of Biology, P.O. Box 23360 UPR Station, San Juan, PR 00931-3360.

POSITIONS OPEN

EVOLUTIONARY ECOLOGY

Applications are invited for a tenure-track faculty position in Evolutionary Ecology to begin August 1993. We are interested in researchers at the ASSISTANT PROFESSOR level attempting to understand the evolution of ecologically important traits in any system, especially plant or plant-animal systems. But outstanding evolutionary ecologists at other ranks or using other systems are also encouraged to apply. The successful candidate will be expected to develop a vigorous, independent research program, to participate in the University's Center for Evolutionary Ecology, and to contribute to graduate training and both lower and upper-division undergraduate teaching. Substantial start-up funding is available. To apply, request that letters of reference be sent from at least three references, and send their names and addresses, curriculum vitae, a statement of research interests, and copies of recent publications by January 8, 1993, to: Evolutionary Ecology Search Committee, T. H. Morgan School of Biological Sciences, University of Kentucky, Lexington, KY 40506-0225.

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PLANT PHYSIOLOGICAL ECOLOGIST: ASSISTANT PROFESSOR. California State University, Bakersfield invites applications for a tenure-track position available September 1, 1993. Teaching responsibilities include general ecology, plant physiology, introductory botany, and courses in the applicant's area of expertise. Ph.D. in the biological sciences required. Development of an active research program, preferably field oriented, which will involve undergraduate student participation is expected. Opportunity for participation in development of Master's Degree anticipated. Review of completed applications will begin January 15, 1993, and continue until position is filled. Applications should include a cover letter, curriculum vitae, unofficial transcripts, statement of teaching philosophy, and three letters of reference, and should be sent to: Dr. Ted Weinheimer, Department of Biology, California State University, 9001 Stockdale Highway, Bakersfield, CA 93311-1099. California State University is an Equal Opportunity/Affirmative Action Employer.

BIOLOGIST: ASSISTANT PROFESSOR—full-time tenure-track position for September 1993, to teach a majors' course in cell biology, an upper level/graduate course in an area of specialization, and participate in the majors/non-majors introductory program. The successful candidate will be expected to conduct research in cellular/molecular biology and to supervise undergraduate and graduate research. A Ph.D. and college-level teaching experience are required. Applicants should send curriculum vitae, a statement of research interests and plans, plus the names, addresses and telephone numbers of three references to: Dr. Larry Klotz, Search Committee Chair, Department of Biology, Shippensburg University, Shippensburg, PA 17257. Deadline for receipt of all application materials is 31 December 1992.

Shippensburg University is an Equal Opportunity/Affirmative Action Employer. Women and all minorities are encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR OF PHYSIOLOGY. The Department of Physiology and Pharmacology, College of Veterinary Medicine, Auburn University is seeking applications for a tenure-track position in physiology. The successful candidate is expected to assume primary responsibility for veterinary student instruction in cardiovascular and renal physiology. In addition, the candidate should have a strong interest in graduate education and in research. The position requires a Ph.D. with emphasis in either cardiovascular or renal physiology. A D.V.M. degree and/or postdoctoral experience is desirable. Preference will be given to candidates whose research involves cellular and/or molecular physiology. Interested applicants are invited to submit a letter of application, curriculum vitae, statement of career goals and the names of three or more references. Letters of application will be accepted until January 31, 1993 or until a suitable candidate is identified. Nominations and applications should be sent to: Dr. Robert C. Wilson, Professor and Head, Department of Physiology and Pharmacology, College of Veterinary Medicine, Auburn University, Auburn, AL 36849-5520.

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Duties include development, validation and implementation of high throughput assays for drug discovery. Experience with protein isolation and purification desired. Techniques involve radioligand binding, spectroscopic based and cellular response assays. BS or MS in Biochemistry or related field, with 2-4 years of applicable experience.

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The Department is responsible for the anatomy curriculum for medical students and for the graduate program in Cellular Biology and Anatomy within the Graduate School. Faculty members are engaged in a range of productive research programs, with an emphasis on structural and molecular approaches to the study of cell biology and developmental biology. Areas of emphasis include cardiovascular disease, neurosciences and visual systems.

Candidates for the position of Chairperson should possess strong credentials in education, a commitment to research, and the administrative skills to foster the department's current growth and to lead the department into the future.

This position offers an excellent professional opportunity to join in the intellectual and administrative leadership of the College. Inquiries should be addressed to: **Search Committee for Cellular Biology and Anatomy, c/o Office of Faculty Affairs, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226.**

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- Pathogenic Mechanisms; Bacteria, Fungi and viruses
- Human Genetics

For information and application materials for graduate study please write:

**Director of Graduate Studies
Department of Molecular Genetics,
Biochemistry and Microbiology
University of Cincinnati
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The American Society for Cell Biology in cooperation with the Marine Biological Laboratory offers financial assistance to qualified minority students attending summer courses at the MBL. Awards are granted to graduate students, postdoctoral fellows and young faculty who are U.S. citizens or permanent residents and are admitted to an MBL summer course in cell, developmental or molecular biology. Awards may cover MBL course tuition, room & board, and travel expenses. Graduates of Minority Biomedical Research Programs (MBRS) and Minorities Access to Research Career Programs (MARC)-eligible institutions are encouraged to apply.

The Porter Fellowship for Minority Students/Investigators is available to support young minority scientists who are U.S. citizens or permanent residents doing research in the field of physiology with MBL senior investigators, or who are admitted to MBL summer courses. The award contributes toward summer expenses at the MBL, including travel.

For further information, please contact:

Dorianne Chrysler, Admissions Coordinator,
Marine Biological Laboratory, Woods Hole,
MA 02543 Phone: (508) 548-3705 ext. 216

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Other opportunities available are permanent and temporary positions as chemistry, biology and microbiology laboratory assistants. B.S. or B.A. plus specific experience desirable but not mandatory. Positions are in Civil Service at GS-5, 7 or 9 grade levels, depending upon experience. Submit SF-171 and transcript to the address below.

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POSITIONS OPEN

ASSISTANT PROFESSOR OR POSTDOCTORAL FELLOW (Depending on Experience)

is sought at the University of Colorado/Denver VA Medical Center. Research aimed at elucidating neural control of the upper airway musculature with a particular interest in sleep effects on these mechanisms. Experience with central and peripheral neural recording is desirable. Recruited individual will work with M.D. investigators interested in disorders of breathing during sleep. Send curriculum vitae and references to: **David P. White, M.D., Respiratory Care (111A), Denver VA Medical Center, 1055 Clermont Street, Denver, CO 80220.**

ASSISTANT PROFESSOR OF BIOLOGY

Active, five-person department seeks cellular/molecular biologist, prepared also to teach microbiology. Ph.D. and commitment to undergraduate teaching required; research focus open; research involving students a plus. New laboratory facility opens January 1993. Send curriculum vitae and reference list to: **Dr. Ralph I. Peters, Chair, Department of Biology, Lynchburg College, 1501 Lakeside Drive, Lynchburg, VA 24501-3199** by November 30, 1992. *Lynchburg invites applications from women and minority candidates. Equal Opportunity Employer.*



EMORY UNIVERSITY
SCHOOL OF MEDICINE

FACULTY POSITIONS IN RADIATION ONCOLOGY

The newly established Division of Cancer Biology in the Department of Radiation Oncology at Emory University School of Medicine invites applications for tenure-track, basic science faculty positions at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** levels. Faculty members will also have the opportunity to participate in the graduate student training and teaching programs of the Emory University Graduate School Division of Biological and Biomedical Sciences. Areas of emphasis include, but are not restricted to, DNA damage and repair, mutagenesis, oncogenes, oxygen radical toxicity, radiobiology, and mechanisms of tumor progression/metastasis. Collaborations are anticipated with faculty in the basic science and clinical departments, as well as the Winship Cancer Center of Emory University. Competitive salaries, start-up funds and resources have been committed for these positions. Ph.D. or M.D. degree required. Faculty rank commensurate with demonstrated background and potential. Applications will be accepted until positions are filled. Applications together with curriculum vitae and a statement of research interests and the names of three references should be sent to: **Paul W. Doetsch, Ph.D., Department of Biochemistry, Emory University School of Medicine, Rollins Research Center, Atlanta, GA 30322-3050. Emory University is an Equal Opportunity/Affirmative Action Employer.**

CANCER GENETICS FACULTY POSITION

Louisiana State University Medical Center
(LSUMC)

The Stanley S. Scott Cancer Center invites applications for a tenure-track position at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. The appointment will also include an appointment in an appropriate basic sciences department. The successful candidate is expected to develop and sustain an independent research program and participate in departmental teaching. Candidates with interests in any area of basic science related to the question of cancer will be considered, but preference will be given to candidates with interests in gene expression and the genetic changes associated with cancer. Interested individuals should send curriculum vitae with bibliography, short (three pages) summary of planned research, and the names and addresses of three references to: **Dr. Prescott Deininger, Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, LA 70112. LSUMC is an Equal Employment Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

FOUR VACANCIES IN BIOLOGY ASSISTANT OR ASSOCIATE PROFESSOR

The Department of Biology, University of South Dakota, invites applications for four tenure-track positions in biology available August 15, 1993. Applicants must have a Ph.D. by the time of appointment and postdoctoral experience is desired. The positions include (1) **Membrane Biologist**, (2) **Fisheries/Aquatic Biologist**, (3) **Population Geneticist**, and (4) **Botanist**. The successful candidates will be expected to develop a competitive research program in their area of specialty and to teach and advise undergraduate and graduate students (M.A. and Ph.D.). Start-up packages will be available. The research and teaching expertise of the successful applicants will complement the department's emphasis in ecology and environmental physiology. Salary is competitive and commensurate with experience and qualifications. Detailed position announcements are available upon request. Applicants should submit curriculum vitae, statement of teaching and research interests and the names, addresses and telephone numbers of four individuals who may be contacted for letters of recommendation. Screening begins December 1, 1992 and will continue until suitable candidates are hired. Inquiries and applications should be directed to: **Dr. Jack Butler, Department of Biology, University of South Dakota, Vermillion, SD 57069, Telephone: (605) 677-5211, FAX: (605) 677-5073.**

The University of South Dakota is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST UNIVERSITY OF DALLAS

The University of Dallas, a selective Catholic liberal arts university, seeks a molecular biologist for a tenure-track appointment at the **ASSISTANT or ASSOCIATE PROFESSOR** level beginning August 1993. He/she should be able to teach molecular biology, microbiology, and either comparative anatomy or developmental biology. Successful candidates will also teach a course in their field of expertise and maintain an active research program with undergraduates. Ph.D. is required along with proven teaching and research ability. Applicants should submit curriculum vitae, names of three references, and a statement describing the nature of their commitment to undergraduate teaching and research. These items should be submitted to: **Dr. Frank Doe, Department of Biology, University of Dallas, Irving, TX 75062.** Review of applications will begin November 30, 1992. *Equal Opportunity Employer.*

FACULTY POSITION, Molecular Biology of Infectious Diseases. The Department of Microbiology at Colorado State University invites applications for a tenure-track **ASSISTANT or ASSOCIATE PROFESSOR** position to address the molecular biology of infectious diseases. Host-parasite interactions, with particular regard to basic mechanisms of pathogenesis by bacteria, viruses, or other parasitic microorganisms are areas of research interest appropriate to this position. Candidates should possess the Ph.D., D.V.M./Ph.D., M.D./Ph.D. or equivalent degree, and postdoctoral research experience in the biomedical sciences. The successful applicant will be expected to establish an independent research program, and participate in the teaching of undergraduate and graduate courses within the Department and the College. There will be ample opportunity to interact with faculty and students in our nationally recognized programs such as those concerning mycobacteria and arthropod-borne infectious diseases. Applicants should send curriculum vitae, a statement of research interests, and a list of at least three references, to: **Dr. Ian Orme, Search Committee Chairman, Department of Microbiology, Colorado State University, Fort Collins, CO 80523, Telephone: 303-491-5777** by December 31, 1992.

Colorado State University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR, MARINE CONSERVATION

To promote conservation of the marine resources of the Florida Keys. Advanced degree in marine biology or related field, experience working with public agencies, and use of scientific data in policy and resource management, excellent communication skills, willing to travel and perform field work. Resume to: **Mark L. Robertson, Director, Florida Keys Initiative, The Nature Conservancy, P.O. Box 4958, Key West, FL 33040. Equal Opportunity Employer.**

POSITIONS OPEN

BIOLOGY. Wesleyan College is seeking two tenure-track **ASSISTANT or ASSOCIATE PROFESSORS** especially interested in teaching that emphasizes critical thinking, connected learning, and writing as part of a superior liberal arts education. One will have responsibility for the area of molecular genetics, the other for the area of zoology. Ph.D. required; a minimum of five years of teaching experience for associate professor rank. Interest in undergraduate research desirable. Committed to becoming the pre-eminent college for women in the Southeast, Wesleyan wants faculty members who share its commitment to the liberal arts, to the ideal of the teacher-scholar, and to its students. Submit letter of application, curriculum vitae, transcripts, and three current letters of recommendation by December 15, 1992 to: **Dr. Carole Brown, Dean of the College, Wesleyan College, 4760 Forsyth Road, Macon, GA 31297.** *Women and minority candidates are encouraged to apply. Affirmative Action/Equal Opportunity Employer.*

BAYLOR COLLEGE OF MEDICINE HOUSTON, TEXAS

Department of Anesthesiology is inviting applications and nominations for faculty positions at **ASSISTANT PROFESSOR and ASSOCIATE PROFESSOR** levels. Fellowship positions are also available in Cardiovascular Anesthesia. These positions offer excellent opportunities to develop an academic career in a department with excellent clinical and research resources and facilities. We are interested in qualified candidates in general anesthesia, and some positions require cardiovascular or pediatric anesthesia subspecialty training and experience. Qualified candidates should send curriculum vitae to: **William F. Childers, M.D., Chairman, Department of Anesthesiology, Baylor College of Medicine, 6550 Fannin, Suite 1003, Houston, TX 77030. Baylor College of Medicine is an Affirmative Action/Equal Opportunity Employer.**

MUHLBERG COLLEGE

Biology: Two positions, both tenure-eligible, one for department chair. Ph.D. required. Areas of specialization: field botany or comparative physiology. The botanist will manage a green house and 70,000 specimen herbarium. Particular consideration will be given to candidates with transmission and scanning electron microscope experience. Muhlenberg College is a church-related, selective, liberal arts college located one hour from Philadelphia. To apply, send description of teaching interests, résumé, and three letters of reference to: **Biology Search Committee, Muhlenberg College, Allentown, PA 18104, by December 4, 1992. An Equal Opportunity Employer, we encourage applications from minority and female candidates.**

ENDOWED CHAIR AND DIRECTOR Program in Environmental Studies

The University of Redlands continues to seek a teacher/scholar to fill the Hedco endowed chair of Environmental Studies. The chairholder will lead a new program that will provide both a B.A. and a B.S. track. Candidates should have demonstrated teaching, program development and administrative skills. An ability to work with faculty across all disciplines is essential. Area of expertise may be in any discipline connected to environmental studies. There is a well equipped GIS laboratory. The University of Redlands in Southern California enrolls 1,500 residential students and 2,200 working adult students.

Ph.D. required. Rank and salary negotiable. Position begins August 1, 1993 or earlier if convenient. Send curriculum vitae, a letter of application including a statement on the role of an undergraduate program in environmental studies in a liberal arts setting, and the names, addresses and telephone numbers of four references to: **Dr. James P. Malcolm, Department of Biology, University of Redlands, P.O. Box 3080, Redlands, CA 92373-0999.** File review will begin on January 5, 1993 and applications submitted after this date may not receive full review. *The University of Redlands is an Equal Opportunity Employer and encourages applications from women and minorities.*

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.

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To staff this facility we are seeking additional individuals at both the Chemist and Chemical Technologist levels who possess the following qualifications:

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To qualify, you should possess M.S. or Ph.D. in Polymer Science or Polymer Chemistry and 2-10 years' relevant working experience.

Chemical Technologist

To qualify, you will need 20 hours of college-level Chemistry or Science courses and at least 2 years of laboratory experience.

The success of our product line depends heavily on the talents and dedication of our people. If you have what it takes to do the job, we'll supply you with an excellent compensation and benefits package commensurate with your qualifications and the opportunity to work for a premier global organization. Please send your resume with salary history and requirements to Ms. Marion Witte, Human Resources Specialist, Dept. SM, Essex Specialty Products, Inc., 1135 Broad Street, Clifton, NJ 07015. An equal opportunity employer.



AQUATIC VERTEBRATE BIOLOGIST

The Department of Biology at the University of Northern Iowa invites applications from individuals with the Ph.D. degree for a tenure-track assistant professor position in Aquatic Vertebrate Biology effective August 1993. Applicants with basic or applied field oriented research in ecology of aquatic vertebrates are preferred. The person selected will be responsible for developing a research program designed to attract the participation by graduate (M.A.) and undergraduate (B.A. and B.S.) students. Teaching responsibilities may include a course(s) in one's specialty and participation in the general education program. Post-doctoral teaching and/or research experience is preferred. The department expects excellence in both teaching and research. Applicants should submit a curriculum vitae, statement of teaching interests/philosophy, research interests and goals, relevant reprints, copies of graduate and undergraduate transcripts, and three letters of recommendation. The department encourages applications from women, minority persons, Vietnam era veterans and disabled persons. For full consideration application materials should be received by January 15, 1993. Send a detailed letter of application and supporting materials to:

Dr. Robert Seager
Chair, Search Committee
Department of Biology
University of Northern Iowa
Cedar Falls, IA 50614-0421
(Fax No.: 319-273-2893)

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PLOYER WITH A COMPREHENSIVE PLAN
FOR AFFIRMATIVE ACTION.**



RESEARCH SOLICITATION NOTICE

The United States Environmental Protection Agency's Atmospheric Research and Exposure Assessment Laboratory (AREAL) announces its intent to establish collaborative research relationships by competitive cooperative agreements with non-profit or not-for-profit organizations. The competitive cooperative agreements will require a minimum five percent (5%) cost sharing by these two types of participating organizations with one exception. The exception is that competitive agreements awarded to federal agencies will require a minimum fifty percent (50%) cost sharing agreement. The AREAL anticipates funding multiple agreements with multiple organizations. The aggregate value of these agreements is expected to range from \$10-\$20 million per year, depending on EPA's Congressional appropriation. Research organizations are encouraged to submit a written request for the solicitation package if they are interested in, and capable of, conducting national calibre research in collaboration with AREAL scientists in one or more of the following areas: atmospheric pollutant measurement and monitoring; aerosol and visibility measurement and modeling; atmospheric chemistry; atmospheric modeling; meteorological modeling, emissions research, high performance computing and communications technology research and technology transfer, distributed computing and visualization techniques, and algorithm development for massively parallel architectures; fluid modeling of atmospheric dispersion; climatology; deposition measurement and monitoring; forest assessment; global tropospheric chemistry; integrated environmental/ecosystem assessment; indoor air measurement, monitoring and modeling; human exposure measurement, modeling, and assessment; measurement, modeling, and measurement of air toxic deposition in the Great Lakes basin; source attribution measurement, analysis, and modeling; and development of methods to measure: trace species in indoor and ambient air, air toxics, UVB radiation, mobile source emissions, stationary source emissions, or aerosol technology. No telephone requests for the solicitation package will be accepted. Copies of the solicitation package will be available, in paper or computer diskette (ASCII format) version, on or after November 5, 1992 to all organizations that submit a written request. Written requests for the solicitation package should be mailed to "AREAL Research Solicitation (MD-75), U.S. EPA, RTP, N.C. 27711." Please specify the desired version in the written request. Completed proposals that respond to this solicitation package must be postmarked before, and received at this address on or before, January 15, 1993. Any proposals that are postmarked or received after January 15, 1993 will not be considered. All cooperative agreement proposal packages will be evaluated competitively by expert peer panels. This evaluation will consider scientific merit, organizational capability, the extent and nature of the proposed collaborative relationship with AREAL and/or other Federal laboratories, and relevance to AREAL's mission. Preliminary notification concerning award is expected in April or May 1993.

