### Science would like to know your responses to Minorities in Science '93

| Name:  | <u> </u>   | How important have minority issues been   | to y        | our         | sci           | ent          | ific         | career?                 |
|--|--|---|-------------|-------------|---------------|--------------|--------------|-------------------------|
| Address:   |  |   |             |             |               |              |              |                         |
|  |  |   |             |             |               |              |              |                         |
| Title:   |  |   |             |             |               | 1            | 1            |                         |
| Institution:   | What formal or informal organizations for minorities have been helpful to you? |   |             |             |               |              |              |                         |
| AAAS Member(check if yes)  |  | to you:   |             |             |               |              |              |                         |
| Telephone #(optional)  |  | · · · · · · · · · · · · · · · · · · ·   |             |             |               |              |              |                         |
| Field of science:  |  |   |             |             |               |              |              |                         |
| Years in field Race  | What experiences have you had that are relevant to being a minority in         |   |             |             |               |              |              |                         |
| Do you think "Minorities in Science" should be an annual featu<br>Science? Y N   | science?   |   |             |             |               |              |              |                         |
| What should be covered in future "Minorities in Science" sectio  | ons?   |   |             |             |               |              |              |                         |
|  |  | Mail responses to: Joshua Fischman, Scienc<br>ton, D.C. 20005. Or FAX to (202) 408-80<br>confidential, with the possible exception o<br>names—in surveys presented to the Board | 15.<br>f be | (Re<br>eing | espo<br>g ino | onse<br>clud | es w<br>led- | ill be kept<br>—without |
| On a scale of 1 to 5, with 1 being the most valuable and 5 the lo  | east valuab  | le, which elements of "Minorities in Science  | e" di       | id y        | ou            | find         | l mo         | ost valuable?           |
| (Please circle one for each).  |  | A 'Model Minority' Speaks Out   | 1           | 2           | 3             | 4            | 5            | Did not read            |
| Finding—and Keeping—Minority Professors 1 2 3 4 5 Dic  | l not read   | Schools Stumble on Afrocentric Science  | 1           | 2           | 3             | 4            | 5            | Did not read            |
| From Lab Rats to Policy Wonks 1 2 3 4 5 Did  | d not read   | Last Hired, First Fired?  | 1           | 2           | 3             | 4            | 5            | Did not read            |
| Germany's Turks Struggle Into Science 1 2 3 4 5 Dic  | d not read   | Plenty of Jobs, Little Support in Biotech   | 1           | 2           | 3             | 4            | 5            | Did not read            |
| Are Foreigners Squeezing Minorities Out? 1 2 3 4 5 Dia   | d not read   | White Men Can Mentor  | 1           | 2           | 3             | 4            | 5            | Did not read            |
| Bringing Science Back to the Neighborhood 1 2 3 4 5 Dic  | d not read   | Guide to Scientific Societies/Resource Guide  | 1           | 2           | 3             | 4            | 5            | Did not read            |
|  | dar C  | aunan   |             |             |               |              |              |                         |
| Or   | aer C  | Coupon  |             |             |               | C            | ost          | 14.500 14               |
| Minorities in Science '93<br>To order additional copies of the special Minorities in<br>Science '93 issue, please enclose a check payable to |  | Postage and Handling<br>In the U.S. \$1.50 first copy<br>\$.60 each additional copy   |             |             |               |              |              |                         |
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# Cooperative Research Units U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service invites applications for two fisheries research biologist positions (GS-482-11 [\$33,623-\$43,712]/GS-12 [\$40,298-\$52,385]) to serve as Assistant Leader for Fisheries at Cooperative Research Units in Ohio and New Mexico. Successful candidates will be located on cooperating university campuses and will receive a courtesy faculty appointment at the host university.

Assistant Unit Leader duties include establishing a strong research program, teaching at the graduate level, and providing technical assistance on fisheries resource issues. Requirements for the positions include a record of research productivity or resource management training and experience, a commitment and ability to teach, and ability to administer research grants and program budgets. Candidates must meet the requirements for a faculty appointment.

To apply, send a completed SF-171 and OPM Form 1170 (List of College Courses) for each vacancy of interest to Ms. Dot Easley, Personnel Division, Research and Development, U.S. Fish and Wildlife Service, Mail Stop 725 ARLSQ, Washington, D.C. 20240. Applications must reference the particular State for which you are applying. Applications for the Ohio and New Mexico Assistant Leader positions must be postmarked no later than November 22, 1993.

Additional vacancies expected to be announced soon are: Assistant Leader for Fish Assistant Leader for Wildlife

Assistant Leader for Fish Alabama (Nov., Dec. 93) Arkansas (Nov., Dec. 93) Florida (Nov., Dec. 93) Georgia (Nov., Dec. 93) Oklahoma (Nov., Dec. 93) Utah (Nov., Dec. 93) Wisconsin (Nov., Dec. 93) Maryland (Spring, 94)

Arizona (Nov., Dec. 93) Arkansas (Nov., Dec. 93) Iowa (Nov., Dec. 93) Maine (Nov., Dec. 93) Mississippi (Nov., Dec. 93) Wisconsin (Nov., Dec. 93) Maryland (Spring, 94) Unit Leader

Maryland (Nov., Dec. 93)

All positions will become part of the National Biological Survey.

The Fish and Wildlife Service will pay up to \$10,000 in relocation expenses selected candidates that are not already employed by the Federal Government.

For additional information, including vacancy announcements contact the Cooperative Research Units Center, USFWS, Mail Stop 725 ARLSQ, Washington, D.C. 20240 or phone (703) 358-1709.

The Fish and Wildlife Service is an Equal Opportunity Employer.



### THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY Department of Chemistry

### FACULTY POSITIONS

The Hong Kong University of Science and Technology, with the mandate to become one of the eminent technological research universities in the world, was established in April 1988. Students were first admitted for October 1991 at both undergraduate and post-graduate levels including the doctorate. The medium of instruction is English. The Department of Chemistry invites applications for the following positions in all areas of chemistry: Professor: min. US\$107,300 p.a.; Reader: US\$78,400 - US\$104,100 p.a.; Senior Lecturer: US\$75,100 - US\$100,900 p.a.; Lecturer: US\$48,400 US\$80,800 p.a. The area of expertise is open but special consideration will be given to Chemical /Biosensors, Molecular Electronics, chemistry of new advanced materials (design/synthesis/characterization), time-resolved laser spectroscopy and drug discovery/design/synthesis. Applications are particularly invited for a Senior Lecturer position with research interests and experience in natural products, Chinese medicinal chemistry and pharmaceutical development. Applications in response to earlier advertisements will automatically be reviewed and such candidates need not re-apply. Generous fringe benefits including medical and dental benefits, annual leave, and children's education allowances are provided. Air passages and housing are also provided where applicable. Initial appointments will generally be on a three-year contract; a gratuity of an amount equal to 25% of the basic salary drawn will be payable upon successful completion of contract. Re-appointment after the initial contract will be subject to mutual agreement. Approved sabbatical leave will be at full salary. Applications should be sent with a C.V., together with names and addresses of three references, to Professor Nai-Teng Yu, Head of Department of Chemistry, The Hong Kong University of Science & Technology, Clear Water Bay, Kowloon, Hong Kong (Fax: 852-358-1594) by 17 February 1994, but the search will continue until suitable appointments are made.

ADVANCED TRAINING IN THE APPLICATION OF MOLECULAR, STRUCTURAL, AND CELLULAR BIOLOGY TO ANTICANCER THERAPEUTICS

Massey Cancer Center Virginia Commonwealth University Richmond, Virginia

This is a postdoctoral training program aimed at enabling individuals with superior qualifications and motivation to initiate a career in the challenging and rewarding field of cancer therapeutics. The objectives of the program are to allow trainees to apply the approaches fundamental to modern biology to front-line research problems in this area as well as to develop the practical skills needed to be competitive for today's academic or industrial positions. The spectrum of training is comprehensive and is supported by an interactive faculty involved in cellular and molecular biology, fundamental protein and nucleic acid biochemistry, drug design and molecular graphics, molecular genetics, and biochemical and molecular pharmacology. The major emphases of the program are the components of structural biology (protein and nucleic acid crystallography, computational chemistry, and high-field NMR), growth factorinitiated signal transduction, control of programs of differentiation, control of cellular proliferation, programmed cell death, and mechanism of action studies.

The program is supported by an NCI-funded Training Grant and by the comprehensive array of core laboratories available to trainees at the Massey Cancer Center. Stipends start at \$25,000 per annum. Contact Dr. Richard G. Moran at the Massey Cancer Center, Medical College of Virginia, MCV Box 230, Richmond, VA 23298-0230. US citizenship or permanent residence status is required. MCV/VCU is an equal opportunity employer. Women and minorities are encouraged to apply.

### PLANNING GRANTS AVAILABLE

### THE McKNIGHT FOUNDATION COLLABORATIVE CROP RESEARCH PROGRAM

The Foundation has committed up to \$12 million over the next six years for the support of basic and applied plant biology research on topics important to improved food production in less developed regions of the world. Grants of up to \$300,000 per year will support work jointly planned and collaboratively conducted by research groups in the United States and in less developed countries.

The Foundation will award up to fifteen planning grants to facilitate the preparation of proposals for support under this highly competitive program. Scientists working in the United States or in a less developed country and interested in applying for a planning grant should *promptly* request eligibility requirements and guidelines from:

### The McKnight Foundation, Minneapolis, Minnesota, USA Phone: 612-333-4220; FAX; 612-332-3833; Email: GoodmanR@MACC.WISC.EDU

Applications for planning grants must be received by March 1, 1994; planning grants are expected to be announced in April 1994.



### Research Coordinator, ICLARM International Network on Genetics in Aquaculture (INGA)

The International Center for Living Aquatic Resources Management (ICLARM) is a nonprofit, non-governmental, international center with headquarters in the Philippines. ICLARM is a member of the Consultative Group on International Agricultural Research (CGIAR) and is funded by a number of government agencies and foundations.

ICLARM is seeking a coordinator for the International Network on Genetics in Aquaculture (INGA), which has been established to link genetic researchers involved in the development of national fish breeding programs in developing countries.

Qualifications and Experience: A Ph.D. in biological or agricultural sciences; experience in applied genetics as supported by research publications; experience in working in close partnership with National Research Systems in developing countries, and in network coordination, with a knowledge of modern computer-based communication and publishing systems; interpersonal skills to work with scientists and administrators from diverse backgrounds; and fluency in written and spoken English. Working knowledge in any other major language, particularly French, would be an advantage.

The position is based at ICLARM headquarters, Manila, with frequent travel to network member countries. A 3-year contract will be made initially with provision for extension depending upon performance and availability of funds.

Salary and benefits are competitive with those of similar international institutions.

Application: Send application with full documentation, including three references, to: Dr. L.D. Stifel, Director General, ICLARM, MCPO Box 2631, Makati, Metro Manila, Philippines. Phone (63-2) 817-5163, 818-0466; Fax (63-2) 816-3183. Applications should be received before 10 December 1993.

### PHYSCIAN/SCIENTIST

The Arthritis and Rheumatism Branch (ARB) of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), National Institutes of Health (NIH), Public Health Service (PHS), which conducts laboratory and clinical research related to immunology, inflammation, and particularly autoimmunity and autoimmune diseases, is recruiting for two tenuretrack or tenured positions.

One position requires the expertise of a physician/scientist who will develop an independent research program involving both laboratory and clinical research. In addition to laboratory and office space, common facilities are available.

The second position requires the expertise of a physician/clinical investigator who will develop an independent clinical research program related to the rheumatic diseases. Opportunities include both inpatient and outpatient research and collaborations with research scientists and clinical investigators on the NIH campus.

Candidates for both positions must hold an M.D. degree and be Board Eligible or Board certified in Rheumatology. Salary is \$39,000 to \$108.200 depending on experience and the type of appointment.

Send curriculum vitae, bibliography, a list of three individuals who can serve as references, and a one-page summary of research plans and interest to

Dr. Henry Metzger Chief, ARB 9000 Rockville Pike Building 10, Room 9N228 NIAMS, NIH Bethesda, MD 20892



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Our future plans call for even more extensive clinical research programs; relocation to a 150,000 square foot, state-ofthe-art headquarters facility; and the addition of biotech professionals with unique skills to help us expand and share in our future growth. We are interested in discussing employment possibilities with qualified professionals in these areas:

### CHEMISTRY

### Medicinal Chemist/ Synthetic Organic Chemist

Will conduct research involving the design and synthesis of novel compounds for therapeutic targets. A Ph.D. in Chemistry and 3+ years' medicinal chemistry experience are required. **Dept. MC/ME** 

### Associate Director/Director, Medicinal Chemistry

Strong leadership, organizational skills and a strong record of scientific accomplishments are required, as well as a Ph.D. in Chemistry and 4+ years' drug discovery experience. **Dept. AD/ME** 

### Associate Director/Director, Chemical Development

A Ph.D. in Chemistry and 4+ years' pharmaceutical industry experience, including process chemistry group experience focused on the synthesis of development candidates, are required. **Dept. AD/ME** 

### PHARMACOLOGY/ PHARMACOKINETICS

### **Cardiovascular Pharmacologist**

Will design, conduct and supervise evaluation of cardioprotective drug candidates for *in vivo* models of cardiac disease. This position requires a Ph.D. in Pharmacology/ Physiology or relevant medical science. 1-2 years' post-doc must include surgical techniques, cardiovascular disease and experimental design/analysis experience. Dept. CP/MY

### PHARMACEUTICAL AND DELIVERY SYSTEMS DEVELOPMENT

### Associate Director, Analytical

Lead our Pharmaceutical and Delivery Systems Development group in support of pre-clinical development. A Ph.D. and 7+ years' development experience, preferably in sterile product development/manufacturing, are required. **Dept. AD/YJ** 

### **Manager, Corporate Quality Operations**

Assist in developing systems, procedures and policies for the Process Chemistry and Drug Development departments. Will audit bulk drug and finished product manufacture, interface with production facility personnel, and implement/develop corporate quality assurance programs. If you're looking for good chemistry in a career-enriched environment where you can still make an impact, consider Gensia. Our success is hinged on an environment that fosters a synthesis of diverse disciplines and perspectives.

At Gensia, we have the human resources, the financial resources and the vision to meet the long-term challenges necessary to bring new drugs to market. There's an entrepreneurial environment at our San Diego headquarters. Here, the quality of life complements the excitement of working in the heart of one of the nation's top biotech and academic centers, with a team of highly creative scientists. If your current position doesn't fulfill your high capacity potential, this is the perfect time to join forces with a dynamic forerunner.

We offer a competitive salary and comprehensive benefits package, which includes a stock option plan. Qualified candidates are encouraged to submit a resume and salary history to: Gensia, Inc.; Human Resources Dept. (please indicate appropriate dept. code); 11025 Roselle St.; San Diego, CA 92121-1204; or FAX it to (619) 622-5540. Gensia is proud to offer equal employment and a culturally diverse work environment to everyone.