THE UNIVERSITY OF MASSACHUSETTS AT AMHERST ANNOUNCES THE
FOLLOWING FACULTY OPENINGS

**DIRECTOR OF THE INTERDEPARTMENTAL GRADUATE PROGRAM IN MOLECULAR
AND CELLULAR BIOLOGY**

We seek a distinguished scientist who will maintain a strong research program while providing intellectual and administrative leadership to a program of 60 faculty members and an equal number of Ph.D. students. Applications accepted until December 15, 1992 or until the position is filled. Please send curriculum vitae and names of 3 references.

BIOCHEMISTRY AND MOLECULAR BIOLOGY

Assistant/Associate Professor, tenure-track. Preference will be given to investigators studying *signal transduction* using a molecular genetic approach. Applications accepted until December 21, 1992 or until the position is filled. Please send curriculum vitae, personal statement and 3 letters of recommendation.

BIOLOGY DEPARTMENT

Assistant/Associate Professor, tenure-track. *Vertebrate physiologist* using modern approaches to basic physiological questions. Teaching responsibilities will include upper level animal physiology and graduate courses in area of specialty. Submit application by December 15, 1992, including curriculum vitae, reprints and 3 letters of reference.

Assistant Professor, non-tenure track. *Neuroendocrinologist* with interest in circadian rhythms and/or seasonal influences on reproduction. Teaching responsibility is one course per year in experimental vertebrate endocrinology. This position is funded for a five-year period. Submit application by December 15, 1992, including curriculum vitae, reprints and 3 letters of reference.

CHEMISTRY DEPARTMENT

Assistant Professor, tenure-track. *Organic chemistry*. Preference will be given to applicants in area of synthetic or bioorganic chemistry. Deadline November 27, 1992.

Salaries will be commensurate with qualifications and experience.

Send replies to *Search Coordinator, Room 913L LGRT, University of Massachusetts, Amherst, MA 01003*. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR/RESEARCHER

Exercise Physiology—Nutritional Biochemistry

Applications are invited for an individual to head a new private research institute within the athletic department of a major southern university. Responsibilities include the design and development of methods for testing nutritional ergogenic aids for athletes, analyzing nutrient effects on endurance, performance, injury rate and rehabilitation. Additional responsibilities involve the coordination of University and local, private resources to develop expertise in all aspects of personal performance and optimization, including all technologies presently in existence as well as development of future ones. Salary commensurate with experience. Send résumé, cover letter in your own handwriting and current photograph to: **Box 26, Science Magazine, Suite 814 1333 H Street, NW, Washington, DC 20005.**

CHEMISTRY FACULTY: The Department of Biology and Chemistry of Lake Superior State University invites applications for a tenure-track position commencing fall 1993. Applicants should have a Ph.D. in chemistry with strengths in analytical chemistry and instrumental analysis and show evidence of potential excellence in teaching. Interest and experience in environmental chemistry is desirable, but not essential. The position may involve teaching courses in general, analytical, and environmental chemistry, and supervision of undergraduate research projects. Rank and salary commensurate with experience.

Send letter of application, curriculum vitae and arrange to have three letters of recommendation sent by January 4, 1993, to: **Office of Employee Relations, Lake Superior State University, Administration Building, Sault Ste. Marie, MI 49783.**

An Equal Employment Opportunity/Affirmative Action Employer.

The Pittsburgh Cancer Institute, a major component of the University of Pittsburgh Medical Center, is interested in recruiting qualified minorities in all areas of cancer research and clinical care. Of special interest are **CLINICAL ONCOLOGISTS** and **POSTDOCTORAL FELLOWS** and **JUNIOR FACULTY** in basic cancer research—especially in the areas of molecular biology, immunology, experimental therapeutics and cell biology. Opportunities are also available for cancer epidemiologists and individuals with expertise in community outreach.

Please send a letter of interest and curriculum vitae to: **Dr. Jules Heisler, Pittsburgh Cancer Institute, 200 Meyran Avenue, Pittsburgh, PA 15090.**

The University of Pittsburgh is an Equal Opportunity Employer.

**CHAIRPERSON
CHEMISTRY DEPARTMENT
UNIVERSITY OF MIAMI**

The Department of Chemistry solicits applications and nominations for the position of Chair. The candidate is expected to possess a distinguished record of research, teaching, and extramural funding, as well as demonstrated skills in leadership, administration, and interpersonal relations. In addition to normal academic duties within a department dedicated to excellence in both research and teaching, the responsibilities of the position specifically include the direction of departmental initiatives in research at the interface of chemistry and biology, and interamerican scientific collaboration. The Department consists of 13 faculty and offers Ph.D., M.S., B.S. (with and without ABCS certification), and A.B. degrees.

Inquiries, applications, and nominations should be directed to: **Dr. Manuel A. Huerta, Chair, Search Committee, Department of Chemistry, University of Miami, P.O. Box 249118, Coral Gables, FL 33124.** The application should include letters of recommendation or names of referees. To be assured of consideration, all materials should be received by December 31, 1992. *The University of Miami is an Equal Opportunity/Affirmative Action Employer and a smoke/drug-free workplace. We do not discriminate on the basis of race, religion, color, sex, age, national origin, or disability. We encourage applications from females, veterans, the disabled, and minority groups.*

NYU
Medical
Center

**ASSOCIATE
RESEARCH SCIENTIST
HIV/AIDS EPIDEMIOLOGY**

The Department of Environmental Medicine, NYU School of Medicine, is seeking an epidemiologist to work with Michael Marmor, Ph.D. on projects concerning human immunodeficiency virus infection among persons with a history of intravenous drug abuse. Duties shall include project coordination, staff supervision, and analysis of data. Knowledge of associated fields including virology, immunology, statistical analysis and data management desirable for effective productivity in a highly collaborative, multidisciplinary setting.

Academic credentials should include (1) a Ph.D. or Dr.P.H. in epidemiology, or (2) a Ph.D. in a related field with research experience in epidemiology, or (3) an M.D. degree with an M.P.H. or experience in epidemiology.

Other Research Scientist positions are available. Minorities are encouraged to apply. Qualified applicants should submit their curriculum vitae to: **Maha Singh, Human Resources, NYU Medical Center, 550 First Avenue, New York, NY 10016.** Resumes must be received by Dec. 4. EOE, M/F.

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**Molecular Mechanisms of
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Daniel Goldberg - Enterocytoerythroid survival of malarial parasites.

William Goldman - Interactions of *B. pertussis* and *H. capsulatum* with respiratory tract cells.

Eduardo Groisman - Molecular mechanisms of *Salmonella* survival within phagocytic cells.

Scott Hultgren - Molecular chaperones and adhesive pili in pathogenic bacteria.

Ellen Li - Interactions of *Entamoeba histolytica* with intestinal cells.

Robert Munson - Pathogenesis of *Haemophilus* disease.

Staffan Normark - Adhesive organelles in microbial pathogenicity.

David Russell - Infection by the intracellular pathogens *Leishmania* and *Mycobacterium*.

David Sibley - Intracellular parasitism by the protozoan *Toxoplasma gondii*.

Samuel Stanley Jr. - Pathogenesis of the protozoan parasite *Entamoeba histolytica*.

*For additional information please write to Rosemary Garagnani,
Biology & Biomedical Sciences, Campus Box 8226, 660 S.
Euclid Ave., St. Louis, MO 63110-1093; or call 800-852-9074.*

POSITIONS OPEN

UNIVERSITY OF UMEÅ, SWEDEN, invites applications for a position as **SENIOR LECTURER IN PLANT PHYSIOLOGY** at the Department of Plant Physiology, available July 1, 1993, Reference number 322-2030-92.

Candidates should have a distinguished record of research in the area of plant physiology as well as proven experience and qualities in teaching. The appointee is expected to conduct and supervise independent research (75% of duty) and to participate in graduate and undergraduate teaching (25% of duty) at the department. In the evaluation of candidates equal consideration will be paid to documented research achievements and teaching skills.

Applications with curriculum vitae, copies of reprints and preprints and a statement of previous research achievements and teaching skills should be sent to: **University of Umeå, S-901 87 Umeå, Sweden.**

For further information, write or call: **Professor Gunnar Öquist, Department of Plant Physiology, University of Umeå, S-901 87 Umeå, Sweden. Telephone: +46-90-165416.**

Deadline for applications is December 4, 1992.

FACULTY POSITIONS DEPARTMENT OF BIOMEDICAL ENGINEERING UNIVERSITY OF VIRGINIA

The University of Virginia, Department of Biomedical Engineering, invites applications for two tenure-track faculty positions in **In Vivo Cellular Engineering** (interdisciplinary research in cell functions and technology) and one position in **Rehabilitation Engineering**. Requirements include a demonstrated record or strong potential for development of funded research, a commitment to BME graduate education, and a Ph.D. in biomedical engineering or equivalent. Affiliated with the School of Engineering and Applied Science and the School of Medicine, the department has 25 faculty and 50 graduate students and offers the M.E., M.S., and Ph.D. in biomedical engineering. Please send curriculum vitae, a brief description of research, up to three reprints, and the names of three references to: **Dr. J. S. Lee, Chair, Department of Biomedical Engineering, Box 377, University of Virginia Health Sciences Center, Charlottesville, VA 22908. University of Virginia is an Equal Opportunity Employer. Women and minorities are encouraged to apply.**

The Department of Botany, North Carolina State University, invites inquiries from minorities to explore the possibilities of a future entry-level **FACULTY POSITION**. Qualifications include a Ph.D. degree in Botany or a closely related discipline, research in an area recognized by competitive granting agencies, teaching experience and the desire to teach both undergraduate and graduate students. Send inquiries to:

**Ernest D. Seneca, Head
Department of Botany, Box 7612
North Carolina State University
Raleigh, NC 27695-7612**

The Department of Chemistry of Yale University seeks qualified candidates with Ph.D. degree to fill one or more positions as non-ladder **LECTURERS** in undergraduate chemistry laboratories. Responsibilities include the organization of the course, supervision of teaching assistants, and writing recommendations.

The appointment is effective July 1, 1993. Candidates should submit a résumé and three letters of recommendation to: **Lecturer Search, Yale University, Sterling Chemistry Laboratory, Box 6666, 225 Prospect Street, New Haven, CT 06511-8118. The deadline for applications is January 15, 1993. Yale University is an Affirmative Action/Equal Opportunity Employer.**

FREE PRODUCT INFORMATION SERVICE

Send a letter stating the specifics about your new laboratory and *Science* will put you in touch with the vendors whose products you will need. Write to:
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Washington, DC 20005**

POSTDOCTORAL SCIENTISTS

Hybritech Incorporated, a \$100 million subsidiary of Fortune 100 Eli Lilly and Company is a recognized leader in the development of *in vitro* and *in vivo* products utilizing monoclonal antibody technology. We have immediate and challenging opportunities for two Industrial Postdoctoral Scientists in our San Diego research facility.

One Postdoctoral position will focus on developing unique forms of bispecific monoclonal antibodies using molecular biology and computer modeling technology. The ideal candidate will have earned a PhD within the last three years and have experience in molecular biology and mammalian cell culture. Experience with computer modeling is desirable, but not required. The job code for this position is MDS/SM/11-20-92/PDS-MM.

The other position will be responsible for basic research in the area of targeted delivery of positron emitting isotopes. The successful candidate will have experience in organic synthesis, pharmacology, nuclear medicine and radiolabeling of small molecules with PET and other isotopes. The job code for this position is MDS/SM/11-20-92/PDS-CL.

Both Postdoctoral Scientists will be exposed to research in a team-oriented environment while carrying out individual research projects.

Hybritech offers a stimulating work environment and competitive salaries and benefits. Interested individuals should send their resume to: **HYBRITECH INCORPORATED, P.O. Box 269006, San Diego, CA 92196-9006. Please include the appropriate job code. Equal Opportunity Employer.**



POSTDOCTORAL INVESTIGATOR MATHEMATICAL ECOLOGY/ BIOLOGICAL OCEANOGRAPHY

Available immediately, opportunity for research in a large multi-investigator program. This is a one year appointment for research into the interaction between life history structure, ecological nonlinearities and physical spatial and temporal visibility. Ph.D. in Biology required. Expertise in resource completion models, nonlinear dynamics, and/or multi-trophic level models desired. Interested individuals should send CV and names of 3 references to:

**Dr. Hal Caswell
Woods Hole Oceanographic Institution
P.O. Box 54 PAL
Woods Hole, MA 02543**



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INSTITUTION**

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GRADUATE FELLOWSHIPS IN ANIMAL BIOTECHNOLOGY

The Department of Animal Science and Agricultural Biochemistry at the University of Delaware is seeking highly qualified candidates for USDA National Needs doctoral fellowships in the area of Animal Biotechnology. The awards are for a three year period and provide support in the form of a \$15,000 per year stipend plus a tuition scholarship.

The Department has a strong research emphasis on poultry health and physiology. By interfacing with both molecular biologists and experts in animal health and physiology, students receive training in all aspects of disease control and optimization of growth performance of poultry. The goal of the program is to produce graduates who are capable of developing multifaceted strategies involving both classical and molecular approaches to address challenges in animal production.

Eligibility. Citizens or native residents of the United States and its territories. Special consideration will be given to members of underrepresented minority groups, including but not limited to African Americans, Alaskan Natives, American Indians, Mexican Americans, Pacific Islanders, and Puerto Ricans.

Applications must be received by March 15, 1992.

For information write:

**Dr. Jack Gelb, Jr.
Graduate Studies Committee
Department of Animal Science
and Agricultural Biochemistry
040 Townsend Hall
University of Delaware
Newark, DE 19717-1303
(302) 831-2524**

The University of Delaware is an equal opportunity employer which encourages applications from minority group members and women

FACULTY POSITIONS

FALL 1993

Founded in 1855, The William Paterson College of New Jersey serves approximately 8,000 undergraduate students through its 31 undergraduate programs. Its graduate enrollment numbers approximately 2,000 students in 15 graduate degree programs. The college maintains a strategic commitment to the goals of excellence, diversity and community.

Unless otherwise indicated, faculty positions are tenure-track at the rank of Assistant Professor. Doctorate required. Salary dependent upon qualifications and experience. Candidates must have a demonstrated commitment to teaching, research and scholarship.

School of Humanities, Management and Social Sciences

Anthropology Program

Dr. Anita Barrow, Director

Biological/Physical Anthropology. Teach at the undergraduate and Master's levels. Geographical specialty open. Demonstrated excellence in teaching and active research required.

School of Science and Health

Department of Biology

Dr. Edith Wallace, Chair

Terrestrial or Freshwater Ecology. Teach ecology courses at the undergraduate (majors and non-majors) and graduate (Master's degree) levels, establish an active field-oriented research program involving students, and teach in multi-disciplinary Environmental Science program. Ph.D. in ecology and strong quantitative skills required; post-doctoral teaching and/or research experience preferred. Please include a statement of teaching and research interests, and selected reprints with application.

Department of Chemistry and Physics

Dr. G. M. Sharma, Chair

Analytical Chemistry. Primary responsibility to develop and teach ACS-approved analytical chemistry courses, and participate in our multi-disciplinary Environmental Science program. Ph.D. in analytical chemistry, and experience in use and development of modern instruments for chemical analysis required. Ability to secure grant funds and develop vigorous undergraduate research programs a strong plus. Please forward a research proposal with application.

Physics. Teach introductory courses at the undergraduate level and pursue an active research program. Dedication to teaching introductory courses and ability to pursue research required. Recent Ph.D. in physics with post-doctoral experience preferred. Please include a list of published papers and letter describing plans for teaching and research with application.

William Paterson College, on a 250-acre suburban campus 20 miles from New York City, is an accredited state college. WPC is an affirmative action/equal opportunity employer.

Please address all applications with vitae and names, addresses and phone numbers of three (3) references to the appropriate Chair by December 4, 1992 to:



**WILLIAM
PATERSON
COLLEGE**
Drawer SS
Wayne, NJ 07470

AMERICAN ASSOCIATION FOR CANCER RESEARCH

The American Association for Cancer Research (AACR) is a professional society of over 8,000 scientists and physicians involved in cancer research. Members in the AACR enjoy

- subscriptions to the journals *Cancer Research*, *Cell Growth & Differentiation (CG&D)*, and *Cancer Epidemiology, Biomarkers & Prevention*, at reduced member rates
- early notification of and reduced registration rates at the AACR Annual Meeting and Special Conferences
- Employment Register, Directory of Members, public education activities, and many other benefits

Special programs to provide enhanced career development opportunities for minority scientists include

- **Mentorship Program**
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American Association for Cancer Research

Public Ledger Building
620 Chestnut Street, Suite 816
Philadelphia, PA 19106-3483
Telephone: (215) 440-9300
FAX: (215) 440-9313

Director

Cell Adhesion/Extracellular Matrix Biology Laboratory

The University of Alabama at Birmingham (UAB) has committed substantial financial and space resources to establish a major new Laboratory to study the role of cell adhesion molecules and the extracellular matrix as they relate to fundamental questions in biology. This will be a multi-disciplinary Laboratory which will interact with a significant number of established investigators in several UAB departments including the Department of Biochemistry and the Department of Medicine's divisions of Oncology and Clinical Immunology and Rheumatology. The Laboratory will occupy 9,000 square feet of newly renovated Laboratory and office space and accommodate up to five (5) full-time established investigators and their support staff. The duties of the Director will be to lead the recruitment of other established investigators to the Laboratory, coordinate research activities within the Laboratory and between it and other extracellular matrix research personnel within The University of Alabama at Birmingham. This is a tenured position and will include an appointment as a Senior Scientist in the UAB Arthritis and Musculoskeletal Diseases Center. Qualified candidates will hold a PhD and/or a MD degree, have a successful history of competing at the national level for peer-reviewed funding and publication of the results of their research, and have demonstrated scientific leadership capabilities.