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### **POSITIONS OPEN**

### TWO TENURE-TRACK ASSISTANT PROFESSORSHIPS SUNY COLLEGE AT PLATTSBURGH

(1) PHYSIOLOGIST/CHEMIST: The Departments of Biology and Chemistry invite applicants for an integrative position. The successful candidate must be qualified to teach introductory courses in both depart-ments and will have an area of expertise. Candidates with teaching experience are preferred (BOX 1841-246).
 (2) MICROBIAL PHYSIOLOGIST: The Depart-

ment of Biology invites applicants with a strong back-ground in microbiology and with expertise in microbial

ground in microbiology and with expertise in microbial ecology, toxicology or plant-microbe interactions. The successful candidate will teach courses in general micro-biology and microbial physiology (**BOX 1840-246**). Both positions require a Ph.D. and a commitment to developing a research program that involves undergrad-uates. WOMEN AND MINORITY SCIENTISTS ARE ENCOURAGED TO APPLY. Send curriculum vise a catement of teaching philosophy and threa vitae, a statement of teaching philosophy, and three letters of recommendations to: Chair, Search Commit-tee, c/o Office of Personnel, SUNY Plattsburgh, (Box # from above), Plattsburgh, NY 12901. The closing date is March 1, 1994, or until positions are filled. SUNY PLATTSBURGH IS AN EQUAL OPPOR-TUNITY/AFFIRMATIVE ACTION EMPLOYER.

#### ASSISTANT PROFESSOR OF ENVIRONMENTAL BIOLOGY

Applications for a tenure-track position invited (fall 1994): Requires a broadly trained biologist/environmental scientist for 12 contact hours in biology, soil science, and microbiology. Teaching expertise, promise of successful research program in environmental biology are desirable. Ph.D. preferred and required for tenure. Salary \$27,000 minimum. Submit letter describing teaching philosophy and research goals, curriculum vitae, transcripts, reprints, teaching evaluations, 3 letters of recom-mendation to: Dr. Mary Schwanke, Department of Natural Sciences, University of Maine at Farmington, Farmington, ME 04938, Review begins December 10, 1993. The University of Maine is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities. Upon request, the University provides reasonable accommodations to individuals with disabilities.

VERTEBRATE ECOLOGICAL PHYSIOLO-GIST—The Division of Ecology, Evolution, and Marine Biology in the Department of Biological Sciences, University of California, Santa Barbara, invites applications for a tenure-track position at the ASSISTANT PRO-FESSOR level in vertebrate physiology, effective July 1, 1994. Applicants will be expected to carry out physio-logical research in the context of the ecology or evolution of the organisms studied. Preference will be given to individuals with an interest in terrestrial vertebrates. Ph.D. required by the time of the appointment; postdoctoral experience is preferred. The successful candidate will be expected to establish a strong research program, to teach broadly based undergraduate courses in compar-ative vertebrate physiology in the department's physiology major, and to develop an advanced course in his or her specialty. Interested individuals should send a copy of their curriculum vitae and a summary of their research goals, and arrange to have three letters of recommenda-tion sent by December 31, 1993, to: The Chairman, Department of Biological Sciences, University of Cal-ifornia, Santa Barbara, CA 93106 USA. The University of California is an Equal Opportunity/Affirmative Ac-tion Employer.

BIOLOGY: The Department of Biology at St. John Fisher College invites applications for a tenure-track position at the ASSISTANT PROFESSOR level, to begin in late August 1994. Primary teaching responsibil-ity in anatomy and physiology courses for nursing ma-jors. Development of additional courses is expected in other specialty areas, for biology majors and/or for non-science students. A doctorate in the biological sciences is required. A strong commitment to teaching undergraduates is a must, along with continuing schol-arly activity. Please send curriculum vitae, a statement of educational perspectives, and the names, addresses, and telephone numbers of 3 references, by December 1, 1993, to: Dr. G. Thomas Crombach, Chairman, De-partment of Biology, St. John Fisher College, Roch-ester, NY 14618. St. John Fisher College is an Affirmative Action/Equal Opportunity Employer.

### SCIENCE • VOL. 262 • 12 NOVEMBER 1993

### **POSITIONS OPEN**

#### ASSISTANT PROFESSOR Biological Chemistry/Molecular Biology

The Department of Biological Chemistry, College of Medicine, University of California, Irvine, invites appli-cations for a tenure-track appointment at the assistant professor level. Individuals with research experience and interests in the areas of molecular genetics, macromolecular processing and its control, structural biology and developmental processes are particularly encouraged to apply. Faculty members are expected to develop strong, independent research programs and to participate in the teaching of medical students and graduate students in a campus-wide joint graduate program in molecular biology, genetics and biochemistry.

Applicants should send curriculum vitae, a description of proposed research program and the names of four references to: Search Committee Chair, Department of Biological Chemistry, College of Medicine, University of California, Irvine, CA 92717–1700.

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ASSISTANT or ASSOCIATE PROFESSOR to work on molecular defects in neurodegenerative human diseases and neurological mutant mice. Requirements include an M.D. with at least five (5) years of relevant postdoctoral experience, demonstrated productivity, and capability of securing extramural support. Applicants must have an interest in CNS degenerative diseases and a strong background in neuropathology (clinical and experimental) as well as in molecular biology (timical and ex-perimental) as well as in molecular biology. Please send your curriculum vitae to: James W. Smith, M.D., Professor and Chairman, Department of Pathology and Laboratory Medicine, Indiana University School of Medicine, 635 Barnhill Drive, Room A128, Indianapolis, IN 46202-5120. Indiana University is an Equal Opportunity Employer.

#### HAROLD H. BAILEY PROFESSOR OF BIOLOGY Virginia Polytechnic Institute and State University

The Department of Biology invites applications and nominations for the Harold H. Bailey Professor of Biology. We are seeking an internationally recognized scholar whose research uses modern approaches in addressing fundamental biological questions in the field of vertebrate biology. It is expected that the Bailey Professor will conduct original research of the highest caliber and contribute to the instructional mission of the University. Applicants should be at or near the rank of full professor.

Application materials should include curriculum vitae, a statement of anticipated future research directions, and names of three potential references. Applicant evaluation will begin 1 December 1993 and will continue until the position is filled. Applications and nominations should be sent to: J. R. Webster, Chairman, Bailey Search Committee, Department of Biology, Virginia Poly-technic Institute and State University, Blacksburg, VA 24061.

> Virginia\_Tech is an Equal Opportunity/ Affirmative Action Employer.

### YALE UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF GENETICS

The Department of Genetics invites applications for a tenure-track faculty position, at the level of ASSIST-ANT PROFESSOR, in a stimulating academic environment that includes excellent laboratory and clinical facil-ities. We seek a person with a Ph.D., M.D., or M.D./ Ph.D. degree with a strong record of accomplishment in any area of basic genetic research. Individuals with expertise in developmental biology, cell growth regula-tion, genome structure, the molecular genetics of inher-ited or neoplastic disease and cancer predisposition syndromes are particularly encouraged to apply. Applicants should submit curriculum vitae, reprints, a statement of research interests, and should arrange to have three letters of recommendation send to:

> Chair, Faculty Search Committee Attention: Mrs. I. Sherman **Department of Genetics** Yale University School of Medicine P.O. Box 208005 New Haven, CT 06520-8005

The deadline for applications is February 1, 1994. Yale is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.

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### POSTDOCTORAL SCIENTISTS IN CELLULAR AND MOLECULAR BIOLOGY

### **Respiratory Cell Carcinogenesis**

CIIT is an independent, not-for-profit research corporation. Our mission is to improve the scientific basis for understanding and assessing the potential adverse effects of chemicals, pharmaceuticals, and consumer products on human health. We are currently seeking Postdoctoral Scientists in Cellular and Molecular Biology to investigate the cellular and molecular basis of airway and pleural cell neoplastic transformation using in vitro approaches.

The successful candidates must have a doctoral degree in a relevant discipline such as cell biology, molecular biology/ toxicology or pharmacology. Research projects will involve investigating alterations in growth factor and extracellular matrix signaling pathways in airway epithelial and pleural mesothelial cells resulting from mineral fiber and chemical carcinogen exposure.

CIIT is located in Research Triangle Park, NC, which offers many cultural and recreational activities as well as access to 3 major universities. We offer competitive salary and benefits and a stimulating work environment. Interested applicants should submit curriculum vitae and the names of three professional references, representative reprints and a summary of research interests to: Human Resources Manager, CIIT, P.O. Box 12137, Research Triangle Park, NC 27709.



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# ZYMOGENETICS

### **Bio-Tech in the Pacific Northwest**

### ZymoGenetics

is a biotechnology company located in Seattle, Washington, making important strides in the development and clinical evaluation of therapeutic products aimed at tissue repair, coagulation disorders, and diabetes. As a subsidiary of NOVO NORDISK A/S, the world's largest manufacturer of insulin, ZymoGenetics offers an exciting environment characteristic of a small research and development company, along with the scope and stability of a large pharmaceutical corporation. ZymoGenetics currently has openings for the followng:

### Process Development Scientist

Lead the design and development of recovery and purification processes of proteins from microbial fermentations and mammalian cell cultures. To qualify, you must have a PhD and at least 5 years of related experience in the pharmaceutical/biotech industry. Ref# 31R193.

### Preclinical Studies Scientist

Identify, characterize and perform efficacy studies in appropriate animal models for pre-clinical evaluation of novel drug products. You must have a PhD, MD or DVM and 2+ years of related experience to qualify for this position. Ref# 21R493.

### Organic Chemistry Scientist

Perform research in developing new chemistry synthesis of nonpeptide compounds on solid support. To qualify, you must possess a PhD in Organic or Medicinal Chemistry and 2+ years' related experience in solid and solution phase organic synthesis and screening technologies. Ref# 15N593.

### **ZymoGenetics**

offers intellectual challenge, state-of-the-art facilities, and a generous benefits package. Please apply by sending your CV, noting the reference number you are applying for, to:

### ZymoGenetics, Inc.,

Human Resources, 4225 Roosevelt Way N.E., Seattle, WA 98105.



ZymoGenetics is committed to equal opportunity and diversity, and encourages applications from minorities and women.

#### ASSISTANT PROFESSOR UNIVERSITY OF GEORGIA DEPARTMENT OF MICROBIOLOGY

The Department of Microbiology at the University of Georgia invites applications for a new tenure-track Assistant Professor faculty position in cellular/molecular aspects of microbial physiology or microbial pathogenesis. Qualifications for this position include a doctoral degree and a minimum of two years of postdoctoral experience, a strong record of research productivity, and a commitment to excellence in classroom instruction. Women and minorities are especially encouraged to apply. Responsibilities will include the development of an independent, externally funded program of research and graduate-level courses within the Department. Applicants should submit a statement of research and teaching interests and curriculum vitae. Applicants should arrange to have three letters of reference sent prior to the closing deadline. All applications must be received by January 10, 1994. The target date for filling this position is September 1, 1994. Salary will be commensurate with qualifications and experience. Submit applications to: Search Committee, Department of Microbiology, The University of Georgia is an Equal Opportunity/Affirmative Action Institution.



ASSISTANT PROFESSOR. The Morehouse School of Medicine (MSM) invites applications for a regular faculty appointment in the Department of Biochemistry. Candidates should have strong research training and postdoctoral experience in cellular processes at the molecular level. MSM is a new, expanding, private medical school with excellent research facilities and environment and a commitment to the professional development of minority biomedical faculty and students. *Minorities are encouraged to apply. American citizenship required*. Please send curriculum vitae, description of research and names of three references to: Dr. C. L. Parker, Associate Dean, Morehouse School of Medicine, 720 Westview Drive, Atlanta, GA 30310.

#### HARVARD MEDICAL SCHOOL DEPARTMENT OF PATHOLOGY

The Department of Pathology at Harvard Medical School seeks well-qualified (Ph.D., M.D./Ph.D., or M.D.) applicants for several positions of **ASSISTANT PROFESSOR** as part of an expansion of a basic research program in tumor biology. Candidates should have completed 3 to 5 years of relevant postdoctoral experience and have the capability of directing an independent research program in an academic setting in the areas of cell cycle control, transcriptional regulation, tumor suppressor genes, and signal transduction as they relate to cancer biology and viral oncology. Candidates are expected to participate in the teaching activities of the department for medical students, graduate students, and postdoctoral fellows. Recently renovated laboratory research space will become available in July 1994. Applicants should send their curriculum vitae, a statement of research interest, and the names of three references to: Dr. **Peter Howley, Department of Pathology, Harvard Medical School, Building D2, 6th Floor, 200 Longwood Avenue, Boston, MA 02115.** Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

### ANIMAL ECOLOGIST

ASSISTANT PROFESSOR, tenure-track, to start September 1994. Ph.D. required. Duties to include teaching introductory biology, general zoology, ornithology, and graduate course in the area of expertise. Research must have an environmental orientation. Salary dependent upon experience. Send curriculum vitae, transcripts, three letters of reference and a brief statement of goals to: Don C. Forester, Chair, Biology Search Committee, Department of Biological Sciences, Towson State University, Towson, MD 21204. DEAD-LINE for applications is DECEMBER 24, 1993. An Equal Opportunity/Affirmative Action Employer.

### **POSITIONS OPEN**

#### TENURE-TRACK FACULTY POSITION MOLECULAR MAMMALIAN GENETICS

The Department of Molecular and Cellular Biochemistry, Loyola University Chicago, Stritch School of Medicine, is seeking a molecular biologist with interest in mammalian gene expression at the level of ASSISTANT **PROFESSOR** or ASSOCIATE PROFESSOR. Individuals with interest in oncogenes, tumor suppressor genes, and signal transduction pathways are encouraged to apply. The candidate should have a strong commitment to research and the training of graduate and medical students. The candidate will be expected to develop an independent and productive extramurally supported research program. Candidates at the associate professor level should have current extramural support and the potential for future support. Funds for relocation and start-up support for early development will be provided. Applicants should submit a letter describing their research plan, curriculum vitae, and the names of three references to: **Dr. Richard Schultz, Chair, Department of Molecular and Cellular Biochemistry, Loyola University Chicago, Stritch School of Meditorine, 2160 South First Avenue, Maywood, IL 60153. Loyola University is an Equal Opportunity Employer.** 

ASSISTANT PROFESSOR. The Department of Physiology invites applications for one assistant professor position (tenure-track). Ph.D. degree or equivalent with three years of postdoctoral training. Candidates who plan to develop an independent research program in cellular, molecular or biophysical aspects of cell signaling systems or membrane biology are especially encouraged to apply. However, excellent candidates in all areas of cell physiology will be given serious consideration. Applicants should submit curriculum vitae and a brief statement of research plans and have three letters of reference sent to: James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235–9040. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR Wildlife, Waterfowl/ Wetlands Ecology. Tenure-track position in the Wildlife Department. Requires a Ph.D. with expertise in wildlife management. Candidate must demonstrate background in waterfowl/wetland ecology, wildlife management techniques, and research experience in waterfowl/wetland ecology. Instructional duties to include courses in: waterfowl management, wetland habitats, wildlife techniques, as well as other assigned courses. University teaching experience is preferred. The position begins fall 1994. Submit curriculum vitae (including reprints), transcripts of academic work, 3 letters of recommendation, and other pertinent materials to: David W. Kitchen, Chair, Department of Wildlife, Humboldt State University, Arcata, CA 95521. Telephone: (707) 826-3953. Closing date is November 30, 1993, or until appropriate candidate is found. Humboldt State University is an Equal Opportunity/ Affirmative Action/Title IX Employer.