UAB is a rapidly growing institution with many opportunities in medical research at the fundamental science level, as well as opportunities for interaction between basic scientists and clinical investigators. Birmingham has a comfortable climate and offers an affordable and cosmopolitan lifestyle. UAB is an Affirmative Action/Equal Opportunity Employer.

Send curriculum vitae with cover letter to:

John D. Mountz, MD, PhD
Chairman
Search Committee
LHR Building, Room 405
The University of Alabama at Birmingham
Birmingham, AL 35294-0007

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Boehringer Mannheim is a rapidly growing leader in the field of Medical Diagnostics, Biochemicals and Medical research. This leadership has been attained through emphasis on quality and team effort. A challenging position is now available in our Indianapolis, IN headquarters for an experienced Research Investigator.

This position requires technical knowledge in immunochemistry, instrumentation, clinical chemistry and statistics. Individual must have a Ph.D. along with 3-7 years experience in clinical chemistry product development and/or application and evaluation.

Boehringer Mannheim offers an attractive compensation package including relocation assistance. Please send resume including salary history, to: **Boehringer Mannheim Corporation, Human Resources Department, Attn: BG, P.O. Box 50100, 9115 Hague Road, Indianapolis, IN 46250.** *Boehringer Mannheim Corporation is an Affirmative Action Employer committed to attracting, developing and retaining a culturally diverse workforce. Equal Opportunity Employer.*

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POSTDOCTORAL SCIENTIST

Bone Cell Biology

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an exciting opportunity available for a Postdoctoral Scientist to join the Bone Biology Unit. As part of a developing research group, the selected individual will study molecules involved in osteoblast proliferation, differentiation and function. The research will involve a multi-disciplinary approach using both cellular and molecular techniques and *in vitro* and *in vivo* models of bone cell function.

Qualified candidates will have a Ph.D. in Cell Biology or a related discipline. It is desirable to have a working knowledge of bone biology, experience in molecular-biology techniques and good communication skills. Publications in peer-reviewed journals is considered an advantage.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package and a stimulating team environment. For confidential consideration, send your resume to: Senior Employment Administrator, #H0520, SmithKline Beecham Pharmaceuticals, PO Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/D/V.



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CAREER OPPORTUNITIES

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ONCOGENE SCIENCE is expanding its research effort in small molecule drug discovery in a variety of therapeutic areas. We are actively seeking qualified Ph.D. level scientists interested in joining our team during this exciting and challenging period of growth. We are particularly interested in scientists with experience in the following areas:

GENE TRANSCRIPTION

Scientists with three to six years of postdoctoral experience in the analysis of eukaryotic gene transcription are invited to apply for positions in our Pharmaceutical Division. We have established an industry-leading approach for identification of new drug candidates which function by altering the transcription of physiologically important genes. We are currently establishing new teams for the analysis of specific genes in several new therapeutic areas.

ATHEROSCLEROSIS

Two positions are currently available in our cardiovascular disease group:

PROJECT MANAGER: This position requires greater than five years of postdoctoral experience in the area of lipoprotein biochemistry or molecular biology, superb organizational and communication skills, and proven managerial skills. Industry experience is preferred but not essential.

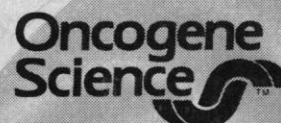
RESEARCH SCIENTIST: This position requires two to five years of postdoctoral experience in the regulation of lipid metabolism, growth factor activity, hepatocyte function or molecular genetics. Experience directly relevant to cardiovascular disease is preferred.

ANALYTICAL CHEMIST/NATURAL PRODUCTS

RESEARCH SCIENTIST: This position requires two to five years of postdoctoral experience in the isolation and identification of novel lead compounds from natural product extracts and analytical chemistry skills.

Oncogene Science offers an excellent compensation and benefits package along with unlimited growth potential. Qualified candidates may send their resumes, including references, to:

Oncogene Science, Inc.
106 Charles Lindbergh Blvd.
Uniondale, NY 11553, Attn: CC.
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**INTERNATIONAL LABORATORY FOR
RESEARCH
ON ANIMAL DISEASES (ILRAD)**

Director General

ILRAD was established in 1973 in Nairobi, Kenya as one of the research Centres of the Consultative Group on International Agricultural Research (CGIAR), a consortium of donor agencies which now supports 18 centres worldwide. ILRAD has a global mandate to work on the improved control of livestock diseases which seriously limit world food production and are impediments to sustainable agriculture. It applies the best of modern science in pursuit of this goal. ILRAD is a leader in the field of molecular parasitology and its application in vaccine development and has a substantial interest in the genetic basis of resistance to diseases. Presently, its research program is focused on trypanosomiasis and serious tick borne hemoprotozoan diseases such as theileriosis. ILRAD envisages an expanding range of interests to improve the productivity of livestock in developing nations.

ILRAD occupies a modern complex of research laboratories and supporting units at Kabete, on the outskirts of Nairobi. The Laboratory currently employs approximately 60 scientists and 350 support staff. It is governed by an international Board of Trustees consisting of 12 members.

Applicants are expected to have demonstrated capacity for dynamic leadership, innovative research, strategic planning, effective administration, and a comprehensive understanding of animal diseases and their control especially those pertinent to ILRAD's interests. International experience in a developing country is highly desirable. The position requires the ability to interact with international donor agencies, national governments, commercial organizations, and other laboratories in the CGIAR system. Candidates must be familiar with infectious diseases, biotechnology, immunology, molecular biology, genetics, epidemiology, the role of livestock in sustainable farming systems, and methods of technology transfer.

The position becomes available in April of 1994 upon the retirement of the incumbent Director General and will be for an initial five-year term that is renewable. Salary, and other emoluments, will be negotiated and will be consistent with similar positions in the CGIAR system. Deadline for receipt of applications is February 28, 1993. Applicants should make arrangements for three letters of reference to be sent to the Chair of the Board.

For further information contact: Dr. N. Ole Nielsen, Chair, Board of Trustees, ILRAD, c/o Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada N1G 2W1. 519-823-8800, ext. 4417. FAX: 519-837-3230.

Senior Toxicologist/ Risk Assessor

Leading national environmental engineering and consulting company has immediate opening for an experienced Risk Assessor. Sacramento, California location.

The successful candidate will deal with external and internal clients on projects involving public health and ecotoxicology. Heavy client interaction, project management, risk assessment/communication and business development are some important elements of this growing function.

MS or PhD in a biological science, Toxicology preferred, and several years experience, preferably in a consulting environment, in risk assessment and project management.

Please submit resume including salary history to: EMCON Associates, Dept. C-218, 1921 Ringwood Ave., San Jose, CA 95131-1721. Equal Opportunity Employer.



EMCON

Harvard Medical School-McLean Hospital Alcohol and Drug Abuse Research Center Behavioral Science Laboratory

Applications are invited for a junior faculty research position at the Harvard Medical School and the Behavioral Science Laboratory at the Alcohol and Drug Abuse Research Center, McLean Hospital (tenure-track). This is an excellent opportunity for a well-trained, productive, behavioral or biological scientist (Ph.D. or M.D./Ph.D.) to collaborate in an ongoing Behavioral Science Research program and to develop independent research projects supported by extramural funding.

Experience in behavioral pharmacology research (drug discrimination and drug self-administration) is essential. Responsibilities will include conducting research and supervision of pre- and post-doctoral fellows and research assistants. Macintosh computer skills are desirable. Applicants may participate in medical school teaching, but there are no formal teaching requirements. Applicants should have at least two years of post-doctoral experience and be qualified for an appointment at the Assistant Professor level. Salary is commensurate with experience.

The Alcohol and Drug Abuse Research Center conducts multidisciplinary basic and clinical research with a current emphasis on the behavioral pharmacology of substance abuse, the neuroendocrine consequences of cocaine and alcohol abuse, and the effects of drug abuse on the brain as assessed by brain imaging techniques (MRI, SPECT, and EEG). The Center's treatment research unit evaluates the safety and the effectiveness of new pharmacotherapies. The McLean Hospital, located in Belmont, a suburb of Boston, is an affiliate of the Harvard Medical School and the Massachusetts General Hospital.

Please send a curriculum vitae, reprints of at least five recent papers, a brief statement about research interests and goals, and the names of three references (including complete address and telephone number) to Dr. Nancy K. Mello, Professor of Psychology (Neuroscience) and Director, Alcohol and Drug Abuse Research Center, McLean Hospital, 115 Mill Street, Belmont, MA 02178.

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RESEARCH AND TRAINING OPPORTUNITIES IN PLANT BIOLOGY AT THE PENNSYLVANIA STATE UNIVERSITY

Graduate fellowships, undergraduate summer internships and postdoctoral position are available in a new interdisciplinary research training group in **ADVANCED ROOT BIOLOGY** at Penn State*. The goal of this program is to train a new group of biologists capable of solving the unique conceptual and technical problems presented by plant roots. Faculty participating in this program span the Colleges of Science, Agriculture and Engineering. Faculty expertise ranges from root architecture and development to root ecology, physiology, biochemistry, molecular biology, root/pathogen interactions, root nutrition, responses to stress, etc., providing an interdisciplinary environment which fosters original and creative research in plant biology. Research opportunities include collaborations with the Rodale Institute Research Center and the USDA Soil Microbiology Systems Laboratory. The Root Biology Group is a unit of the DOE/NSF/USDA Collaborative Research in Plant Biology program. Applicants please submit C.V., transcripts and three letters of reference to Dr. Hector E. Flores, Biotechnology Institute, The Pennsylvania State University, 315 Wartik Laboratory, University Park, PA 16802 (Phone: 814-865-2955; FAX: 814-863-1357). Deadline for Graduate Fellowship applications is February. *U.S. citizens and U.S. residents only. Penn State is an affirmative action, equal opportunity university.

**UNIVERSITY OF HAWAII AT MANOA
DEAN, COLLEGE OF NATURAL SCIENCES**

The College of Natural Sciences is one of four colleges in the Colleges of Arts and Sciences, and consists of about 150 faculty members in 8 departments (Botany, Chemistry, General Science, Information and Computer Sciences, Mathematics, Microbiology, Physics and Astronomy, and Zoology), 1 undergraduate program (Biology), and 2 interdisciplinary graduate specializations (Ecology, Evolution and Conservation Biology, and Marine Biology).

Duties: Chief academic and executive officer of the college reporting to the Sr. VP for Academic Affairs; administration with strong instruction and research responsibilities; oversees an annual budget in excess of \$10 million.

Minimum Qualifications: An earned doctorate and achievements that meet the university criteria for tenure as full professor in one of the departments of the college; demonstrated commitment to administration; a dynamic leader committed to excellence in teaching, research, and service.

Desirable Qualifications: Record of instituting effective teaching methods; knowledge of the various natural science fields, expressed through meeting the needs for modern instruction and research in these fields; appreciation of the potentials of disciplines to interact synergistically, expressed through the creation of interdisciplinary programs; experience in the diverse responsibilities characteristic of a natural science college; commitment to the ideals of a liberal education; ability to lead collegially, consult readily and delegate responsibly; vision of science education and research compatible with Hawaii's multicultural setting and its other unique attributes; ability to generate support by communicating the college mission; record/commitment to assist faculty in obtaining funds from public and private sources; experience and adaptability in fiscal and personnel management.

Starting Date: July 1, 1993 (preferred). *Salary:* Commensurate with qualifications.

Applications to be reviewed on January 4, 1993. Send letter, current cv, names, addresses and tel. nos. of 5 professional references and a concise statement of how applicant meets qualifications. Address to: **Dr. Kiyoshi Ikeda, Interim Assistant Vice President for Academic Affairs, University of Hawaii at Manoa, 2444 Dole Street, Bachman 105, Honolulu, Hawaii 96822.** Inquiries should be directed to **Dr. Rochelle McArthur (808) 956-4568.**

The University of Hawaii at Manoa is an Affirmative Action, Equal Employment Opportunity employer. Women, minority, and disabled candidates are encouraged to apply

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Bettie J. Graham, Ph.D.
National Center for Human Genome Research
National Institutes of Health
Building 38A, Room 610
9000 Rockville Pike
Bethesda, MD 20892
(301) 496-7531



**THE MASSACHUSETTS
GENERAL HOSPITAL (MGH)**

The MGH/NIH Postdoctoral Training Programs are seeking qualified candidates for the following research training opportunities: Basic Neuroscience for Neurologists and Neurosurgeons; Basic Science Research Training for Anesthetists; Burns and Trauma; Cardiology Research; Cell Structure and Function in Nephrology; Connective Tissue Structure, Function and Disease; Dermatology; Digestive Diseases; Endocrinology and Diabetes; Immunology & Tumors; Infectious Disease; NMR Research; Pulmonary Pathophysiology; Radiological Science; Reproductive and Developmental Biology.

Additionally, please note that the MGH is **very committed to providing training opportunities for qualified individuals currently underrepresented in science, namely minorities and women.** Please contact **Diane C. Gilbert, Research Affairs, MGH, Fruit St., Boston, MA 02114-2696.**

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We seek highly motivated, talented individuals to join our growing research team in protein biochemistry. Candidates should have a Ph.D. and 0-4 years of postdoctoral experience in protein chemistry and familiarity with most of the following: protein purification and characterization, enzymology, monoclonal antibodies, bioconjugate chemistry.

NEUROPHARMACOLOGIST

We seek a first-class neuropharmacologist specializing in animal models of acute and chronic neurodegenerative diseases and other neurologic disorders. Projects will include developing and implementing novel and established animal models to evaluate novel therapeutic agents as possible treatments for Alzheimer's disease, Parkinson's disease, and stroke. An important part of the job is the ability to motivate and work within a larger multidisciplinary team, including academic collaborators. Responsibilities will include building and supervising a group involved in *in vivo* research as well as participating in project teams to address scientific and clinical issues related to Alkermes' compounds. The successful candidate will hold the following qualifications:

- Ph.D. in neurobiology or related discipline with 10 plus years of post-Ph.D. experience
- Extensive knowledge of neuropharmacology and neuroanatomy
- Three to five years experience with animal models of chronic and acute neurodegenerative disorders, including stroke
- At least three years of pharmaceutical or biotechnology industry experience strongly preferred
- Familiarity or interest in models for other CNS diseases, such as brain tumor or infectious disease
- Established record of productivity and high motivation

For consideration, please send your C.V., including references, in confidence to Alkermes, Inc., Box DJK, 64 Sidney Street, Cambridge, MA 02139-4136

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The Department of Bionutrition, University of Bridgeport has immediate openings for adjunct faculty in human nutrition. The department focuses on the understanding of normal nutritional biochemistry as well as the pathophysiological changes in nutritional disorders. Excellence in teaching is emphasized.

Programs are beginning on both east and west coasts. Applicants must possess a master's degree (Ph.D. preferred) in nutrition, physiology, biochemistry or a related field.

To apply send current curriculum vitae to:

Dr. R. G. Lanfranchi
Department of Human Nutrition
University of Bridgeport
30 Hazel Street
Bridgeport, CT 06601

Equal Opportunity Employer.

TENURE-TRACK FACULTY POSITION

The Department of Bioengineering, University of Utah, has a tenure-track Ph.D. faculty position in biomechanics. Applicants should have strong physical science or engineering background with demonstrated experience in tissue biomechanics, cellular-level biomechanics, and the general application of biomechanics to the life sciences. Complete curriculum vitae, names of three references, and brief career goals/objectives statement should be sent to: **Dr. R. Normann, Chair, Department of Bioengineering, 2480 MEB, University of Utah, Salt Lake City, UT 84112, Telephone: (801) 581-8528, FAX: (801) 585-5361**, by February 15, 1993, or until the position is filled. *The University is an Affirmative Action/Equal Opportunity Employer, encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.*

SWARTHMORE COLLEGE BIOLOGY DEPARTMENT

The Biology Department at Swarthmore College seeks two biologists for one-year **FACULTY POSITIONS** beginning September 1993. Applications should be submitted by January 15, 1993.

MICROBIOLOGIST—Teaching includes a course in Microbiology, an advanced undergraduate course in the area of specialty, participation in the introductory biology course in Cellular and Molecular Biology, and possible participation in the senior evolution seminar. Ph.D. required. Excellent laboratory facilities are available. Please send curriculum vitae, statements of teaching and research interests, and three letters of recommendation to:

Dr. Amy Cheng Vollmer
Department of Biology, Swarthmore College, 500 College Avenue, Swarthmore, PA 19081.

MARINE BIOLOGIST—Teaching includes a course in Marine Biology, an advanced undergraduate course in the area of specialty, participation in the introductory biology course in Organismal and Population Biology, and possible participation in the senior evolution seminar. Ph.D. required. Excellent laboratory facilities are available. Please send curriculum vitae, statements of teaching and research interests, and three letters of recommendation to:

Dr. Rachel Ann Merz
Department of Biology, Swarthmore College, 500 College Avenue, Swarthmore, PA 19081.

Women and minority candidates are encouraged to apply. Swarthmore College is an Equal Opportunity Employer.

SCIENCE: The Division of Critical Studies at California Institute of the Arts invites applications for a full-time **FACULTY POSITION** in the physical sciences starting fall 1993; responsibilities include designing and teaching broad-based science courses appropriate for our curriculum in general education and the arts. No lab facilities. Teaching experience and Ph.D. required. Multidisciplinary background desirable. Committed to innovation in the visual and performing arts, CalArts offers B.F.A. and M.F.A. degrees in art, dance, film/video, music and theatre. Application deadline is January 15, 1993. Send cover letter, curriculum vitae, course proposals and three letters of recommendation to: **Dick Hebidge, Dean of Critical Studies, California Institute of the Arts, 24700 McBean Parkway, Valencia, CA 91355.**

POSITIONS OPEN

COGNITIVE NEUROSCIENCE: The Department of Psychology at Carnegie Mellon University invites applications from cognitive neuroscientists for a **FACULTY POSITION** preferably at, but not necessarily limited to, the junior level. Cognitive Neuroscience at Carnegie Mellon is characterized by attempts to arrive at cognitive theories derived from consideration of the computational properties of neural circuitry, from patterns of damage following brain injury, and from the postnatal development of the brain. A variety of different techniques ranging from connectionist modeling to animal studies are currently utilized. Opportunities for a variety of types of neuroimaging are also available. This hiring is part of a plan to make Cognitive Neuroscience an independent "track" within the department. Please send curriculum vitae, statement of research interests, representative papers, and three letters of recommendation to: **Cognitive Neuroscience Search Committee, Department of Psychology, Carnegie Mellon University, Pittsburgh, PA 15213-3890**. Application deadline: 1 February 1993. *Affirmative Action/Equal Opportunity Employer.*

THE SCHOOL FOR FIELD STUDIES in conjunction with Northeastern University

SUMMER FACULTY needed for the following programs which run June through August 1993: Marine Mammals—Pacific Northwest; Tropical River Ecology—Belize; Ethnobotany—Ecuador; Landscape Ecology—U.S. Rockies; Primates—Latin America; Raptors—North America. Full-time positions available for Conservation Biologists and Resource Management professionals. **QUALIFICATIONS**: Ph.D. preferred, M.S. minimum, field and research experience in the region, two years of teaching at the undergraduate level, leadership abilities, management experience, and the ability to live in a remote field setting with 16 to 32 undergraduates in an intensive teaching and research environment. **TO APPLY**: Send curriculum vitae, a detailed letter explaining skills and experience to: **SFS SAT Search, 16 Broadway, Beverly, MA 01915. FAX: 508-927-5127; Telephone: 508-927-7777**. Deadline: ASAP.