ASSISTANT/ASSOCIATE PROFESSOR in Physical Oceanography/Rutgers University. The Institute of Marine and Coastal Sciences of Rutgers University invites applications for a tenure-track position in the area of Physical Oceanography.

Applicants must have a Ph.D. and an established record of published research and grant support. The successful candidate will be expected to teach courses primarily at the senior and graduate student level, as well as to establish an innovative, forward-looking research program in dynamical or observational oceanography. Preference will be given to candidates with demonstrated expertise in interdisciplinary studies of marine systems. Appointment will be at a level commensurate with prior experience.

The Institute is housed in a new Marine Sciences Building featuring satellite remote sensing, computer modeling, and seawater flume laboratories. Shore-based stations provide access to the coastal environmental through shipboard and continuous real-time *in situ* observations.

Curriculum vitae, a statement of research interests, and four letters of reference should be sent prior to 1 January 1994 to: Dr. Frederick Grassle, Director, Rutgers University, Institute of Marine and Coastal Sciences, P.O. Box 231. New Brunswick, NI 08903-0231.

P.O. Box 231, New Brunswick, NJ 08903–0231. Rutgers University is an Equal Opportunity/Affirmative Action Employer.

### **POSITIONS OPEN**

### CELL BIOLOGY

The Department of Biological Sciences anticipates making two full-time tenure-track faculty appointments in the area of cell biology beginning September 1994, subject to budgetary approval, to continue expansion of the Department, which has hired six faculty in molecular or developmental biology in the past three years. These appointments are expected to be made at the **ASSIST-ANT PROFESSOR** level, but under exceptional circumstances experienced candidates with outstanding records will be considered for appointment at higher rank. Applicants studying the cell cycle, signal transduction, or using genetic systems to study basic cellular problems are especially encouraged to apply. The successful candidate must have a Ph.D. and extensive postdoctoral experience and will be expected to establish an extramurally funded research program, train graduate students, and participate in undergraduate education. In order to ensure full consideration, applications must be received by December 10, 1993. Applicants should send curriculum vitae along with a summary of research interests and goals, and arrange to have at least three letters of reference sent to: Dr. Charles Walsh, Cell Biology Search Committee, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, PA 15260. Telephone: (412) 624-4266.

The University of Pittsburgh is an Equal Opportunity/ Affirmative Action Employer. Women and minorities are especially encouraged to apply.

BIOCHEMIST. Tenure-track position at the ASSISTANT/RECENT-ASSOCIATE PROFES-SOR level. Preference to candidates doing research in eukaryotic development. Participate in teaching an undergraduate and graduate biochemistry course, and develop an upper-division course in developmental biochemistry. Vigorous research program and aggressive pursuit of extramural support expected. Ph.D. in biochemistry or closely related discipline, and postdoctoral or comparable experience required; teaching experience preferred. Screening will begin 3 January 1994. Send letter of application, curriculum vitae, statement of research goals, and three letters of reference to: Biochemistry Search Committee, Division of Biological Sciences, The University of Montana, Missoula, MT 59812. Women and minorities are strongly encouraged to apply. Affirmative Action/Equal Opportunity Employer.

TENURED PROFESSOR/ASSOCIATE PRO-FESSOR/Department of Marine and Coastal Sciences and resident DIRECTOR at Rutgers University's Haskin Shellfish Research Laboratory (HSRL). Senior scientist with demonstrated leadership and ability to develop, obtain funding for, and administer an active research program to complement ongoing projects. HSRL conducts basic and applied research in support of fisheries (especially shellfish) and aquaculture, and is affiliated with both the New Jersey Agricultural Experiment Station and the Institute of Marine and Coastal Sciences. Needs to interact with fisheries/aquaculture interests, government agencies, and University administration.

Send curriculum vitae, a statement of research/teaching interests, and names of three references by December 31, 1993, to: Dr. Frederick Grassle, Institute of Marine and Coastal Sciences, Box 231, Rutgers, The State University of New Jersey, New Brunswick, NJ 08903. Rutgers University is an Equal Opportunity/Affirmative Action Employer.

#### THE JOHNS HOPKINS UNIVERSITY DEPARTMENT OF BIOLOGY SCHOOL OF ARTS AND SCIENCES

Applications are invited for a tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the areas of Molecular, Cellular and Developmental Genetics. Successful applicants are expected to generate creative and productive research programs that will interface with the diverse scientific interests of the department. Applicants are expected to participate in the teaching of Genetics at the undergraduate and graduate levels. Send curriculum vitae, list of publications, a statement of research interests and plans, and arrange to have three letters of reference forwarded before December 1, 1993, to: Chairman, Search Committee, Department of Biology, The Johns Hopkins University, Baltimore, MD 21218. Minority and female candidates are encouraged to apply. The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. PHARMACIA BIOTECH INC., one of the foremost suppliers of instrumentation and consumables to the biotechnology industry, and PHARMACIA P-L BIOCHEMICALS INC., a leader in the research, production and marketing of molecular and cell biology products, have embarked on a vigorous expansion program. Together we seek professionals in the following areas:

### SALES REPRESENTATIVES

To develop, promote and manage the sale of products within an assigned territory. Responsible for demonstration of products to customers and the gathering of information on competitive products. Qualified candidates must possess BS degree in Biology, Molecular Biology, Chemistry or a life science plus previous laboratory experience utilizing techniques and instrumentation related to biotechnology. DEPT. S.R.

### FIELD APPLICATION SPECIALISTS

To call on customers to familiarize them with related equipment operation/maintenance as well as new and emerging techniques. Individuals must have excellent presentation and communication skills required to conduct technical seminars and training as well as the ability to troubleshoot problems in an effective manner. Qualified candidates must possess a BS degree in Biology, Molecular Biology, Chemistry or a life science and strong laboratory background with experience in technical support of similar product lines. Familiarity with molecular biology techniques as well as DNA sequencing helpful. DEPT. F.A.S.

(Sales/Application positions) Manager, Human Resources Pharmacia Biotech Inc. 800 Centennial Ave., Piscataway, NJ 08854



RESEARCH/DEVELOPMENT

Opportunities exist in Research/Development and Production for individuals interested in developing new kits and reagents for molecular and cell biology products, as well as purfication of restriction nucleic acid modifying enzymes, using a variety of protein purification techniques: production of molecular biology reagents by chemical and enzymatic methods; performing the quality control of molecular biology reagents. Candidates must possess a BS/MS degree in Chemistry, Biochemistry, Molecular Biology, or Biology. In addition previous experience is required working in a laboratory or in an industrial setting, using modern molecular biology techniques and practical experience in immunology, cell culture, DNA cloning, and DNA sequencing. DEPT R.D.P.

To be considered for current/future opportunities please forward your resume/CV including DEPT CODE of position desired to:

(R&D/Production positions) Manager, Human Resources Pharmacia P-L Biochemicals Inc. 2202 N. Bartlett Ave., Milwaukee, WI 53202



Equal Opportunity Employer M/F/D/V

### Liposome Technology, Inc.

Liposome Technology, Inc. (LTI) is engaged in the development, manufacture, marketing, and sale of proprietary liposome and lipidbased products to treatlife-threatening illnesses. LTI's strategic emphasis in on injectable pharmaceutical products designed to improve the efficacy and reduce the toxicity of selected existing and new drugs used to treat cancer and infectious diseases.

To meet our continuing growth, we offer a variety of interesting career choices to both entry-level and experienced individuals.

LTI is a progressive company dedicated to providing its employees with a professional, yet friendly, working environment, and competitive salaries/ benefits. Please send your resume, to: Liposome Technology, Inc., Professional Staffing, 1050 Hamilton Court, Menlo Park, CA 94025, or fax to: (415) 324-3928.