POSTDOCTORAL POSITION

Available immediately for Ph.D. or M.D. in molecular immunology. Research will involve studies on cellular and molecular mechanisms of human B cell differentiation. This area includes (1) biochemical purification and molecular cloning of various factors; and (2) regulation of lymphokine gene expression. Immunology training is not essential. The interested candidate is encouraged to send curriculum vitae to:

Dr. Y. S. Choi
Director, Laboratory of Cellular Immunology
Alton Ochsner Medical Foundation
1520 Jefferson Highway
New Orleans, LA 70121
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POSTDOCTORAL POSITION available to study repair of radiation-induced DNA damage in human cells. Primary research involves characterization of human enzymes that repair radiation- and bleomycin-induced DNA strand breaks (see *Nucleic Acids Research* 20:2573-2580, 1992). Other research areas include mechanistic studies of DNA repair inhibitors, modulation of cellular DNA repair by gene expression vectors, and the role of DNA synthesis in cellular radioresistance. Experience in DNA damage and repair, enzymology, or radiochemistry is required. Interested individuals should send curriculum vitae and names of three references to: **Dr. Timothy J. Jorgensen, Department of Radiation Medicine, Georgetown University Medical Center, 3800 Reservoir Road, N.W., Washington, D.C. 20007**. *Georgetown University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION: Available immediately for the neurobiological analysis of sensory function. Main emphasis involves the study of signal transduction mechanisms in mammalian taste receptor cells utilizing patch-clamp techniques. Immunocytochemical and *in situ* hybridization techniques are also employed. Prefer experience with patch-clamp recordings. Salary \$27,000. Send curriculum vitae and names of references to: **Dr. Scott Herness, Indiana University School of Medicine, Center for Medical Education, Ball State University, Muncie, IN 47306**. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

RESEARCH ASSOCIATE

Postdoctoral position available immediately for studying image formation mechanisms in STM of biological molecules. This is a collaboration between the Department of Physics and Astronomy and Los Alamos National Laboratories, and may require frequent travel to LANL. Send curriculum vitae and the names and addresses of three references by December 18, 1992, to: **Human Resources, University of New Mexico, 1717 Roma, NE, Albuquerque, NM 87131**. Reference your curriculum vitae with **Employment Requisition # 1104-92A**. *The University of New Mexico is an Affirmative Action/Equal Opportunity Employer.*

YORK UNIVERSITY

Department of Physical Education Graduate Program in Exercise and Health Science Faculty of Pure and Applied Science

Applications are invited for a tenure-track appointment in exercise physiology with an emphasis on biochemistry and/or health. A Ph.D. degree is required. Postdoctoral experience, publications in refereed journals and the ability to generate external funding will be given a high priority. Duties will include graduate and undergraduate teaching, graduate student supervision and the development of a productive research program. *York University is implementing a policy of employment equity, including affirmative action for women faculty. Qualified men and women are invited to apply.* Salary will be commensurate with experience. *In accordance with Canadian Immigration requirements priority will be given to Canadian citizens and permanent residents of Canada.* Applicants should send curriculum vitae, a cover letter stating future research goals, and the names and addresses of at least three persons who may act as references to: **Dr. David A. Hood, Chair, Exercise Physiology/Biochemistry Search Committee, Department of Physical Education, York University, 4700 Keele Street, North York, Ontario, M3J 1P3** by February 1, 1993. Duties commence July 1, 1993 subject to budgetary approval.

ASSISTANT PROFESSOR, MOLECULAR BIOLOGY: Tenure-track position, Fall 1993 at John Carroll University, a Catholic and Jesuit comprehensive university, offering B.S., M.S. and M.A. degrees. Candidates should be able to teach introductory biology, genetics, molecular genetics, their specialty and have experience in DNA molecular methods. Area of expertise is open, especially interested in population genetics, molecular genetics. Primary responsibility is teaching; academic counseling and research activity are expected. Submit a letter of application, curriculum vitae, statements of teaching and research interests, start-up costs, and three letters of recommendation by January 15, 1993 to: **E.J. Skoch, Department of Biology, John Carroll University, University Heights, OH 44118**. *An Equal Opportunity/Affirmative Action Employer; women and minorities especially encouraged to apply.*



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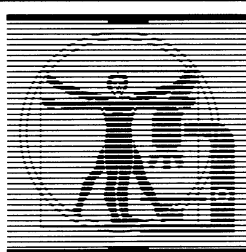
U.S. Applicants: Further information from:

Andi Sutherland, Santa Fe Institute
1660 Old Pecos Trail, Suite A
Santa Fe, NM 87501
505-989-7372; fax 505-982-0565
email: summerschool@santafe.edu.

Foreign Applicants: Provide a current resumé (including bibliography) along with a statement of your current research interests and comments about why you want to attend the School. Please have two scientists who know your work write letters recommending you for this program. Send material to above address. Please include your fax number and/or email address. Travel funding limited.

Women and minorities are encouraged to apply.

Application Deadline: FEBRUARY 1, 1993.



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Deadline January 15, 1993




**New Jersey Medical School
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UMDNJ-New Jersey Medical School is committed to the successful recruitment and retention of qualified women and members of minority groups. The expansion of our faculty and administrative recruitment program, marked by the development of a Minority Vitae Bank, is designed to maintain an extensive file of candidates who are seeking academic employment. This is not an offer of employment or a placement service. The New Jersey Medical School enthusiastically encourages applications from women and members of minority groups.

Please submit your CV and a cover letter, including a brief summation of your current academic rank and primary academic department, research/academic interests/clinical specialty and any additional background information which might prove helpful in placement. We would also appreciate knowing where you saw this advertisement. Please submit all information to: **Dr. Anthony J. Garro, Associate Dean for Academic Affairs, UMDNJ-New Jersey Medical School, 185 South Orange Avenue MSB C671, University Heights, Newark, NJ 07103-2714.** UMDNJ, NJ's university of the health sciences, is an Affirmative Action/Equal Employment Opportunity Employer, m/f/h/v, and a member of the University Health System of New Jersey.





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TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER SCHOOL OF MEDICINE

CHAIR DEPARTMENT OF PHARMACOLOGY

The Texas Tech University Health Sciences Center School of Medicine invites applications for the position of Chair of the Department of Pharmacology. Applicants should have a demonstrated ability in research, a commitment to the education of graduate students, medical students and postdoctoral fellows, and a desire to provide continuing leadership in building the Department to a level of national prominence. We are seeking candidates who have a record of consistent research productivity and support through extramural sources, and have served on grant review boards at the national level. Interested applicants should send their curriculum vitae, the names and addresses of three references, and a brief statement indicating their interest in the position to:

Richard M. Lampe, M.D.
Professor and Chairman
Department of Pediatrics

Chairman, Pharmacology Search Committee
Texas Tech University Health Sciences Center
Lubbock, Texas 79430

Texas Tech University Health Sciences Center School of Medicine is an Affirmative Action Institution.

THOMAS JEFFERSON UNIVERSITY College of Graduate Studies

offers Ph.D. training in
**Biochemistry and Molecular Biology,
Molecular Genetics, Immunology,
Microbiology and Molecular Virology,
Molecular Pharmacology and
Structural Biology, Pathology and Cell Biology**

**Jefferson Cancer Institute,
Carlo M. Croce, M.D., Director;
Jefferson Institute of Molecular Medicine,
Darwin J. Prockop, M.D., Ph.D., Director;
Alcohol Research Center,
Emanuel Rubin, M.D., Director**

Thomas Jefferson University has established a flexible entry program for graduate studies in biochemistry and molecular biology, molecular genetics, immunology, microbiology and molecular virology, molecular pharmacology and structural biology and pathology and cell biology through several departmental and interdepartmental programs. In the first year, students will take a common core curriculum consisting of courses in biochemistry, molecular biology and cell biology, followed by specialized courses in their particular area of concentration. After performing research rotations in three laboratories, students will choose their thesis advisor and the discipline for the Ph.D. degree.

Students accepted into the program will be provided with full financial support including tuition and a competitive stipend. For interested and qualified students, an M.D./Ph.D. program is available.

For further information regarding September 1993 entrance, call or write:



**Thomas
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University**

Ms. Jessie Pervall
Admissions Coordinator
College of Graduate Studies
Thomas Jefferson University
1020 Locust Street
Philadelphia, PA 19107-6799
(215)955-4400



Yale UNIVERSITY

The Department of Biology at Yale University is seeking candidates for two tenured faculty positions: one in the field of **Plant Molecular Genetics** and one in the field of **Neuron Growth & Synaptogenesis**. The successful applicant for either position is expected to conduct a vigorous research program, to have a proven record in attracting grant support, and to have a proven capacity and interest in teaching at the undergraduate and graduate levels.

Plant Molecular Biologist

Applications are invited from individuals using both classical and molecular approaches to study plant genetics.

Please send curriculum vitae, description of research interests and the names and addresses of at least three references by January 15, 1993 to:

Plant Molecular Genetics Search Committee
c/o Chair, Department of Biology
Yale University
P.O. Box 6666
New Haven, CT 06511-8112

Developmental Neurobiologist

Applications are invited from individuals using anatomical, physiological, genetic and/or molecular approaches to the development of neuronal morphology and connectivity.

Please send curriculum vitae, description of research interests and the names and addresses of at least three references by January 15, 1993 to:

Neuron Growth & Synaptogenesis Committee
c/o Chair, Department of Biology
Yale University
P.O. Box 6666
New Haven, CT 06511-8112

Yale University is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are especially urged to apply.



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Minority Junior
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For further information contact:

Joan Y. Reede, M.D.

HARVARD MEDICAL SCHOOL
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Postdoctoral Fellows

accelerate the rate of discovery

At Lilly Research Laboratories, a division of Eli Lilly and Company, we know that, as the pace of scientific discovery quickens, research strategies must quickly accommodate new ideas. Consequently, we continue to strengthen our technological capabilities by recruiting outstanding scientists and supporting them with the most sophisticated research tools available.

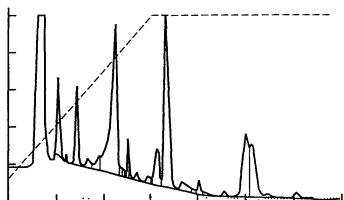
A postdoctoral fellowship here offers several impressive advantages. Working with highly respected Lilly scientists on state-of-the-art instruments and equipment, you'll gain in-depth research training and experience while becoming acquainted with the pharmaceutical industry. In addition, you'll have the opportunity to share your knowledge as our postdoctoral scientists are encouraged to publish, attend at least one major conference a year, and interact with other Lilly scientists through our seminar series and informal meetings.

All positions are for one year, renewable for a second year upon mutual agreement. Eli Lilly and Company provides a comprehensive salary and benefits program, including relocation expenses. Candidates with no more than one previous postdoctoral experience are encouraged to send a CV to: Albert L. Peyton, PhD, PhD Recruitment, Dept. SC-1113, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285.

We are an equal opportunity employer committed to diversity in the workplace.

Lilly

— SCIENTIST —



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Cell Therapeutics, Inc. is an innovative biopharmaceutical start-up company focused on the design and commercial development of drugs to treat a variety of significant human diseases. CTI currently has an opening for a Scientist in its Cancer Biology Laboratory.

You will study signal transduction by myeloid growth factors. Must know basic molecular techniques of PCR, cloning, nucleic acid assays, mammalian tissue culture and DNA manipulation. Ph.D in Biochemistry, Microbiology, Chemistry or Molecular Biology and two years post doctoral experience.

CTI is located in downtown Seattle, with views of Puget Sound and the Olympic Mts.. We offer an attractive compensation and benefits package, and an environment where your contribution can make a significant difference. For consideration, send or fax your resume to: **Human Resources - Dept. SCB, Cell Therapeutics, Inc., 201 Elliott Avenue West, Suite 400, Seattle, WA 98119. Fax: (206) 284-6206.** Equal Opportunity Employer.



CTI

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Our Radiopharmaceutical Research and Development organization, a major contributor to a new venture between Du Pont and Merck, is committed to improving patient diagnosis and treatment through quality products and services that expand the advantages of radiopharmaceuticals. This organization enjoys a unique culture where challenge, creativity and solutions are all part of our vision.

RESEARCH PHARMACOLOGIST

As part of our Pharmacology team, you will be responsible for the design, execution and reporting of preclinical animal studies to document the efficacy and safety of novel radiopharmaceuticals used for the diagnosis of cardiovascular and CNS diseases. Our Research Pharmacologist participates in the definition of research program directions and represents the company at scientific meetings and customer functions. In addition, this position is responsible for supervising a small research laboratory.

A Ph.D. in Pharmacology, Physiology or a related discipline and 5-8 years of experience are required.

We offer a competitive compensation package and a full range of benefits. Qualified applicants should send a resume to: Human

**DU PONT
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Resources Dept., The Du Pont Merck Pharmaceutical Company, 331 Treble Cove Road, North Billerica, MA 01862. An Equal Opportunity Employer, M/F/D/V.

POSITIONS OPEN

BIOPHYSICAL CHEMISTRY POSTDOCTORAL POSITION. The interactions of prosthetic groups and ligands with regulatory proteins, enzymes and visual pigments are being studied by Raman spectroscopy employing novel approaches in a state-of-the-art equipped lab. Applicants should have a strong background in biophysics and/or biochemistry. Send curriculum vitae and three letters of recommendation to: **Professor Robert Callender, Physics Department, City College of New York, New York, NY 10031.** An Equal Opportunity Employer.

POSTDOCTORAL POSITION

Fred Hutchinson Cancer Research Center

A postdoctoral position is available to do basic research in human molecular immunology and molecular genetics. Options for study include structural and functional analysis of newly discovered genes found within the MHC and functional studies of previously characterized nonclassical class I antigens (PNAS 89:2669, PNAS 89:3947). Seattle and the surrounding area provide an exceptional living environment and the Hutchinson Center provides an outstanding scientific environment. The benefits package is excellent and the salary is competitive. Funding is available for two years with the possibility of extension. Applicants should have a Ph.D. and experience in molecular biology. Please send curriculum vitae, a summary of your research experience and the names of three references to: **Daniel E. Geraghty, Ph.D., Fred Hutchinson Cancer Research Center, 1124 Columbia Street, Seattle, WA 98104-2092.** An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS: Molecular Mechanisms of Antisense Oligonucleotide Therapy. Positions available immediately for individuals with an interest in cancer pharmacology and a strong background in molecular biology. Send curriculum vitae and names of three references to: **Dr. R. L. Juliano, Department of Pharmacology, UNC-CH, Chapel Hill, NC 27599-7365.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Reproductive Biology Research Training Grant. Available immediately. Interdisciplinary training with faculty members, Laboratory of Human Reproduction and Reproductive Biology. Recent Ph.D.'s with liberal arts, medical, agricultural, or veterinary science background and demonstrated performance in animal reproductive biology. Only U.S. citizens, noncitizen nationals, and permanent residents are eligible. Send résumé, summary of research interests, and three reference letters to: **Dr. John D. Biggers, Harvard Medical School, LHRB, 45 Shattuck Street, Boston, MA 02115.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the regulation of mitochondrially encoded genes by interferons (see Shan et al. EMBO J. 9, 4307, 1990). This N.I.H.-funded project is studying the mechanism by which interferon down-regulates mRNA levels. Candidates should have training in Cell or Molecular Biology. Familiarity with radioisotopic labelling procedures advantageous. Send curriculum vitae and two references to: **Dr. John A. Lewis, Department of Anatomy and Cell Biology, SUNY Health Science Center, 450 Clarkson Avenue, Brooklyn, NY 11203.** Equal Opportunity/Affirmative Action Employer. DMC#CR0390.

POSTDOCTORAL POSITION IN SOIL HYDROLOGY OR SOIL BIOGEOCHEMISTRY. Position available immediately to study landscape-level variations in hydrologic losses and transformations of different forms of nitrogen from soils. The project is part of a larger effort to understand and model fluxes and transformation of N in a mixed agricultural/forested landscape. Experience with soil hydrology and lysimeters is desirable. Please send cover letter, curriculum vitae and three letters of recommendation to: **Dr. Lars O. Hedin and Dr. G. Philip Robertson, W. K. Kellogg Biological Station, Michigan State University, Hickory Corners, MI 49060.** MSU is an Affirmative Action/Equal Opportunity Institution.

POSITIONS OPEN

POSTDOCTORAL POSITIONS in RNA-protein recognition and RNA structure. Our laboratory uses biochemical, biophysical, and biological methods to identify determinants of sequence-specific RNA recognition, particularly focusing on small peptide-RNA model systems. Projects include determination of peptide structures and prediction of RNA tertiary structure. Applicants should send curriculum vitae, names and addresses of three references, and a one-paragraph description of research interests to: **Alan Frankel, Department of Biochemistry and Biophysics, Gladstone Institute of Virology and Immunology, UCSF, PO Box 419100, San Francisco, CA 94141.**

POSTDOCTORAL POSITION IN MOLECULAR GENETICS available immediately to study molecular aspects of the fungus *Candida albicans*. Projects include the mechanisms of differentiation and pathogenesis of the organism and the structure/function and molecular interactions of the fungal specific translation elongation factor three. The candidate should be experienced in molecular genetics techniques and biochemistry, experience in yeast molecular genetics desirable. Send curriculum vitae and names of three individuals to be contacted for references to: **Dr. William A. Fonzi, Department of Microbiology & Molecular Genetics, College of Medicine, University of California, Irvine, Irvine, CA 92717-4025.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL NIH FELLOWSHIP in second-messenger signaling pathways in, and secretion by, single gonadal cells. Equal Opportunity Employer. Please send cover letter and curriculum vitae to: **Dr. J. D. Veldhuis, Box 202 Department of Internal Medicine, University of Virginia Health Sciences Center, Charlottesville, VA 22908.**

FELLOWSHIPS IN MATHEMATICS AND MOLECULAR BIOLOGY

The Program in Mathematics and Molecular Biology has graduate and postdoctoral fellowship support available. Current topics in the Program include geometry, topology, and sequence analysis of DNA, molecular dynamics, and mapping functions and algorithms for DNA and protein structure prediction. Other areas will be considered. Fellowships can be held at any university or college in the United States. Awards made assuming continuation of funding. **Deadline for Applications:** March 1, 1993. *Women and minorities are encouraged to apply.* Apply to: **PMMB, 103 Donner Lab, University of California, Berkeley, CA 94720.** E-mail: sylviaj@violet.berkeley.edu.

AMERICAN MUSEUM OF NATURAL HISTORY FELLOWSHIPS AND GRANTS

Fellowships—Research/Museum Fellowships are available to postdoctoral researchers and established scholars starting in summer and fall 1993. The fellowships support independent research in association with the resident staff. Areas include vertebrate and invertebrate zoology, paleozoology, anthropology, mineral sciences, and the field of museum education as it relates to museums or planetariums. This year, an additional fellowship in marine zoology and/or paleontology is available and will be funded by the Lerner-Gray Fund for Marine Research. All fellowship applications, including Chapman (ornithology) and Lerner-Gray, should be postmarked by January 15, 1993.

Grants—Research grants are available to advanced predoctoral candidates and recent postdoctoral researchers in the field of zoology and paleontology. Awards average \$700. Postmark dates vary for each grant program:

- Frank M. Chapman (Ornithology)—**January 15, 1993**
 - Theodore Roosevelt (North American Fauna)—**February 15, 1993**
 - Lerner-Gray (Marine Zoology)—**March 15, 1993**
- Request information and application forms from: **The Office of Grants and Fellowships, American Museum of Natural History, Department H, Central Park West at 79th Street, New York, NY 10024.**

POSITIONS OPEN

POSTDOCTORAL FELLOW IN NEUROSCIENCE

The Los Alamos National Laboratory Biophysics Group has an immediate postdoctoral position open for a Neuroscientist in the field of biomagnetic imaging of human brain function. The biomagnetic research program at Los Alamos is part of the Center for Magnetoencephalography, a collaborative effort between Los Alamos, the University of New Mexico and the Veterans Affairs Medical Center in Albuquerque which represents the largest biomagnetic research group in the U.S. The research program includes advanced sensor development and image reconstruction methods, novel approaches to neural source reconstruction methods, clinical applications of biomagnetism and basic neuroscience experiments on human brain function. Available instrumentation includes two biomagnetic seven channel systems (one in Los Alamos and one in Albuquerque), access to a large Bti 37 channel system, and a sophisticated network of scientific workstation computers. A large multi-channel system is under construction. Currently, there are developed protocols involving studies of the visual, auditory and somatosensory areas of the human brain. Candidates for this position should have a background in basic neuroscience with experience in evoked responses, EEG and/or MEG recordings and computational modeling desirable. The successful candidate will be expected to be involved with the current biomagnetic programs in functional localization, participate in the clinical trials of the Center for MEG and also develop new protocols of his or her own. Some background in computer usage is an advantage in this program. For initial consideration, send curriculum vitae and a statement of research interests to: **Charles Wood, P-6, MS M715, Los Alamos National Laboratory, Los Alamos, NM 87545.** To formally apply, send Laboratory application, curriculum vitae, three letters of reference and graduate and undergraduate transcripts to: **Mary Anne With (MS P280), Human Resources Development Division PD-92-118, Los Alamos National Laboratory, Los Alamos, NM 87545.** Affirmative Action/Equal Opportunity Employer. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy.

Dr. Khushi L. Matta
Roswell Park Cancer Institute
Elm and Carlton Streets
Buffalo, NY 14263

POSTDOCTORAL RESEARCHERS: Affiliate positions (2) available immediately. (1) Carbohydrate chemist with direct experience desired to engage in oligosaccharide syntheses. NMR and HPLC skills helpful. (2) Immunologist experienced with carbohydrate determinants desired to engage in antibody production and characterization. Skills in immunohistochemistry, protein purification and/or affinity chromatography are helpful. Minimum stipend of \$20,000 offered. Send curriculum vitae plus two references to the above address. **Roswell Park is an M/F/D/V Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE—A postdoctoral position is available to study the structures of proteins and glycoproteins by mass spectrometry. Ph.D. degree in biochemistry, organic chemistry or a related discipline with emphasis on mass spectrometry is required. Salary range is \$21,000 to \$23,004 depending on qualifications. Send curriculum vitae and names of three references by December 31, 1992 to: **Dr. M. Deinzer, Department of Agricultural Chemistry, Oregon State University, ALS 1007, Corvallis, OR 97331-7301.** OSU is an Affirmative Action/Equal Employment Opportunity Employer and is responsive to dual-career needs. **Position #001-1401.**

POSTDOCTORAL RESEARCH ASSOCIATE available for a recent Ph.D. to study the molecular mechanisms of virulence of parasitic protozoa. Experience in protein chemistry and immunological techniques is highly desirable. Applicants should have an interest in parasitology and molecular biology. Salary range \$18,000 to \$25,000. Review of applications will begin on November 27, 1992 and applications will be accepted until the position is filled. Send curriculum vitae and names of three references to: **Dr. John Burand, Department of Microbiology, University of Massachusetts, Amherst, MA 01003.** Affirmative Action/Equal Opportunity Employer.

NYU
Medical
Center

Assistant Research Scientist

We currently have a Post Doctoral position available in the laboratory of Dr. Robert Boorstein to study molecular biology and chemistry of DNA damage and DNA repair. You'll participate in the characterization of newly developed DNA repair mutants and in understanding the role of DNA repair enzymes and cell cycle genes in preventing mutagenesis and carcinogenesis.

Experience in biochemistry, chemistry, or molecular biology is desirable. Salary is competitive.

Please send your C.V. to Ms. Singh, Human Resources Dept., NYU Medical Center, 550 First Avenue, New York, NY 10016. EOE, M/F.



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We are proud to announce opportunities for Research Scientists with appropriate scientific background and B.S./M.S./Ph.D. degree.

At Sterling Winthrop, you'll enjoy a highly competitive salary and benefits package. Our research facilities will be relocating to a new state-of-the-art research center in Upper Providence Township, PA (30 miles west of Philadelphia) in approximately 1993. We invite you to share in our opportunities now and in the future. For confidential consideration, forward your resume and salary requirements to:



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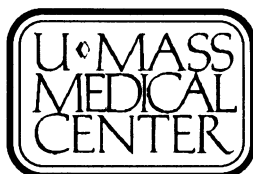
Vice Chancellor for Research University of Massachusetts Medical Center

The University of Massachusetts Medical Center invites applications for the newly established position of Vice Chancellor for Research. We seek candidates with outstanding scientific credentials who will make a strong commitment to facilitating the continued development of basic and clinical research programs, both on the University of Massachusetts Medical School campus and between our Medical Center investigators and the private sector. The successful candidate will be appointed to the faculty in a basic science or clinical department. Continued pursuit of an active research program is encouraged and supported.

The University of Massachusetts Medical Center has a faculty of internationally recognized investigators actively involved in biomedical research. A broad spectrum of investigator-initiated research grants as well as several training grants and program projects supports research training of graduate students, M.D./Ph.D. students, postdoctoral and clinical fellows.

The Vice Chancellor for Research, reporting directly to the Chancellor, will have line responsibility for research administration and technology transfer and will have a key role in research development. The specific responsibilities of the Vice Chancellor for Research include: 1) serving as the representative of and advocate for the research community by providing advice and consultation to the Chancellor, Deans, Academic Chairs and Faculty on policy that will enhance the institutional research mission; 2) representing the research community in matters pertinent to local, state and federal research-related issues; 3) facilitating development of program projects and other consortium research funding opportunities between and among basic and clinical scientists; 4) working with individual investigators and the Development Office to facilitate initiatives for funding of basic and clinical research; 5) chairing the Scientific Council, which represents basic scientists and clinical investigators in each principal discipline at the University of Massachusetts Medical Center; and 6) overseeing the Office of Research Administration and the Office of Technology Transfer.

Please send curriculum vitae to Dr. Gary S. Stein, Chair, Vice Chancellor for Research Committee, Department of Cell Biology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.



The University of Massachusetts Medical Center is an Equal Opportunity/Affirmative Action Employer; women and minorities are particularly encouraged to apply.

RESEARCH ASSOCIATES Immunology

Join an exciting private biotechnology company located in the San Francisco Bay Area which is pioneering the human therapeutic applications of gene targeting and related technologies. Experienced RAs required for the following positions:

Research Associate in Molecular Immunology - Essential functions include molecular and cellular analysis of genetically modified T lymphocytes; purification and culture of T lymphocytes; introduction of genes into mammalian cells; analysis of cell surface receptors by flow cytometry; cytokine and cytotoxicity assays; immunoprecipitation, immunoblotting and related biochemical techniques. Experience with T lymphocytes essential, molecular biology desirable. B.S./B.A. plus 3-5 years related laboratory experience required.

Research Associate in Experimental Immunobiology - Essential functions include analysis of lymphocyte function *in vitro* and *in vivo*; proliferation, cytokine and cytotoxicity assays; evaluation of immune responses to tumor and viral antigens in animal models; tissue culture. Experience with T lymphocytes (human or rodent) essential; experimental tumor immunology highly desirable. B.S./B.A. plus 3-5 years experience in experimental cellular immunology required.

This is an exciting opportunity for a person willing to contribute energy, flexibility, and initiative to a successful, rapidly-growing company committed to developing novel therapies for the treatment of serious human disease. We offer a competitive salary, excellent benefits, and equity participation. For immediate consideration send your resume to: Paula Bogard (11.3.3), Cell Genesys, 322 Lakeside Dr., Foster City, CA 94404. An equal opportunity employer.



CELL • GENESYS

Desert Research Institute (DRI) is actively seeking employment inquiries from recent minority college graduates and scientists currently active in such environmental research areas as:

- Geosciences
- Biology
- Hydrology
- GIS/Remote Sensing
- Atmospheric Physics
- Soil Science
- Chemistry
- Archaeology
- Anthropology
- Ecology

As an international environmental research organization, DRI is a statewide division of the University and Community College System of Nevada. DRI is engaged in balanced environmental research for effective management of the earth's natural resources.

For more information, please contact:



Recruitment Office
Desert Research Institute
University and Community College
System of Nevada
P.O. Box 19040
Las Vegas, NV 89132-0040

AA/EOE



**THE UNIVERSITY OF CONNECTICUT
 HEALTH CENTER**

A Strong Commitment to Minority Graduate Education

In pursuit of its goal of promoting diversity within its student body and increasing the number of basic scientists from traditionally underrepresented groups, the University of Connecticut Health Center invites minority students with an interest in graduate education in the biomedical sciences to join us. The Graduate School at the Health Center is a division of the University of Connecticut Graduate School. The University of Connecticut Health Center is located in Farmington, Connecticut, just west of Hartford, midway between Boston and New York.

Programs leading to the Ph.D. degree are offered in the following areas:

CELL BIOLOGY	MOLECULAR BIOLOGY AND BIOCHEMISTRY
DEVELOPMENTAL BIOLOGY	NEUROSCIENCE
IMMUNOLOGY	ORAL BIOLOGY
PHARMACOLOGY AND CELL & MOLECULAR TOXICOLOGY	

Programs leading to the Master's degree are offered in:

PUBLIC HEALTH	DENTAL SCIENCE
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Combined degrees including MD/Ph.D., DMD/Ph.D., MD/MPH or DMD/MPH are available through programs jointly administered by the Graduate School and the Schools of Medicine or Dental Medicine.

Undergraduates are invited to apply for summer research internships available at the Health Center. Stipends and housing are available.

For further information contact:

Office of Minority Student Affairs or,
 Graduate Student Affairs Office AG059
 University of Connecticut Health Center
 Farmington, Connecticut 06030
 (203) 679-3483 or (203) 679-3150

Wetland or Marine Ecologist

The California Coastal Commission, a state planning and regulatory agency, is seeking an ecologist to work on a long-term marine resource mitigation project. The project, which is a requirement of the Commission's permit for the San Onofre nuclear power plant, involves designing, constructing, and monitoring the restoration of 150 acres of southern California wetlands and the creation of 300 acres of artificial reef. Southern California Edison Company, the power plant operator, is responsible for the design and construction work; the Commission is responsible for monitoring and evaluating the project.

The ecologist will work on an interdisciplinary team which designs the mitigation project, monitors its performance, and evaluates its effectiveness. Specific responsibilities include designing a long-term sampling program, evaluating contractor reports, providing advice on scientific issues, and working with the Coastal Commission, Southern California Edison, and a scientific advisory panel to achieve the project's objectives. The ecologist could work either under a long-term contract or a shorter-term post-doctoral assignment.

A masters degree or a doctorate in marine biology, ecology, or a related field is required. Preference will be given to candidates with post-doctoral or professional experience in wetland ecology and restoration and with strong analytical and statistical skills.

We offer competitive salary, excellent benefits, and an attractive working environment in downtown San Francisco. Send resume or curriculum vitae to Susan Hansch, California Coastal Commission, 45 Fremont Street, Suite 2000, San Francisco, California 94105.

Minorities and women are strongly encouraged to apply.



POSTDOCTORAL FELLOWSHIPS at the WOODS HOLE OCEANOGRAPHIC INSTITUTION

- * Applied Ocean Physics & Engineering
- * Biology * Marine Chemistry & Geochemistry
- * Marine Geology & Geophysics
- * Physical Oceanography

Applications are invited from new or recent doctorates in science or engineering with interests in physical oceanography, meteorology, marine chemistry, marine geology and geophysics, biological oceanography, or applied ocean physics and engineering. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise.

*** Marine Policy and Ocean Management**

Research fellowships are offered in the social sciences or natural sciences with emphasis on economics and law. Topics of special current interest include marine biological diversity, marine reserves, sea-level change, advanced marine technologies, historic shipwrecks, and Arctic affairs. Other research interests also may be appropriate.

Fellowships are awarded for one year (extendable up to two years in special circumstances) with a stipend of \$34,500 plus group health insurance and a modest research budget. Recipients are encouraged to pursue their own research interests independently or in association with resident staff. Completed applications must be received by January 15, 1993 for the 1993-94 awards. Awards will be announced in March. Write for application forms to: Dean of Graduate Studies, P.O. Box 5, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543.



**WOODS HOLE
 OCEANOGRAPHIC
 INSTITUTION**

An equal opportunity/affirmative action employer

DIRECTOR

NATIONAL CENTER FOR RESEARCH RESOURCES, NATIONAL INSTITUTES OF HEALTH

The National Center for Research Resources (NCRR) is seeking applicants for the position of Director, National Center for Research Resources. This position is located in Bethesda, Maryland, and is a permanent full-time position with a salary range of \$90,000 to \$112,100 per annum commensurate with qualifications. Physicians may be eligible for Physician Comparability Allowance ranging with \$5,000 to \$20,000 per year.

A recruitment bonus of up to 25 percent of base pay may be available to a non-federal selectee for this position.

A relocation bonus of up to 25 percent of base pay (subject to approval) may be available to a permanent Federal employee who must relocate to accept this position.

The Director, NCRR is responsible for providing leadership and guidance in the development and support of multi-categorical research resources needed for health-related research. Plans, directs, coordinates, and administers the Center's programs to provide the most effective and efficient support for the health research activities of the PHS research institutes and other public and private organizations involved in biomedical research. Applicants for this Senior Executive Service position must have a Doctor of Medicine degree, Doctor of Veterinary Medicine degree or Ph. D. in one of the health sciences (or equivalent combination of experience and training). Send applications to Ms. Pathenia Wiggins, NCRR, 9000 Rockville Pike, Building 31, Room 3B40, Bethesda, MD 20892. For application forms and a copy of the requirements contact Ms. Wiggins at NCRR on (301)496-1524. Deadline for applicants is 11/27/92.

Public Health Service Commissioned Officers interested in performing duties of the position within the Commissioned Corps must submit a resume to the above address.



NIH is an Equal Opportunity Employer

RESEARCH IN MOLECULAR PHARMACOLOGY

The Department of Pharmacology, Case Western Reserve University invites applications for two programs. The **Summer Program for Undergraduate Research** places sophomore or junior undergraduates in research laboratories for a 10-week period. A stipend of \$2500 plus lodging is supplied. Travel expenses may also be available. Students participate in weekly activities pertinent to careers in biomedical research. Application deadline March 1, 1993. The **Biomedical Sciences Training Program** admits students to a Ph.D. program in basic medical research on a non-departmental basis. After the first year students choose a mentor and specialty program. Competitive stipends and tuition are provided to all students. Application deadline January 15, 1993. *Case Western Reserve University is an Affirmative Action/Equal Opportunity Employer. The Department of Pharmacology encourages minority students to apply to:*

Dr. Ruth Siegel
Department of Pharmacology
Case Western Reserve University
Cleveland, OH 44106-4965

ASSISTANT PROFESSOR OF MEDICINE AND IMMUNOLOGY

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE AT CHICAGO

The Department of Microbiology and Immunology, an integral component of the University's basic science campus, is seeking to fill a position at the level of Assistant Professor (tenure track; Associate and Full Professor candidates will also be considered) in the area of molecular virology, retrovirology or molecular immunology. The successful candidate will be expected to develop a strong independent research program with external funding. Generous space and start-up funds are available. Applicants should have an M.D. or Ph.D. degree and at least two years of Postdoctoral experience.

Applicants should provide the search committee with a curriculum vitae, at least three letters of recommendation and a brief statement of future research interests and plans. The first series of candidates will be considered after December 1, 1992 and applications will be accepted until the position is filled.

Send applications to: Dr. Edward P. Cohen, Chair, Search Committee, Department of Microbiology and Immunology, University of Illinois College of Medicine, P.O. Box 6988, Chicago, Illinois 60680.

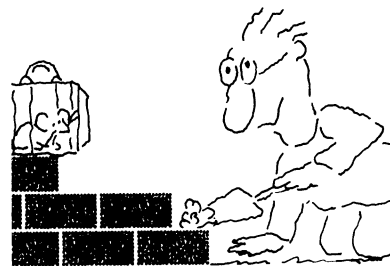
UIC is an AA/EOE.

ASSOCIATE DIRECTOR CANCER PREVENTION AND CONTROL RESEARCH

The University of Kansas Cancer Center and the Department of Preventive Medicine, University of Kansas School of Medicine, will provide a tenure track appointment of appropriate academic rank to an innovative scientist interested in developing a division of cancer prevention and control research. The focus of the new division's research programs will be acquired and inherited genetic predisposition to cancer. It is expected that the individual will have a strong personal research program, strong interpersonal and leadership skills, interest in preventive oncology education, and demonstrated/developing administrative expertise. A physician-scientist is preferred, with subspecialty training/career experience that is applicable to a genetic approach to cancer prevention and control. The projected division will encompass investigators with a full range of basic and applied interests, and will be expected to seek out and serve regional needs. Attractive personal and divisional start-up budgets, together with dedicated administrative support and newly renovated space, are available. Core biostatistical and technical writing services, as well as state and local hospital tumor registries, are also available. Other areas of programmatic emphasis in the Cancer Center include cancer of the reproductive organs, breast and prostate; research in the behavioral and social sciences; smoking cessation; informational sciences (including a branch of NCI's Cancer Information Service); and cytokines/cellular host defense mechanisms. Interested persons should send their curriculum vitae, bibliography and the names of three references to: Stephen W. Russell, Director, University of Kansas Cancer Center, 3901 Rainbow Boulevard, Kansas City, Kansas 66160-7312.