Bristol-Myers Squibb Pharmaceutical Research Institute is the R&D Division of Bristol-Myers Squibb, a worldwide leader in the discovery and development of innovative pharmaceuticals.

# Bristol-Myers Squibb

# STAFF VETERINARIAN

Bristol-Myers Squibb Pharmaceutical Research Institute announces an immediate opening for a Staff Veterinarian at their Princeton, NJ site. This 110,000 square foot facility is located in suburban New Jersey with easy access to Philadelphia, New York City, and numerous recreational and cultural activities. The laboratory animal facility has a diversity of support programs for the basic science and pharmaceutical departments it serves. A full complement of species is maintained in this AAALAC accredited facility.

We are seeking a fully qualified ACLAM eligible or boarded veterinarian for this position. Major responsibilities include the conducting of our animal health programs designed to screen and maintain the quality of animal colonies and to direct comprehensive sentinel, diagnostic and vendor health surveillance programs. The successful candidate is expected to have a career history with extensive experience in rodent, dog and primate animal health. Knowledge of and experience with immunocompromised rodent colonies is considered an important asset. The Staff Veterinarian will be a major contributor to the overall department and program development.

Correspondence including resume and salary history should be sent to: Dr. Dennis M. Stark, Executive Director, Veterinary Sciences, Bristol-Myers Squibb Pharmaceutical Research Institute, P.O. Box 4000 - D2.493, Princeton, NJ 08543-4000. Bristol-Myers Squibb is an equal opportunity employer.

#### VEGETABLE CROPS PRODUCTION AND POSTHARVEST HORTICULTURIST

An 11-month, career-track extension/experiment sta-tion position is available at the **ASSISTANT** or **ASSO-CIATE** ranks. Appointee will develop and implement an extension and applied research program integrating vegetable crop production, environmental quality and postharvest/food quality. Emphases will be on soil and water management in vegetable cropping systems in the San Joaquin Valley, and their effects on postharvest quality. Appointee will provide statewide Extension leadership, interact with numerous clientele groups and provide farm advisor training and advising. Affirmative Action is an integral part of the program. Appointee will have the opportunity to participate in Departmental teaching and in directing undergraduate and graduate research. Requirements include: a Ph.D. in horticulture, agronomy, crop ecology, plant, soil or water science, or a closely related discipline; demonstrated ability or experience in irrigated agricultural production systems; understanding of postharvest research and extension; and a record of scholarly and academic achievement. Send curriculum vitae, statement of extension and research interests, documentation of extension, research, and teaching experience, official transcripts, and names and addresses of at least three references by March 15, 1994, to: **Dr. Ronald** E. Voss, Search Committee Chair, Department of Vegetable Crops, University of California, Davis, CA
 95616–8746; Telephone: (916) 752-1249; FAX:
 (916) 752-9659. The University of California is an Affirmative Action/Equal Opportunity Employer.

#### ASSISTANT PROFESSOR SIGNAL TRANSDUCTION UNIVERSITY OF VERMONT

Applications are invited for a tenure-track position in the Department of Zoology. Applicants are expected to (1) hold a Ph.D. degree and have two or more years of postdoctoral experience; (2) have research experience with techniques of modern molecular biology and a primary research focus on some fundamental aspect of signal transduction; (3) teach physiology and (4) develop a competitive research program in signal transduction. Applicants should forward current curriculum vitae and brief description of their research *and* teaching plans and should solicit three letters of reference to be sent to: Dr. Judith L. Van Houten, Department of Zoology, University of Vermont, Burlington, VT 05405–0086. Review of applications will begin on December 15, 1993.

We especially encourage women, disabled and minority candidates to apply. The University of Vermont is an Affirmative Action/Equal Opportunity Employer.

Trinity College. The Psychology Department and the Neuroscience Program seek a tenure-track ASSISTANT PROFESSOR in the area of cognitive psychobiology/ neuropsychology, starting August 1994. Research specialty is open. We are particularly interested in someone who can engage bright, motivated students in research. The successful candidate will teach introductory and advanced neuroscience courses and will contribute to service courses such as introductory psychology or statistics. We especially seek applications from women and minority group members. Send curriculum vitae, three letters of recommendation, evidence of teaching effectiveness, and a sample of publications to: Dr. Karl Haberlandt, Department of Psychology, Trinity College, Hartford, CT 06106. Trinity College is an Affirmative Action/Equal Opportunity Employer.

ANTICIPATED FACULTY POSITION—ANA-LYTICAL CHEMISTRY WITH ENVIRONMEN-TAL INTEREST. WIDENER UNIVERSITY. Applications are invited for tenure-track position at the ASSISTANT PROFESSOR level, starting fall 1994. Ph.D. and strong commitment to undergraduate teaching required. Research expected. Teaching responsibilities will include introductory chemistry, as well as advanced analytical chemistry. Possibility for developing environmental chemistry courses. Laboratory facilities include 300 MHz NMR, AA, FT-IR, HPLC, and GC/ MS. Send letter of interest, résumé, transcripts, a statement of teaching philosophy, a description of research plans and three letters of reference to: Dr. J. S. Conroy, Chemistry Department, Widener University, One University Place, Chester, PA 19013, by December 31, 1993. Widener University is an Equal Opportunity Employer.

#### **POSITIONS OPEN**

#### ANIMAL ECOLOGY/ BEHAVIORAL ECOLOGY Harvard University

The Department of Organismic and Evolutionary Biology at Harvard University invites applications for two **ASSISTANT PROFESSORSHIPS**, one in animal ecology and one in behavioral ecology. We encourage applications from a broad range of subdisciplines, including empirical and theoretical approaches to behavioral ecology, population biology and/or community ecology. Applicants should send by January 1, 1994, curricu-

Applicants should send by January 1, 1994, curriculum vitae, statement of research interests, and names, addresses and telephone numbers of at least three referees to: Professor N. E. Pierce, Animal Ecology/Behavior Search Committee, Department of Organismic and Evolutionary Biology, 26 Oxford Street, Cambridge, MA 02138.

Harvard University is an Equal Opportunity/Affirmative Action Employer. We encourage applications from women and minority groups.

#### CELLULAR BIOLOGISTS

The Department of Zoology (reorganizing as the Department of Cellular Biology) at the University of Georgia seeks to fill two tenure-track ASSISTANT **PROFESSOR** positions. One position requires expertise in electron microscopy and in cell structure. Obligations for both positions include research as well as teaching at the undergraduate and graduate levels. Send curriculum vitae, statements of proposed research and teaching interests, and at least four letters of recommendation to: Dr. Kojo Mensa-Wilmot, Chair of Search Committee, Department of Zoology, The University of Georgia, Athens, GA 30602. Applications received by December 22, 1993, are assured of consideration. The University of Georgia is an Equal Opportunity/Affirmative Action Employer.

#### TENURE-TRACK POSITION CELL/MOLECULAR BIOLOGIST

The Biology Department of Santa Clara University invites applications for a **CELL/MOLECULAR BIOL-OGIST** to fill a tenure-track position at the **ASSIST-ANT PROFESSOR** level beginning September 1, 1994. Candidates with strong backgrounds in Genetics, Animal Physiology, Developmental Biology, or Cell Biology are encouraged to apply. Applicants must have a Ph.D. with at least two years of postdoctoral experience. Previous teaching experience preferred. The successful candidate will be required to develop a strong research program which includes undergraduate participation.

The Department of Biology is within the undergraduate College of Arts and Sciences at Santa Clara University. The University stresses a strong liberal arts curriculum and seeks to create a learning environment that encourages rigorous enquiry and creative imagination. Excellence in both teaching and research is emphasized.

Applicants should submit curriculum vitae, names, addresses, and telephone numbers of three references, and a brief description of future research and teaching plans by November 15, 1993, to: Dr. Carolyn Bellinger-Kawahara, Chair, Search Committee, Biology Department, Santa Clara University, Santa Clara, CA 95053. Santa Clara University, a Jesuit Institution, as an Equal Opportunity/Affirmative Action Employer, welcomes applications from women and persons of color.

#### POLYMER/MATERIALS SCIENCE ASSISTANT PROFESSOR

The University of Tennessee, Knoxville (UTK), invites applications for a tenure-track Assistant Professor position, effective August 1994, in polymer/materials science with emphasis on synthesis and applications of biopolymers and/or organic polymers. The individual must have a Ph.D.; postdoctoral or industrial experience is highly desirable. Candidates in related areas of organic/polymer chemistry will be considered. Applicants should submit curriculum vitae, including graduate and undergraduate transcripts, a research plan with start-up requirements, and a list of publications. Application materials, as well as three letters of recommendation, should be sent to: E. L. Wehry, Chair-Search Committee, Department of Chemistry, University of Tennessee, Knoxville, TN 37996–1600. Evaluation of completed applications will begin on December 1, 1993, and will continue until the position is filled.

UTK is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.

#### **POSITIONS OPEN**

#### SENIOR FACULTY POSITION Department of Biochemistry University of Illinois College of Medicine at Chicago

Applications and nominations are invited for a seniorlevel tenured faculty position of ASSOCIATE or FULL PROFESSOR. We are seeking applicants who have a strong record of research accomplishments, a nationally/ internationally recognized, funded research program and a commitment to teaching. All areas of biochemistry will be considered. We are particularly interested in scientists using transgenic mouse technology to investigate prob-lems related to gene regulation in the context of molec-ular biology and medicine, development, signal transduc-tion and molecular immunology. The Department is one of six basic science departments in the largest College of Medicine in the United States, and consists of 19 fulltime faculty and 13 joint appointees. The department, college and campus are well equipped and have research facilities that will support any area of contemporary bio-medical research. In recent years we have recruited several senior and junior faculty and are most interested in fostering independent research in an environment of interactive collegiality. Applications should include curriculum vitae, a summary of current and future research plans and the names, addresses, telephone/FAX numbers of at least three individuals for references. All inquiries will be held in confidence. Review of applications will begin after November 1, 1993. Send applications or nominations to: Chair, Faculty Search Committee, Department of Biochemistry (M/C 536), University of Illinois College of Medicine, 1819-53 West Polk Street, Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

Biology: The University of Tennessee–Chattanooga, beginning August 1, 1994. Two ASSISTANT PROFESSOR positions (Full-time, Tenure-track). Comparative Vertebrate Zoology. Responsibilities include lectures and laboratories in Comparative Vertebrate Zoology, Human Anatomy, and Physiology, and Introductory Biology. Microbiology. Responsibilities include lectures and laboratories in Microbiology, Immunology and Virology, and Introductory Biology. Opportunities may exist for candidates to develop courses in their specialty. Scholarly activity and a research program that involves undergraduate students are expected. Advising undergraduate students and participation in departmental matters are required. Preference will be given to candidates with demonstrated excellence in college or university teaching. Send curriculum vitae, transcripts, and three current reference letters to: Dr. Charles H. Nelson, Head, Department of Biological and Environmental Sciences, 615 McCallie Avenue, The University of Tennessee at Chattanooga, Chattanooga, TN 37403. Screening of credentials will begin on November 17, 1993, and will continue until the positions are filled. The University of Tennessee at Chattanooga is an Equal Employment Opportunity/Affirmative Action/Title IX/section 504/ADA Institution.

ASSISTANT PROFESSOR, MICROBIOLOGY. The Department of Biology, College of Arts and Sci-ences, University of South Florida (USF), invites appli-cations for a tenure-track, Assistant Professor position in microbiology, anticipated for fall 1994. The successful candidate must establish a strong, externally funded research program, train M.S. and Ph.D. students, and teach undergraduate and graduate courses in the micro-biology core. He/she should have expertise in molecular and cellular processes and be able to interact closely with microbiology and cell/molecular biology faculty. Attractive start-up funds, state-funded salary, modern equipment and research facilities in a new bioscience building will be provided. USF, the second largest university in Florida, includes Colleges of Medicine and Public Health, and an interdisciplinary Institute for Biomolecular Science. Applications should include curriculum vitae, undergraduate and graduate transcripts, reprints, and statements of research and teaching interests. Three letters of recommendation are required. Send all materi-als for receipt by January 7, 1994, to: **Chairperson**, Microbiology Search Committee, Department of Biology, University of South Florida, 4202 East Fowler Avenue, Tampa, FL 33620–5150. USF is an Equal Opportunity/Equal Access/Affirmative Action Employer. Applicants needing a reasonable accommodation to participate in the application/selection process because of a disability must notify the Search Committee Chairperson five days in advance (813-974-3250).



# CHALLENGING OPPORTUNITIES IN BIOMEDICAL RESEARCH

### STAFF FELLOWSHIP PROGRAM DHHS/PHS/FOOD AND DRUG ADMINISTRATION CENTER FOR BIOLOGICS EVALUATION AND RESEARCH

The Center for Biologics Evaluation and Research is searching for outstanding candidates to conduct biomedical research to provide a strong scientific base for the regulation of biological products. The Center's mission is to protect and enhance the public health with respect to the blood supply, vaccines, and biological therapeutics. The primary responsibility of the Center is to review the safety and efficacy of vaccines, blood products, certain diagnostic products and other biological and biotechnology-derived human products. In conjunction with regulatory and research responsibilities, the Center statistically evaluates clinical and preclinical studies of human biological products and vaccines and epidemiologically evaluates post-marketing studies and adverse biologics reactions. These positions offer the opportunity to participate in the development and approval process for new biological products. Current research includes investigations in the areas of viral and bacterial diseases and vaccines, mechanisms of pathogenesis, cytokines and growth factors, allergy and immunology, parasitic diseases, and developmental biology. We have active research on AIDS and related diseases. This is a truly unique fellowship program which integrates diverse biologics development and control.

**Qualifications:** Candidates for the Staff Fellowship Program must have completed all requirements from an accredited institution for a doctoral degree (M.D., Ph.D., or equivalent degree). Graduates of foreign medical schools must submit a copy of their permanent Educational Commission for Foreign Medical Graduates (ECFMG) certification. Candidates must be either U.S. citizens or resident aliens eligible for citizenship within four years.

**Duration:** Appointments are for an initial two-year period and may be extended up to a total of seven years.

**Location:** Laboratories are strategically located on the campus of the National Institutes of Health in Bethesda, Maryland, or in close proximity to the campus.

**Salary:** Salary range for candidates with a doctoral degree (other than M.D.) is from \$28,000 to \$62,293 per annum. Salary range for candidates with a medical degree is from \$28,000 to \$73,472 per annum. Salary, research support, and level of responsibility are commensurate with education and experience.

Positions may also be filled by appointment in the U.S. Public Health Service, Commissioned Corps, Research Officer Group, with commensurate salary and benefits. Candidates for this program need to meet Commissioned Corps appointment standards.