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POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE

Postdoctoral Fellowships are available at Children's Hospital, Harvard Medical School for a Ph.D. or M.D. scientist trained in cellular and molecular biology to participate in projects aimed at understanding the molecular basis of tumor metastasis. Please send curriculum vitae along with names and telephone numbers of three references to: **Dr. Bruce R. Zetter, Enders 1077, Children's Hospital, Harvard Medical School, 300 Longwood Avenue, Boston, MA 02115.**

POSTDOCTORAL RESEARCH ASSOCIATE

To conduct research on the application of intermediate biomarkers in human cancer risk assessment and cancer prevention studies; develop protocols and execute experiments under the direction of a principal investigator. DNA damage and repair are preferred interests. Position requires a Ph.D. degree in biochemistry, molecular biology, or cell biology and relevant research experience in carcinogenesis or cancer prevention. Send curriculum vitae and letter outlining research interests and plans to: **Jennifer J. Hu, Ph.D., Laboratory Director, Cancer Prevention Research Institute, 36 East 22nd Street, New York, NY 10010.**

PH.D. TRAINING IN VETERINARY PATHOBIOLOGY, PHYSIOLOGY

The Department of Veterinary Microbiology, Pathology and Biomedical Sciences at the University of Missouri has Ph.D. training positions in Animal Biotechnology. The Ph.D. programs are in Area Pathobiology or Physiology. These USDA National Needs fellowships emphasize an integrated approach toward Ph.D. training in contemporary molecular biology and biotechnology. Stipends are competitive. Appointments beginning in January, 1993 or until positions are filled. Applications should include college transcripts, curriculum vitae, a statement of professional goals, and the names of three references. Send applications to: **Dr. G. M. Buening, Office of Dean, College of Veterinary Medicine, University of Missouri, Columbia, MO 65211; FAX: (314) 884-5044. University of Missouri is an Affirmative Action/Equal Opportunity Educator and Employer.**

RESEARCH IN MOLECULAR PHARMACOLOGY

The Department of Pharmacology, Case Western Reserve University, invites applications for two programs. The **Summer Program for Undergraduate Research** places sophomore or junior undergraduates in research laboratories for a 10-week period. A stipend of \$2500 plus lodging is supplied. Travel expenses may also be available. Students participate in weekly activities pertinent to careers in biomedical research. Application deadline March 1, 1993.

The **Biomedical Sciences Training Program** admits students to a Ph.D. program in basic medical research on a non-departmental basis. After the first year students choose a mentor and specialty program. Competitive stipends and tuition are provided to all students. Application deadline January 15, 1993.

Case Western Reserve University is an Affirmative Action/Equal Opportunity Employer. The Department of Pharmacology encourages minority students to apply to:

**Dr. Ruth Siegel
Department of Pharmacology
Case Western Reserve University
Cleveland, OH 44106-4965**

RNA

A **RESEARCH ASSOCIATE** position is available immediately for an individual with a background in nucleic acid biochemistry to join the laboratory of Thoru Pederson, to accelerate a program addressing novel enzymatic activities in RNA. Salary range is \$22,000 to \$30,000 per year, depending on previous experience. Applicants should submit curriculum vitae and concurrently arrange to have at least two letters of recommendation sent to: **RNA Research Associate, c/o Personnel Department, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

RESEARCH IN EXPERIMENTAL PATHOLOGY AND MOLECULAR PATHOBIOLOGY LEADING TO THE Ph.D. Expanded faculty and state-of-the-art facilities; stipends of \$13,000 and up per year including full tuition waivers; attractive campus in suburban Westchester close to New York City; expedited review process and flexible entrance times for promising candidates. Contact: **Dr. Michael B. Stemmerman, Professor and Chairman, Department of Experimental Pathology, New York Medical College, Valhalla, NY 10595. Telephone: 914-993-4146. Equal Opportunity Employer.**

RESEARCH ASSOCIATE to investigate molecular and cell biology of erythroid development. Requires knowledge and skills to carry out independent mammalian cell culturing, and various molecular biology experiments using techniques of molecular cloning, DNA transfection, radioisotope labelling of nucleic acids, gel electrophoresis, DNA sequencing, RNA and DNA hybridization, cell culture and stable DNA transfection. The position will also develop new methods, and assist graduate students and postdoctoral fellows. A Ph.D. degree in Cell Biology and/or Genetics obtained within the past five years, and at least two years of postdoctoral training is required. Salary range: \$4166.67 to \$5350.00 monthly. Place of employment and interviews: Davis, California. Send this ad and a résumé to: **Job No. SK2495, P.O. Box 269065, Sacramento, CA 95826-9065 no later than December 10, 1992.**

RESEARCH SCIENTIST IN HYDROCLIMATOLOGY

The Climate Research Division of Scripps Institution of Oceanography, University of California, San Diego, invites applications for appointment to the professional research staff. Applicants should have research experience related to the weather and climate of the global and regional continental/ocean/atmosphere system. Preferred is expertise in the study of hydrologic and hydroclimatic processes. Ph.D. or equivalent in hydrology, meteorology, or a closely related field as well as demonstrated ability to conduct independent research of high quality in this area is required. Substantial record of research funding is preferred. Salary support will be largely from extramural funds with salary and position rank depending on experience and qualifications and based on UC salary scales. Partial institutional funding is possible at more senior levels.

Inquiries and applications should be directed to: **Professor Richard C. J. Somerville, Director, Climate Research Division/UCSD, 9500 Gilman Drive, La Jolla, CA 92093-0224.** Applications should include curriculum vitae and names and addresses of three references. Closing date is January 15, 1993. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

POSITION ANNOUNCEMENT IN LANDSCAPE ECOLOGY

Duke University's School of the Environment seeks applicants at any level for a tenure-track or tenured faculty position in Landscape Ecology. The successful applicant is expected to develop a nationally recognized externally funded research program, and to teach and advise graduate-level research and professional students. Training and/or experience in GIS in conjunction with expertise in ecology, forestry, land use, geography or wetlands is required. Interest and experience in remote sensing, modeling and/or experimental approaches in problems such as cumulative impacts, ecosystem linkages and transfers or land use changes are desirable. Applicants should send curriculum vitae and the names of three references to: **Dr. Curtis J. Richardson, Chair, Landscape Ecology Search Committee, School of the Environment, Duke University, Durham, NC 27708-0328, USA.** Applications will be accepted through December 15, 1992 or until a suitable candidate is identified. *Duke University Is An Equal Opportunity/Affirmative Action Employer.*

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

POSITIONS OPEN

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW. Position available to work on the use of retroviral and adenoviral vectors for somatic gene therapy of cystic fibrosis and inborn errors of metabolism. Strong institutional environment in molecular human genetics. Send curriculum vitae including FAX number and two or three letters of recommendation to: **Arthur L. Beaudet, Institute for Molecular Genetics, Baylor College of Medicine, Houston, TX 77030. Baylor College of Medicine is an Equal Opportunity, Affirmative Action and Equal Access College.**

RESEARCH ASSISTANT

FT position available in a genetics and molecular biology research lab located in Northeast Philadelphia. This is a challenging position for an experienced, independent, clear thinking individual who is well organized and enjoys exploring new frontiers in the study of malignant disease and the invention of new technology. Familiarity with standard molecular biology techniques including restriction mapping, gene cloning and DNA sequencing are preferred. M.S. or Ph.D. required. Competitive salary and benefit package. Submit résumé to: **Research Assistant-MAS.**

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UNIVERSITY OF CALIFORNIA LOS ANGELES

The UCLA Department of Anesthesiology is searching for an established **INVESTIGATOR** and mentor to develop a research program in **MOLECULAR ANESTHESIOLOGY**. The primary goal of this new program is to investigate the molecular effects of anesthesia and to interact with doctoral and postdoctoral training programs. The applicant must have a demonstrated scholarly record in biophysics, electrophysiology, molecular biology, receptors, or signal transduction. This record must also include a history of notable doctoral and postdoctoral trainees. This academic appointment will be at an appropriate level in the Regular (tenure-track) Academic Series. Candidates for appointment at the University of California are evaluated on four main criteria: (1) teaching; (2) research and creative work; (3) professional activity; and (4) University and public service. Address correspondence and curriculum vitae before December 31, 1992 to: **Patricia A. Kapur, M.D., Molecular Anesthesiology Search, Department of Anesthesiology, UCLA School of Medicine, Los Angeles, CA 90024-1778. UCLA is an Affirmative Action/Equal Opportunity Employer.**

CARCINOGENESIS CANCER CHEMOPREVENTION

IIT Research Institute (IITRI) a not-for-profit contract R&D organization, is seeking a Ph.D.-level scientist to conduct research in our Pathophysiology Section of the Life Sciences Department.

Candidate should have up to four years of postdoctoral experience and a strong interest in the areas of carcinogenesis and cancer chemoprevention. Prior experience in pharmacology, *in vivo* carcinogenesis or nutritional toxicology is desirable. Candidate will also be encouraged to develop a research program in area of interest.

IITRI provides a competitive compensation/benefits portfolio. Submit résumé with salary specifics in confidence to: **Ms. L. Amft, IIT Research Institute, 10 West 35th Street, Chicago, IL 60616. Equal Opportunity/Affirmative Action Employer.**

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A major grant from the Lucille P. Markey Charitable Trust is providing funding for a continuing search for several faculty positions in molecular neurobiology, with an emphasis upon molecular mechanisms of neural development and plasticity.

We plan to fill one or more tenure track faculty positions (rank open) for fall 1993 and additional positions in the next several years. Candidates will be appointed primarily in the Departments of Cell and Structural Biology or Biochemistry, although appointments may be made in other departments. Substantial funds are available for laboratory start-up and research. The University has a strong interdisciplinary Neuroscience Program with strengths in neural development and plasticity and growing strength in cellular and molecular neuroscience. In addition to the interdisciplinary resources of the Beckman Institute, the University of Illinois is home to the NSF-funded National Center for Supercomputing Applications, and a Biotechnology Center that provides a number of subsidized services including production of oligonucleotides, peptides and monoclonal antibodies, molecular graphics, fluorescence activated sorting, protein and DNA sequencing and transgenic animal facilities.

Salary is commensurate with experience and qualifications. Minorities and women are particularly encouraged to apply. Applications (vita, 1-2 representative reprints, and a statement of research interests) and three letters of recommendation should be sent to:

Byron Kemper, Chair, Molecular Neuroscience Search Committee
1315 Beckman Institute, 405 N. Matthews
Urbana, IL 61801 Tel. (217) 244-8379

This is an ongoing search and applications received after the deadline may receive consideration. However, to ensure full consideration for fall, 1993 hiring, applications should be received by December 15, 1992.

The University of Illinois is an Affirmative Action/ Equal Opportunity Employer.

Molecumetics Institute, a Seattle-based pharmaceutical research and development company working in the areas of peptidomimetic pharmaceutical design, is currently recruiting for the following position:

Postdoctoral Research Associate

This opportunity is available to a professional possessing a Ph.D. in Chemistry, Medicinal Chemistry, or Biochemistry. Experience in organic synthesis (additional experience with peptidesynthesis is a plus but not critical), and in purification and spectroscopic techniques (NMR, IR, MS) are essential.

We provide a competitive salary and an excellent fringe benefits package. Interested and qualified candidates should submit resume with salary history and requirements, in confidence, to: Ms. Sara Canning, Molecumetics Institute, 2023 120th Avenue, N.E., Suite 400, Bellevue, Washington 98005-2199. An equal opportunity employer m/f/d/v.

MOLECUMETICS INSTITUTE

MIT

FACULTY POSITIONS Department of Nuclear Engineering

The Department of Nuclear Engineering at MIT seeks candidates for faculty positions starting in September 1993. We anticipate openings for a limited number of junior faculty appointments for individuals who have recently completed a doctorate. Faculty duties include teaching at both the undergraduate and graduate levels, and research involving the supervision of theses. We are interested in candidates in the following areas of nuclear engineering: fission, fusion, and radiation applications in medicine and industry. Candidates interested in utilizing the capabilities of our major experimental facilities, a 5 MW research reactor and a major tokamak experiment, are encouraged. An opening is also available for a senior experimentalist in the area of biomedical radiation applications who can assume departmental leadership for this area. Leadership in research using the reactor is of particular interest.

All candidates should write to the address below, describing their professional interests and goals. Each application should include a curriculum vitae and the names and addresses of three or more references. Additional material describing the applicant's work, such as papers or technical reports, would also be helpful. All candidates should indicate citizenship and, in the case of non-U.S. citizens, describe their visa status. Send all applications to the search committee chairman, **Prof. Neil E. Todreas, Room 24-219, Massachusetts Institute of Technology, 77 Mass. Ave., Cambridge, MA 02139-4307.**

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Massachusetts Institute of Technology

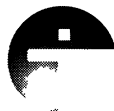
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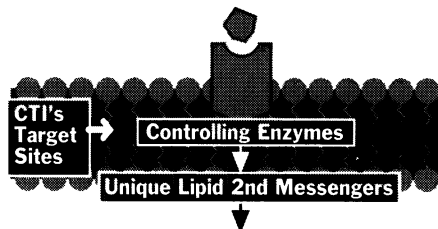
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CTI is located in downtown Seattle, with views of Puget Sound and the Olympic Mountains. We offer an attractive compensation and benefits package, plus an environment where you can make a significant contribution to medical technology. For consideration, send or fax your resume to: **Human Resources - Dept. PD-S, Cell Therapeutics, Inc., 201 Elliott Avenue West, Suite 400, Seattle, WA 98119. FAX: (206) 284-6206.** Equal Opportunity Employer.



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Trustee Distinguished Visiting Minority Scholar

The Biology Department invites applications for the position of Trustee Distinguished Minority Scholar. This is a one-year appointment, beginning in the Fall of 1993, renewable for a second year. An appointment can be made at any faculty rank, including ABD. Preference will be given to candidates with specialization in molecular biology, but any biological specialty will be considered. The position carries a reduced teaching load, designed to encourage teaching, scholarship and support of students. Review of applications will continue until position is filled. A letter of application, curriculum vitae and three letters of recommendation should be sent to:

**Chair, Department of Biology
Skidmore College
Saratoga Springs, NY 12866**

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We are a *Large Pharmaceutical Company* based in the PARIS Region, dedicated to the discovery of new drugs. We have a position available in the *Division of Cellular and Molecular Biology* for :

Pharmacologist (PH.D)

The applicant should have *post doctoral* experience in *Binding* assays and in situ *Hybridization Techniques*.

The candidate should show creativity, initiative and qualities which will help him/her to work in a research team.

To be considered for this position, submit a *hand written letter*, CV and photo to Média-System, Compasse des Deux Usins, 75849 Paris Cedex 17, France, quoting ref. 37780 in the envelope.

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THE UNIVERSITY OF CINCINNATI COLLEGE OF MEDICINE SUMMER OPPORTUNITIES TO EXPLORE THE CAREERS OF MEDICINE, BIOMEDICAL RESEARCH, AND HEALTH CAREERS

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High School Student Research Apprentice Program
Teacher Initiative: Summer Research in Biomedical Research

For Undergraduate Level Students:

Summer Premedical Enrichment Program
MARC Scholars Summer Program (Minority Access to Research Careers)
The REACH Program (Research Education and Achievement to Careers in Health)

For Matriculating Medical Students:

Summer Prematriculation Programs

Application materials for 1993 programs will be available by February 1, 1993. For more information contact:

The Medical Educational Development Program
University of Cincinnati College of Medicine
231 Bethesda Avenue
Cincinnati, OH 45267-0552
Phone: (513) 558-7212 FAX: (513) 558-1165

POSTDOCTORAL POSITIONS

Postdoctoral positions are currently available to work in the following areas: Immunology, microbiology, molecular biology, biochemistry, and genetics. Specific areas include: Regulation of autoreactive T cells, mechanism of induction of syngeneic graft versus host disease, regulation of pulmonary immune function, B cell activation, regulation of the induction of TH1 and TH2 T cell subsets, molecular pathogenesis of *Yersinia pestis*, regulation and biochemistry of pyrimidine biosynthesis, structure and genetic dissection of domains of a multienzymatic protein, immunological consequences of tissue-specific mice, and mechanisms of tolerance induction. Experience in cellular and molecular immunology, molecular biology or enzyme biochemistry is highly desirable. The Department of Microbiology and Immunology has 23 primary faculty members with a strong history of federal funding and administers an NIH training grant in immunology that provides support for predoctoral and postdoctoral fellows. Extensive core facilities include flow cytometry, macromolecular structure, transgenic and hybridoma laboratories and a supercomputer. Applicants should submit curriculum vitae and three letters of reference to:

Alan M. Kaplan, Ph.D.
Chairman, Department of
Microbiology & Immunology
University of Kentucky
College of Medicine
MS-415 Medical Center
Lexington, KY 40536-0084

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Senior Scientist

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Schering-Plough Research Institute provides opportunities within a growing, evolving, professional Bioanalytical Research & Development Department.

In order to enhance the support that our Bioanalytical R&D area provides to the entire company, we are seeking a Senior Scientist who can visualize "the big picture" and propose/implement creative solutions to scientific challenges.

Overall responsibilities include writing experimental designs for the development, qualification and validation of analytical bioassay methods for cytokines in support of new line extensions, fermentation, purification, clinical and pre-clinical toxicology/PK studies; providing technical expertise at the bench level; and ensuring the development and preparation of technical documents for IND and PLA/ELA submission. In addition, you will review and monitor current operating practices in on-line bioassay methods, formulation, and off shore operations to ensure accuracy and compliance to GMP/GLP.

The qualified candidate will have a PhD in Cell or Molecular Biology, Microbiology or a

closely related discipline; and 1-4 years of experience in cell biology/culture and GMP operations. The ability to effectively interface with multidisciplinary professionals at a level of sophistication commensurate with state-of-the-art science, and to ensure the group's involvement with other areas of the Company are additional vital attributes. Supervisory experience is preferred.

If your vision of scientific research is broad enough to encompass the many facets of involvement at Schering-Plough, we invite your inquiry. We offer a salary commensurate with your education and expertise, a generous benefits package and significant opportunities to impact a dynamic organization. For confidential consideration, please send your resume, indicating salary history and requirements, to: Personnel Manager, Department PML/DD92-49, Schering-Plough Research Institute, 1011 Morris Avenue, Union, New Jersey 07083. We are an equal opportunity employer.

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CDC & ATSDR

CENTERS FOR DISEASE CONTROL AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY

The Centers for Disease Control (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) are Federal agencies responsible for preventing disease, disability, and premature death, promoting healthy lifestyles and ensuring public safety from hazardous materials. CDC's and ATSDR's prevention efforts include: heart disease, hypertension, diabetes, breast and cervical cancer; low birth rate and infant mortality; violence and injuries; environmental exposures such as radon and lead; and behavioral risk factors associated with chronic diseases and sexually transmitted diseases, such as HIV/AIDS. CDC's headquarters is in Atlanta and includes seven centers, one institute and three program offices. The Director of CDC also serves as Administrator for the Agency for Toxic Substances and Disease Registry (ATSDR).

CDC and ATSDR offer an opportunity to make a difference in the following categories:

Behavioral Scientist	Chemist
Engineer	Epidemiologist
Health Economist	Health Education Specialist
Industrial Hygienist	Mathematical Statistician
Microbiologist	Physician
Statistician	Toxicologist

Salary and benefits are commensurate with qualifications and experience. For further information, send a resume or an Application for Federal Employment (SF-171) to: Ms. Judy Young, Centers for Disease Control, Mail Stop D45 (science), 1600 Clifton Road, NE, Atlanta, Georgia 30333.

CDC AND ATSDR ARE EQUAL OPPORTUNITY EMPLOYERS AND PROVIDE A SMOKE-FREE ENVIRONMENT.

CELL BIOLOGIST

Ross Laboratories, a division of Abbott Laboratories and the leading manufacturer of infant and adult nutritional products, has an excellent opportunity for a Cell Biologist in our Microbiology Department. Primary responsibilities include the development of cell and tissue culture assays to study potentially mitogenic, antibacterial, anti-adhesion and anti-apoptotic factors. Assays will support various nutritional research studies. Incumbent will also have supervisory responsibility for 2-3 microbiologists to achieve specific project goals.

Experience with binding assays in human epithelial, oropharyngeal and uroepithelial cells required. A working knowledge of molecular biology and biochemistry is essential. Qualified candidates will have an M.S. degree in cell biology or related field with a minimum of 5-8 years research experience.

Ross offers an excellent benefits program and salary commensurate with experience. Interested candidates should send resume in confidence to: M. Scruggs/S, Dept. 175.



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POSITIONS OPEN

UNIVERSITY OF NEVADA, LAS VEGAS. The Department of Physics has available immediately a full-time professional **RESEARCH SUPPORT** position at the level of research assistant or research associate. Minimum qualifications are a B.S. degree in Physics, Applied Physics, Engineering Physics or a related discipline, and demonstrated experience in the installation, interfacing, applications programming and systems support (to include knowledge of UNIX and DOS) of PC's and workstations in a research environment.

Applicant should send a descriptive cover letter indicating interests along with current curriculum vitae, reprints and preprints, and arrange for five letters of reference to arrive (FAX or mail) by December 1, 1992, to the: **Research Staff Position Committee, Department of Physics, University of Nevada, Las Vegas, Las Vegas, Nevada 89154-4002.** Direct inquiries to (702) 739-3563 (telephone) or (702) 739-3804 (FAX). UNLV is an Equal Opportunity/Affirmative Action Employer.

LOYOLA UNIVERSITY CHICAGO MOLECULAR VIROLOGIST IMMUNOLOGIST

An excellent opportunity exists at Loyola University Medical Center for an Immunologist with experience in vaccine development and a Molecular Virologist with experience in Papillomavirus research. Join the new Loyola Viral Oncology group and work in our new Cancer Center.

Applicants will develop their research programs and establish grants. Salary and academic rank dependent on the candidate's background. Please forward curriculum vitae to: **Gregorio Delgado, M.D., Professor and Chair, Department of OB/GYN, Loyola University Medical Center, 2160 South First Avenue, Maywood, IL 60153** Telephone: 708-216-3383. Or contact: **Lutz Gissmann, Ph.D., Director Designate, Division of Viral Oncology, Loyola University Medical Center, 49-6221-424603.**

ASSOCIATE MARINE SCIENTIST position available immediately for a shellfish biologist with experience in development and management of native bivalve fisheries. Experience in oyster ecology and culture desirable. The successful candidate will participate in applied research programs to develop and enhance existing oyster and clam fisheries and to assess the ecological role of oysters in South Carolina estuaries. Permanent, state-funded position with South Carolina Wildlife and Marine Resources Department (SCWMRD), Marine Resources Research Institute, Charleston. Application deadline January 15, 1993. Please send curriculum vitae, statement of research interests and goals (less than 3 pages), and three letters of reference to: **Dr. Fred Holland, Marine Resources Research Institute, P.O. Box 12559, Charleston, SC 29422-2559.** The SCWMRD prohibits discrimination on the basis of race, sex, color, national origin, handicap or age. Women and minority candidates encouraged to apply.

ANESTHESIA SCIENTIST

Application invited for tenure-track or tenured position in the Anesthesiology Department at the University of California at Irvine (UCI) for M.D. and/or Ph.D. Scientist. Candidate must develop and sustain independent program in basic anesthesia research. Opportunities exist for collaborating with established scientists working on molecular or cellular mechanisms in neuroscience, cardiovascular disease, and pharmacology/toxicology. Salary and benefits are commensurate with qualifications and experience. Send curriculum vitae to: **David H. Wong, Pharm.D., M.D., Long Beach VA Medical Center, 5901 East 7th Street, Anesthesiology Service (139A), Long Beach, CA 90822.**

UCI is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP: Training in neurochemistry/molecular biology of drugs of abuse on NIDA Training Grant for recent Ph.D. Background in molecular biology desirable. Applicants must be U.S. citizens or permanent residents. Women and minority candidates encouraged. Please contact: **Professor Eric J. Simon, Department of Psychiatry, NYU Medical Center, 550 First Avenue, New York, NY 10016.**

POSITIONS OPEN

The Biotechnology Patent Examining Group of the Patent and Trademark Office is currently recruiting scientists for positions as **PATENT EXAMINERS.** Individuals with advanced degrees and/or equivalent experience in the fields of immunology, molecular biology, gene therapy, plant genetics and plant breeding, biochemistry, protein engineering and microbiology are urged to send a resume or SF-171 to the following address:

**Patent and Trademark Office
Office of Personnel
Box 171
Washington, DC 20231
ATTN: D. Dowell (180)**

For further information, call David L. Lacey at (703) 308-4314. U.S. CITIZENSHIP IS REQUIRED FOR EMPLOYMENT.

BIOCHEMICAL PHARMACOLOGIST—conduct studies of the absorption, distribution, metabolism, excretion and bioavailability of chemicals in laboratory animals, develop and apply analytical procedures for endogenous and exogenous chemicals in biological fluids and tissues to assess pharmacokinetic properties; establish and maintain a research program in a relevant area of biochemical pharmacology; participate in writing study reports and proposals for various government and industrial sponsors. Ph.D. in Pharmacology, Toxicology, or Biochemistry with at least two years of postdoctoral training or industrial experience is required. Send résumé to: **Rick James, AA212 (BP), 333 Ravenswood Avenue, Menlo Park, CA 94025.** Equal Opportunity Employer. **SRI INTERNATIONAL.**

CONSERVATION BIOLOGIST

Responsible for a comprehensive science program to support acquisition and management of conservation lands in Texas. Identify priority species and ecosystems, provide scientific review of proposed acquisitions, and coordinate ecological research and monitoring on Conservancy land. M.S. or Ph.D. in biology, ecology or related field; knowledge of Texas ecosystems and natural communities; experience in designing and administering research; in-depth experience with computers; experience with remote sensing and geographic information systems preferred. Salary low to mid thirties with excellent benefits. Send cover letter and résumé by November 30, 1992 to: **Ms. Daran Moon, The Nature Conservancy of Texas, P.O. Box 1440-S, San Antonio, TX 78295-1440.** Equal Opportunity Employer.

THE UNIVERSITY OF MICHIGAN

The Department of Surgery, Section of Thoracic Surgery, is recruiting for a **CARDIAC CELL BIOLOGIST, BIOCHEMIST, OR MOLECULAR BIOLOGIST** with research interest in myocardial metabolism, effects in ischemia and reperfusion, myocardial preservation, and/or transplantation. Position is in the Thoracic Surgery Research Laboratory of the Department of Surgery, University of Michigan. New expanded facilities are available. Individual is expected to have relevant publications in peer reviewed journals, demonstrated ability to obtain extramural funding, and willingness to collaborate with both clinical and basic science colleagues. Academic level for this tenure-track position will be determined by credentials. Send curriculum vitae and reference letters to: **Mark B. Orringer, M.D., Professor and Head, Section of Thoracic Surgery, University of Michigan Medical Center, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0344.** The University of Michigan is a non-discriminatory/Affirmative Action Employer and strongly encourages females and minorities to apply.

MARINE BIOLOGIST, tenure-track ASSISTANT PROFESSOR beginning August 1993. Successful candidate will teach undergraduate/graduate courses, direct graduate students, and maintain active research program. Preference given to candidates with interests in physiological ecology or evolutionary biology, particularly employing molecular techniques. Ph.D. and postdoctoral experience required. Send curriculum vitae, statement of teaching/research interests, graduate transcript(s), and names of 3 references by 15 January 1993 to: **Dr. Paul E. Hosier, Department of Biological Sciences, University of North Carolina at Wilmington, Wilmington, NC 28403-3297.** UNC Wilmington is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

EXTENSION SPECIALIST IN ENTOMOLOGY, Cooperative Extension, New Jersey Agricultural Experiment Station, Rutgers University. 12-month, tenure-track faculty appointment. 70% Extension—30% Research. Location: Cranberry/Blueberry Research Center, Chatsworth, New Jersey. Develop strategies and techniques for blueberry and cranberry IPM programs. Opportunities for research include life history and crop phenology characterization. Other research areas could include biological control, vector research and host plant resistance. Extension responsibilities involve developing and communicating pest management recommendations to agents and growers and providing inservice education opportunities for Extension agents. Collaboration with Extension personnel and industry IPM programs in the implementation of IPM programs is expected. Ph.D. in entomology required. Background in IPM/applied insect ecology preferred. Demonstrated written and oral communication skills desirable. Applications will be accepted until December 15, 1992. Send résumé with names and addresses of three or more references to: **Anne L. Sheelen, Associate Director of Extension, Rutgers Cooperative Extension, PO Box 231, New Brunswick, NJ 08903.** Rutgers University is an Equal Opportunity Employer.

MAGNET DEVELOPMENT/MATERIALS SCIENTIST. Assistant Scholar/Scientist position with courtesy appointment in an appropriate department is available for applicants interested in the development of the next generation of high field resistive and superconducting magnets and/or in the development and characterization of new materials critical to magnet development. A strong interest in new materials as well as the physics and engineering of high field magnets is expected. Experience in cryogenic practice with emphasis on superconductivity, particularly SQUID and the characterization of properties Jc (B,T), Tc. Experience in electron microscopy, with familiarity with SEM, TEM, STEM, HVEM, HREM, and XRD, EDAX, WDS for both thin film and bulk microanalysis is essential. Experience in synthesis and characterization of High-Tc superconducting thin films and bulk materials, Magnetron sputtering and Laser ablation, and processing and characterization of bronze processed Nb₃Sn multifilamentary superconducting wires is also required. This position requires the highest degree appropriate in the field of specialization with a demonstrated record of research in high magnetic field technology.

Deadline for applications: January 15, 1993. Florida State University is an Equal Opportunity/Affirmative Action Employer.

Applications should be sent to:

**Dr. Jack Crow, Director
Florida State University
National High Magnetic Field Laboratory
1800 East Paul Dirac Drive
Tallahassee, FL 32306-3016**

COURSES AND TRAINING

FELLOWSHIPS FOR POSTDOCTORAL TRAINING in Neural Development, Plasticity, and Regeneration at The Ohio State University. Systems, cellular, and molecular approaches are available for trainees supported by an NINDS training grant. Faculty include K. Alley, M. Beattie, G. Bishop, J. Boulant, R. Boyd, J. Bresnahan, R. Burry, H. Cooke, M. Hadjiconstantinou-Neff, R. Ho, L. Horrocks, J. King, D. Lim, G. Martin, N. Neff, R. Nordlander, R. Rogers, A. Rotter, B. Stokes, R. Tassava, S. Tjioe, J. Wood, and A. Yates. Fellows supported by the training grant must be U.S. citizens or permanent residents; however, other positions may be available which can be supported by funds available to individual investigators.

Applications, including curriculum vitae, statement of research interests, and three letters of recommendation, should be sent to: **Drs. G. F. Martin & M. S. Beattie, at the Department of Cell Biology, Neurobiology & Anatomy, The Ohio State University, 333 West 10th Avenue, Columbus, OH 43210.** Potential applicants are encouraged to contact the program directors and prospective faculty sponsors for detailed information. Telephone: **Dr. Martin (614) 292-1667, Dr. Beattie (614) 292-1781.** The Ohio State University is an Affirmative Action, Equal Opportunity Employer and encourages women and minorities to apply.

YALE UNIVERSITY



GRADUATE PROGRAMS IN THE BIOMEDICAL SCIENCES

Yale University invites eligible candidates to apply for entry into one of the many graduate degree programs listed below and is committed to increasing the representation of minority group members.

SCHOOL OF MEDICINE¹

Cell Biology
Cellular and Molecular Physiology
Comparative Medicine
Experimental Pathology
Genetics
Immunobiology
Molecular Biophysics & Biochemistry
Neurobiology
Neuroscience
Pharmacology

SCHOOL OF EPIDEMIOLOGY & PUBLIC

HEALTH²

Biostatistics
Chronic Disease Epidemiology
Environmental Health Sciences
Epidemiology of Infectious Diseases
Health Policy & Resources
Microbiology

FACULTY OF ARTS & SCIENCES³

Biology
Chemistry
Computer Science
Molecular Biophysics & Biochemistry
Physics
Psychology

Directors of Graduate School Programs to contact for information:

- ¹ J. Jamieson, M.D., Ph.D., School of Medicine 203/785-6772
- ² D. McMahon-Pratt, Ph.D., Epidemiology/Pub Health 203/785-4481
- ³ J. Brown, Ph.D., Assoc. Dean, Graduate School 203/432-2744

HEALTH SCIENTIST ADMINISTRATORS OFFICE OF RESEARCH INTEGRITY

The newly organized Office of Research Integrity (ORI), Public Health Service (PHS), Department of Health and Human Services (HHS) in the United States Government, invites applications for the positions of Health Scientist Administrator at the GS-13/14 grade level, with a current salary range of \$46,210 to \$70,987 per annum.

The ORI has the primary responsibility for the implementation of PHS policies and procedures regarding research integrity in the extramural and intramural biomedical and behavioral research community. This involves the review, oversight and conduct of investigations of possible allegations of scientific misconduct, as well as prevention and education activities designed to promote integrity in research.

The ORI offers the opportunity for intellectually challenging use of analytical, scientific, and investigatory skills. Scientists with a research and/or research administration background in university, institute, Government, or private research organizations are encouraged to apply.

The complete vacancy announcement which lists the technical qualifications required, and the Application for Federal Employment (SF 171), are available by letter or by telephone call to 301-443-6900. Completed applications must be received no later than November 30, 1992 at the following address:

Office of the Assistant Secretary
for Health Personnel Operations Office
Room 17A-07
5600 Fishers Lane
Rockville, Maryland 20857

PHS is an Equal Opportunity Employer. The Office of the Assistant Secretary for Health is a smoke-free work place. Relocation expenses will not be paid.



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DNAX Research Institute conducts its basic biomedical research for the purpose of contributing to an understanding of the immune system and of the mechanisms for control of growth and differentiation of mammalian cells.

We currently have openings for technicians in the following areas:

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Primary responsibility will be microinjection of embryonic stem cells into mouse blastocysts.

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Cytokine Fermentation & Purification

Operation and routine maintenance of fermenters with experience in the fermentation of *E. coli* and mammalian cells.

A position is also available to participate in a collaborative project to clone and characterize novel activities. A Ph.D. in molecular biology is required. Additional opportunities are available for individuals with Bachelors degrees in Biology or related areas and one to two years of laboratory experience.

Qualified applicants should send a resume to the Human Resources Department, DNAX Research Institute, 901 California Avenue, Palo Alto, California 94304. DNAX is an equal opportunity employer, m/f/h.



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APRIL 21-25, 1993

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Leonard Kaczmarek, Yale University Medical School
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- Peptides and Small Molecule Transmitters
- Molecular Mechanisms of Synaptic Transmission
 - Cell Imaging
 - Circadian Rhythm
- Neural Circuitry and Behavior
 - Learning
- Regeneration, Development and Aging

The Organizers invite submission of abstracts concerning recent work for oral or poster presentations by February 10, 1993. Requests for registration materials should be forwarded to:

Meetings Coordinator

Cold Spring Harbor Laboratory

1 Bungtown Road, Cold Spring Harbor, NY 11724-2213
516-367-8346 FAX: 516-367-8845

CELL AND MOLECULAR BIOLOGISTS

Department of Cell & Structural Biology, University of Illinois at Urbana-Champaign, invites applications for ASSISTANT, ASSOCIATE, or FULL PROFESSOR, from PhD scientists interested in establishing an outstanding research program in a young, expanding department. Potential areas of focus include membrane receptors and signaling, cell cycle control, nuclear and cytoskeletal structure/function, cellular immunology, developmental biology, and molecular aspects of virus/host interactions. Responsibilities also include teaching core cell biology courses. Position is full-time, available beginning 1993-94 academic year. Salary will be commensurate with experience and level.

Substantial start-up funds and laboratory facilities are available, along with exceptional physical and intellectual resources of the University: Transgenic Animal Facility; Center for Electron Microscopy; Genetic Engineering Facility, providing oligonucleotide and peptide synthesis and automated protein sequencing; Cell Science Laboratory, providing hybridoma culture and flow cytometry; Molecular Graphics Facility; National Center for Supercomputing Applications; and Beckman Institute for Advanced Science and Technology, which combines research in biological and physical sciences.

Urbana-Champaign offers the residential advantages of a medium-sized city (population 120,000) plus excellent cultural amenities on campus. Its location gives easy access to Chicago and St. Louis.

Applicants should send curriculum vitae, summary of research interests, and three letters of reference to: Ms. Ann Zielinski, Search Coordinator, Department of Cell and Structural Biology, University of Illinois, 506 Morrill Hall, Urbana, IL 61801. Telephone: (217) 333-6118.

To ensure full consideration, applications should be received by 15 January 1993. Interviews may be conducted before this date, but all applications received by then will be given full consideration. Final selection will not be made until after this date.

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ILLINOIS

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Tampa Bay Research Institute Positions Open

Tampa Bay Research Institute of St. Petersburg, Florida, in association with Salem-Teikyo University of Salem, West Virginia, announce the opening of several anticipated positions at the rank of Assistant, Associate or Professor levels.

The focus of the research will be in the study of human virus latency with emphasis using molecular biology approach and antiviral therapy. Capability of teaching in the area of enzyme, membrane, protein/nucleic acids at the graduate level will be desirable.

Salem-Teikyo University, already committed to strengthen its Undergraduate training in Molecular Biology/Biotechnology, is planning to establish a Graduate Program to be implemented in the Fall of 1993.

Successful candidates will spend most of their time in Florida for their research programs and supervising graduate student research and will teach one course per year at STU. Joint appointments at the Tampa Bay Research Institute are expected for successful candidates.

Tampa Bay Research Institute is based in a modern facility with excellent individual laboratory and office space, and centralized facilities including a Biotechnology Service Laboratory, transgenic mice and in-house DNA sequence database.

Investigators will enjoy complete freedom to pursue their research goals. While generous program support is provided, scientists are expected to secure extramural funding.

Applicants should have a Ph.D. or equivalent. Interested individuals should send curriculum vitae, list of publications, a short statement of research achievements, and names and addresses of three referees to the **Chairman, Search Committee, Tampa Bay Research Institute, 10900 Roosevelt Boulevard, St. Petersburg, Florida 33716.**

Consortium for a Strong Minority Presence At Liberal Arts Colleges

Minority Scholar-in-Residence Program

With a view towards encouraging African-American, Asian-American, Hispanic-American and Native American scholars to consider teaching and research careers in small liberal arts colleges, the Consortium for a Strong Minority Presence in Liberal Arts Colleges, an association of selective undergraduate institutions, has established the Minority Scholar-in-Residence Program. Applications are invited for the dissertation fellowship program or the post-doctoral fellowship program in all disciplines of the liberal arts and engineering. Applicants should be working toward the PhD or the MFA degree, or should have been awarded the degree no more than five years before application.

The Minority Scholar-in-Residence will receive a stipend equal to the typical salary for beginning instructors or assistant professors. Scholars will be expected to do some teaching and research, and to participate in other activities at the host institution under the supervision of a mentor. It is hoped that the scholars will, upon completion of their residency, qualify for tenure-track appointments at the host institution or similar institution.

Scholars must be citizens of the United States and shall have had no more than five years of teaching or relevant work experience before receiving the award. Ideally, applicants for the dissertation fellowship program should have completed their research before the beginning of the fellowship year.

Among the member institutions of the Consortium, the following offer to sponsor minority scholars during the 1993-94 academic year: Bates College, Bowdoin College, Bryn Mawr College, Colby College, Colorado College, Davidson College, Franklin & Marshall College, Grinnell College, Haverford College, Macalester College, Oberlin College, Occidental College, Pomona College, Reed College, Rhodes College, Swarthmore College, The University of the South, Vassar College, Wellesley College and Whitman College.



The brochure describing the program, and an application form, may be secured by writing to:

Gwendolyn M. Bookman, Assistant to the President
Wellesley College, Wellesley, MA 02181

DEADLINE FOR THE RECEIPT OF
APPLICATIONS IS DECEMBER 4, 1992

Ph.D. RESEARCH PHARMACOLOGIST

The successful candidate for this position must have a Ph.D. in Pharmacology or a related discipline. He/she will apply and interpret theories and concepts in pharmacology and neurochemistry and apply a working knowledge of pharmacology and neurochemistry to problems where causal relationships are difficult to establish, few precedents exist and creative thinking is required. Responsibilities would include development/use of appropriate assays for assessing the pharmacological properties of nicotine and CNS nicotine receptors. He/she will provide technical supervision to laboratory personnel, including technical staff and postdoctoral fellows as appropriate. Good communication and interpersonal skills necessary for effective work in an interdisciplinary environment are essential.

The candidate should have a working knowledge of at least two of the following with desire/capacity to learn others: receptor pharmacology/neurochemistry, *in vitro/in vivo* receptor functional assays, pharmacokinetic/pharmacodynamic modeling, molecular modeling, quantitative structure/activity analyses (QSAR), mammalian cell culture, spectrofluorometry, light microscopy and image analysis, cellular electrophysiology. Postdoctoral or other related experience is preferred but not required.

This position offers the opportunity for further growth and development. Salary is commensurate with ability and experience. An excellent benefits package is provided. Please send current resume, salary history, in confidence to: Ms. R. Susan Clapp, Personnel Director-R&D, RJRT-R&D 611-12/304E, PO Box 1487, Winston-Salem, NC 27102-1487. An Equal Opportunity Employer M/F

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- **HEPATITIS R&D.** We require a Ph.D. with 3-5 years experience in immunoassay development, a high level of technical proficiency in ELISA and previous supervisory experience.
- **HIV R&D - RETROVIROLOGIST.** We require a Ph.D. in a biological science with 1-5 years of industrial experience.

△ GROUP LEADER

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experience in industrial immunoassay development, with at least 3 years in a supervisory role. ELISA and immunoassay development experience is essential; automation experience a plus.

△ SCIENTIST

PRODUCT SUPPORT. We require a Bachelor's or Master's degree with 3-7 years of related industrial experience. Strong experience in areas of protein purification and characterization of proteins for immunoassay applications is needed, as is experience with EIA, RIA, HPLC and PAGE, and immunoassay development.

All applicants should be enthusiastic, have good written and oral communication skills, and be computer proficient. We offer a team-oriented, smoke-free work environment, competitive salary and full package of Johnson & Johnson benefits, which includes a dental plan, tuition reimbursement and our on-site total health facility, the LIVE FOR LIFE Wellness Center. For immediate consideration, forward your resume and salary history, indicating position of interest, to: Human Resources, Dept. CP, Ortho Diagnostic Systems, Inc., 1001 US Hwy

202, P.O. Box 350, Raritan, NJ 08869-0606. We Are An Affirmative Action/Equal Opportunity Employer M/F/D/V.



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The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has a postdoctoral position available immediately for an independent and highly motivated scientist interested in applying modern molecular techniques to the study of endothelin receptors and their signaling pathways. Current work is focused on the structure, function and regulation of endothelin receptor subtypes in vascular cells (endothelial and smooth muscle), as well as cloned subtypes expressed in mammalian expression systems.

Candidates should be recent Ph.D. graduates with a background in cellular and molecular biology, biochemistry or pharmacology. The laboratory is in the Department of Cardiovascular Pharmacology and collaboration with Departments of Signal Transduction and Molecular Biology is highly encouraged. The company has strong ties to the University of Michigan and other academic institutions. Continued academic interactions and publication in leading journals is expected.

Interested persons should forward a curriculum vitae and list of references to **Human Resources Department, Box JDM-55, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105.** "Smoke-Free Work Environment"



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Marion Merrell Dow Research Institute, headquartered in Cincinnati, Ohio is seeking a postdoctoral fellow to work in the Immunology Department at the Cincinnati Center. The company is committed to better living through research excellence and innovation in major areas of drug research including cardiovascular, cancer, CNS and metabolic & inflammatory diseases.

The successful candidate for this fellowship should have a PhD with strong molecular biology skills, experience in transcriptional and translational regulation of eukaryotic genes is desirable including construction and analysis of reporter genes, gel mobility shift assays, and nuclear run-on assays. The project will address the effects of bacterial superantigens on the regulation of macrophage cytokine production at the transcriptional and translational level. In particular, the candidate will examine the molecular pathways involving macrophage-derived Tumor Necrosis Factor and other pro-inflammatory cytokines.

This postdoctoral fellowship includes excellent compensation, benefits and a relocation package. You'll also find an affordable yet cosmopolitan lifestyle in Cincinnati. Please send resume and references to: Marion Merrell Dow, Inc., Staffing Department, P.O. Box 9627, Kansas City, MO 64134. Attention Sharon George (Job Code 90746).



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COURSES AND TRAINING

TRAINING PROGRAMS IN MOLECULAR AND QUANTITATIVE GENETICS NORTH CAROLINA STATE UNIVERSITY

North Carolina State University announces two Ph.D. training programs:

An NIH Ph.D. Training Program on the molecular and developmental basis for genetic variation in quantitative traits in plants and animals.

A Ph.D. and Postdoctoral Training Program sponsored by the McKnight Foundation and focusing on the application of molecular genetic technology to plant improvement.

Contact: Ms. Joyce Clayton, Department of Genetics, North Carolina State University, Raleigh, NC 27695-7614, Telephone: 919-515-5712. *Minority applicants are strongly encouraged.*

ANNOUNCEMENTS

SUMMER RESEARCH TRAINING PROGRAM FOR MINORITY DENTAL STUDENTS

The Department of Dental Research at the University of Rochester invites applications for its summer research training program for minority dental students. The program, in its sixth year, allows dental students to be exposed to basic research in broad multidisciplinary areas. Further information about the program is available by contacting: Dr. Lawrence A. Tabak, Department of Dental Research, University of Rochester, 601 Elmwood Avenue, Box 611, Rochester, NY 14642, Telephone: (716) 275-3441; FAX: (716) 473-2679.

PARKINSON RESEARCH GRANTS

June 1, 1993-May 31, 1994

The National Parkinson Foundation, of Miami, Florida, invites the submission of grant proposals for Parkinson research. A total of \$300,000.00 will be made available to support basic bench research on Parkinson's Disease. The award for a single grant will not exceed \$40,000.00. None of the monies are to be utilized for administrative overhead or travel expenses. The application deadline is February 1, 1993; grant starting date will be June 1, 1993. It is required that proposed studies specifically focus on mechanisms involved in the disease process and that they have the potential of finding the cause and prevention of Parkinson's Disease. Scientists entering the field of Parkinson research are encouraged to apply. Proposals will be assessed by the National Parkinson Foundation Scientific Advisory Board. To obtain submission information, please write to:

National Parkinson Foundation, Inc.
Research Grants
1501 N.W. 9th Avenue
Miami, FL 33136

University of California, San Francisco Announces the Formation of a New Graduate Program BIOMEDICAL SCIENCES

We believe that the next frontier in modern biology is the investigation of normal and pathological function in vertebrates using a combined molecular and integrative approach. To train investigators for research on cells, tissues, and organ systems using molecular, cellular and whole animal techniques, we have formed a new program for doctoral training in Biomedical Sciences. The program will emphasize an integrated approach to vertebrate biology and the importance of disease in biological research. A faculty of over sixty members, drawn from basic science and clinical departments, represents a broad range of research interests. Students entering the program will take a specially designed curriculum of courses combined with laboratory rotations, and will then enter a laboratory for research training. We invite applications from qualified students, especially women and minorities. Further information about the program can be obtained from: Dr. Zach Hall, Head, or Dr. Steinunn Backkeskov, Chair of Admissions. For application forms, please contact: Pamela Humphrey, Program Coordinator, Box 0444, University of California, San Francisco, CA 94143.

ANNOUNCEMENTS

CALL FOR PAPERS

The International Symposium on the Ecological Effects of Arctic Airborne Contaminants is seeking research abstracts for both oral and poster presentations. This Symposium will be held in Reykjavik, Iceland, on October 4-8, 1993. For further information and a copy of the abstract submittal form, please contact:

Dr. Dixon Landers
Fax: (503) 754-4338

Internet: LANDERS@HEART.COR.EPA.GOV

MARINE SCIENCE STUDENT FELLOWSHIP AND FACULTY ENRICHMENT OPPORTUNITIES

STUDENTS: The Duke University Marine Laboratory (DUML) has full support for minority students for Spring Term 1993 and beyond. Junior and senior level natural science majors study the ocean sciences in small classes and conduct guided research. A mentor/tutor program is open to all participants. Detailed announcement available from: Admissions, DUML, Beaufort, NC 28516, Telephone: (919)728-2111).

FACULTY: The Marine Lab encourages minority Visiting Scholars to present a research seminar and engage in informal discussions during a three to five day Spring Term visit. Expenses and honorarium available. Please contact: Professor J. Ramus, DUML, Beaufort, NC 28516. Telephone: (919)728-2111).

Programs funded jointly by the National Science Foundation and Duke University.

Duke University
School of the Environment
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A COMPREHENSIVE GENETIC LINKAGE MAP OF THE HUMAN GENOME

The NIH/CEPH Collaborative Mapping Group, in cooperation with SCIENCE, has prepared a complete collection of baseline genetic linkage maps including detailed descriptions and citations for markers on each chromosome. This important collection represents materials published in the 2 October 1992 issue of SCIENCE and additional, peer reviewed information. To order contact: Dr. Mark Guyer, NIH, NCHGR, Building 38A, Room 605, Bethesda, MD 20892, USA or Dr. Howard Cann, CEPH, 27 Rue Juliette Dodu, 75010, Paris, France.

MEETINGS

1993 American Indian Student Research Symposium, August 12-13, 1993, Montana State University, Bozeman. An opportunity for Indians in health and life sciences, technology and engineering to present research findings and hear talks by Indian professionals. Abstract Deadline: June 1, 1993. For more information, contact American Indian Research Opportunities (AIRO) Program, Montana State University, Bozeman, MT 59715; Telephone: (406) 994-5567.



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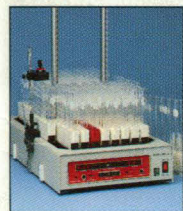
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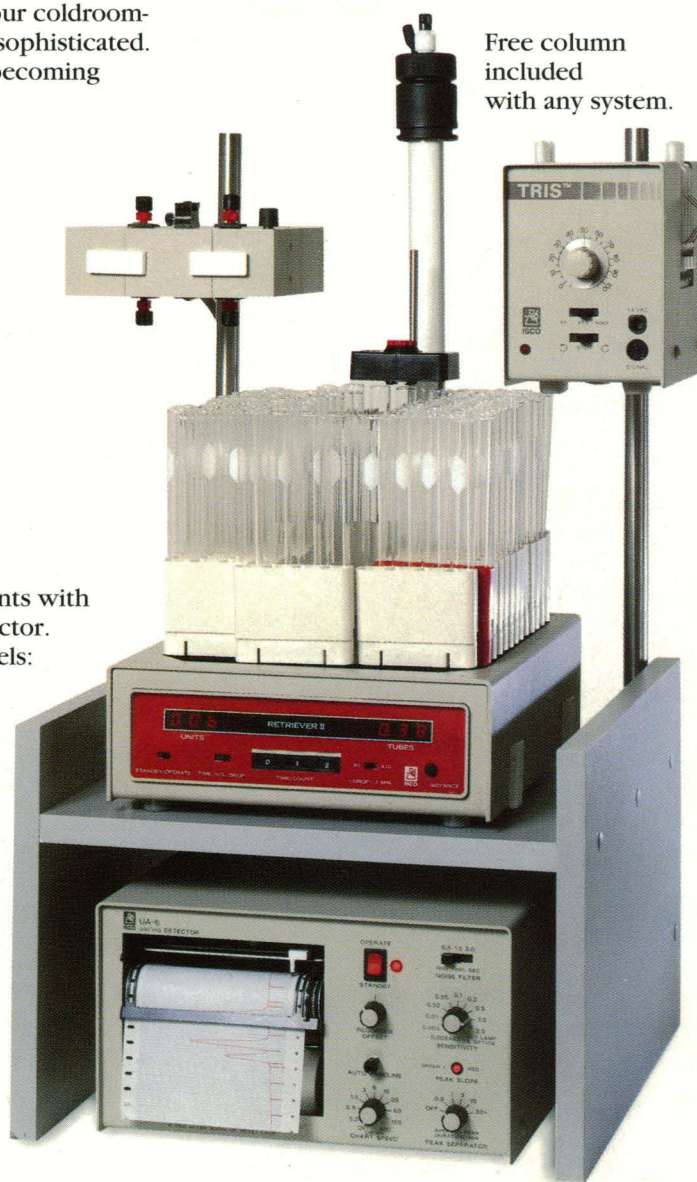
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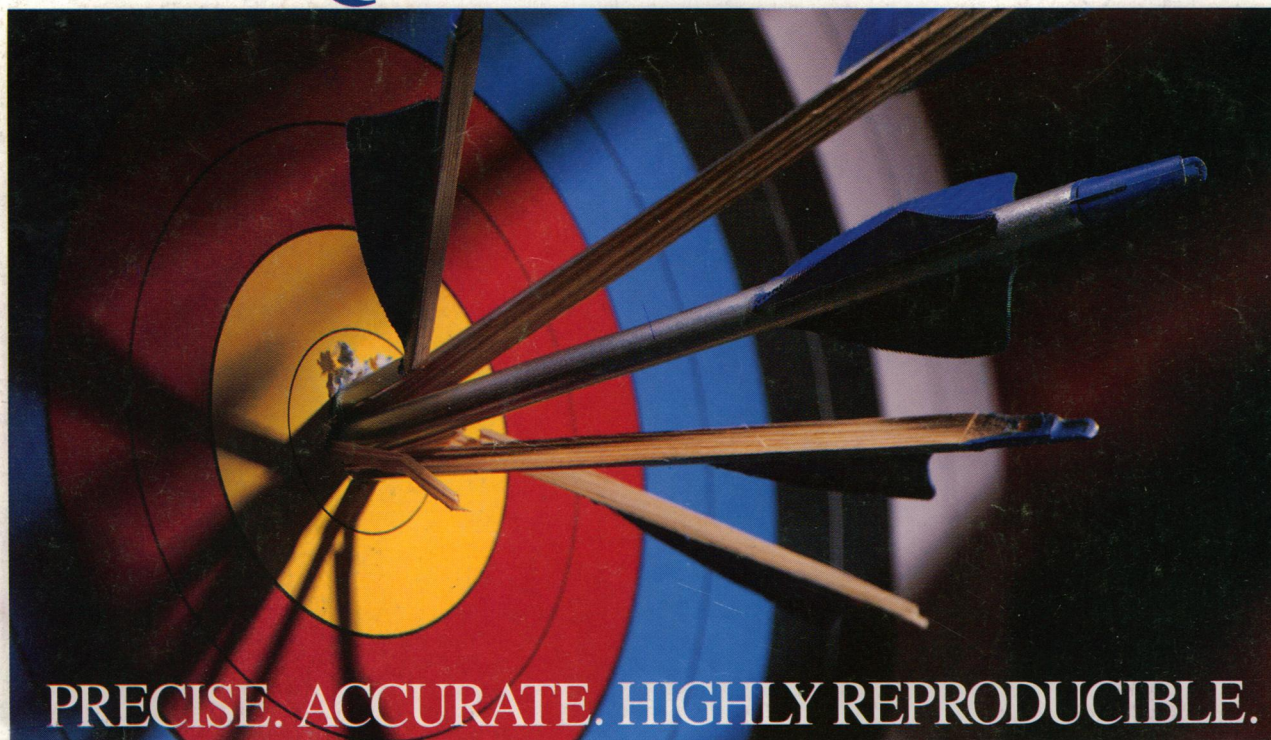
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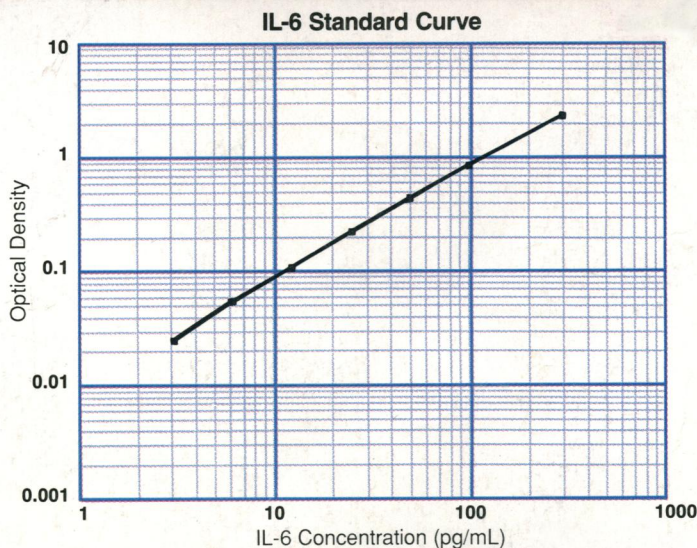
In Europe contact:

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In Japan contact:

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