**How To Apply:** Applications are accepted throughout the year, and candidates should indicate when they will be available for employment. Interested candidates should indicate type of Fellowship position applying to, Post Doctoral or Career Track, and send a current curriculum vitae, statement of research interest, bibliography, transcripts, and names of three references to:

FDA/Center for Biologics Evaluation & Research 1401 Rockville Pike, HFM-60 Rockville, Maryland 20852-1448 Attention: EEO Recruitment Coordinator (122)

FDA IS AN EQUAL OPPORTUNITY EMPLOYER AND HAS A SMOKE FREE ENVIRONMENT



### Public Announcement Regarding New Research and Development Projects on a Next-generation Dental Product Engineering System, a Comprehensive System for Assisting Wheelchair Users and a System for Supporting Independent Evacuation

Announced by the New Energy and Industrial Technology Development Organization on November 12, 1993

In order to promote the research and development of industrial technologies, the New Energy and Industrial Technology Development Organization (NEDO) would like to inform all interested companies and research organizations regarding the three research and development projects described below. These new projects are being undertaken as part of the Research and Development Program on Medical and Welfare Equipment Technology of the Agency of Industrial Science and Technology, Ministry of International Trade and Industry of Japan.

### Themes of the Research and Development Projects

- 1. "R&D of a Next-generation Dental Product Engineering System"
- 2. "R&D of a Comprehensive System for Assisting Wheelchair Users"
- 3. "R&D of a System for Supporting Independent Evacuation"

### Outline of the Research and Development Work to be Entrusted

- R&D of a Next-generation Dental Product Engineering System
  The objective of this project is to develop technology for a next-generation engineering system which enables the
  design and manufacturing of more suitable dental products such as crowns, bridges and complete dentures at
  a lower cost through computer aided design (CAD) and computer aided manufacturing (CAM).
- 2. R&D of a Comprehensive System for Assisting Wheelchair Users
- The objective of this project is to develop technology for a comprehensive system for assisting wheelchair users. The overall system consists of two systems. The first is a supporting system for determining, designing, and manufacturing wheelchairs highly suitable to individual users through CAD and CAM. The other is a system for assisting wheelchair users in transiting public places with differences in level, such as staircases, and without any facilities for wheelchair users.
- R&D of a System for Supporting Independent Evacuation The objective of this project is to develop a system which will help people who are bedridden (but fully conscious) as a result of, for example, a fracture or apoplexy to evacuate by themselves.

### **Procedures for Application**

(1) Qualification Criteria

All companies or research organizations who meet the following qualification criteria may submit an application to participate in the above projects:

- 1. The applicant must have previous research and development experience in the field covered by or related to a project and possess the organizational structure, human resources and research facilities required to carry out the project work.
- The applicant must be in sound financial condition and have the ability to manage its finances and facilities as necessary to smoothly carry out the project work.
- 3. The applicant must be able to comply with NEDO's instructions to fully carry out the project work.
- 4. The applicant must attend the explanatory meeting held by NEDO as set forth in item (2) below or be represented at the meeting by a responsible agent or representative who is capable of accurately conveying the contents of the meeting in detail.
- (2) Explanatory Meeting

An explanatory meeting will be held on the dates shown below in order for NEDO to fully explain the details of each project's research and development work to be entrusted and the application documents to be submitted. All companies or research organizations who are interested in submitting an application to participate in a project are required to attend this meeting or to send an agent or representative to attend on their behalf. Japanese will be the only language used during the meeting.

Date: Monday, November 29, 1993

- Time: 14:00 to 15:30
- Place: NEDO's Head Office

30th Floor, Sunshine 60 Building 1-1, Higashi-Ikebukuro 3-chome Toshima-ku, Tokyo Japan

(3) Further Information

For further information regarding the research and development work to be entrusted under the above projects, please contact NEDO by telefax as follows:

New Energy and Industrial Technology Development Organization Contract Division, Accounting Department 28th Floor, Sunshine 60 Building 1-1, Higashi-Ikebukuro 3-chome Toshima-ku, Tokyo 170 Japan Telefax: +81-3-5992-1184

### **BACHELORS IN:**

- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering
- Civil Engineering
- Industrial Management
- Land Surveying

MASTER IN: • Engineering Management

### TRENTON STATE COLLEGE

ANTICIPATED POSITIONS BIOLOGY DEPARTMENT PLANT ECOLOGIST AND DEVELOPMENTAL GENETICIST

Highly competitive undergraduate college seeks to fill two tenure-track ASSISTANT PROFESSOR positions available September, 1994. Plant Ecologist: to teach Biology of Seed Plants, Field Ecology, Intro-ductory Biology and an upper-level spe-cialty course. Training and current re-search interest in vascular plants required. Developmental Geneticist: with training and current research interest in the genetic control of aukaryotic development, to teach in Cell and Molecular Biology, Genetics, Introductory Biology, and an upper level course in Developmental Genetics. Both positions require an earned Ph.D., capability of conducting research programs that involve students, a strong commitment to undergraduate education. Teaching experience in the prescribed areas and postdoctoral experience expected. Send curriculum vitae, a letter describing your commitment to undergraduate science education, transcripts and have forwarded three letters of recommendation by January 3, 1994 to David Rose (Ecology Search) or Albert Eble (Genetics Search), Trenton State College, Biology Department, Hillwood Lakes, CN-4700, Trenton, NJ 08650-4700. To enrich education through diversity, TSC is an AA/EOE.

### **Structure-Based Methods of Drug Discovery**

Our research labs have led the way in the use of the three-dimensional structure of protein targets to guide medicinal chemistry efforts. We believe that understanding the molecular details of protein/ligand interactions is a crucial part of the drug discovery process, and our commitment to obtaining such information for key therapeutic targets is exemplified by our pioneering structural studies with various enzymes important in disease (e.g. Carbonic Anhydrase, HIV Protease, Inositol Monophosphatase, Stromelysin, PMN Elastase, etc.)

### PROTEIN BIOCHEMISTRY SENIOR SCIENTIST

Currently we are seeking a Ph.D. level scientist to join our Biophysical Chemistry group. A broad background in biochemical techniques and extensive experience with the purification of recombinant proteins is required. You will oversee the development of purification strategies and characterization of recombinant proteins, and will be a critical member of a multi-disciplinary team consisting of molecular biologists, x-ray crystallographers, NMR spectroscopists, computational chemists, and synthetic chemists. State-of-the-art facilities have recently been completed to house this growing team.

Strong communication, managerial and multi-tasking skills are essential. Four or more years of protein biochemistry experience within the pharmaceutical or biotechnology industry are desirable. Most important is an enthusiasm toward applying structural information to the discovery of novel small molecule drugs.

Merck Research Laboratories are located in Rahway, NJ, approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent. For consideration, send your resume with the names of three references to: **Christine Cantone, Merck** & Co., P.O. Box 2000, Ad #141, Rahway, New Jersey 07065, R80-A3. EE0/AA/VH/Employer.



ADDRESS: 377 Ponce De León Ave. Hato Rey, Puerto Rico Phone (809) 754-8000 Fax (809) 763-8919 Post Office Box 192017 Hato Rey, Puerto Rico 00919-2017

# **POLYTECHNIC UNIVERSITY OF PUERTO RICO** LARGEST HISPANIC PRIVATE SCHOOL OF ENGINEERING IN THE NATION.

#### MICROBIOLOGIST

Tenure-track position, San Diego State University, for fall 1994. The successful candidate is expected to teach pathogenic bacteriology, participate in undergraduate and graduate (M.S. and Ph.D.) programs, and develop an independent research program, preferably studying mechanisms of pathogenesis, host-parasite interactions, or closely related areas. Ph.D. or M.D. required. Rank is open, but appointment at ASSISTANT or ASSOCI-ATE PROFESSOR level is preferred. Send curriculum vitae, representative reprints, a brief description of research interests and teaching philosophy, and names and addresses of three references to: Microbiologist Search Committee, Department of Biology, San Diego State University, San Diego, CA 92182–0057 by December 31, 1993 (the application period may remain open until the position is filled). Ethnically diverse candidates, women, disabled and veterans are particularly encouraged to apply.

MOLECULAR BIOLOGY/ANIMAL PHYSIOL-OGY. The Biology Department at Pacific Lutheran University (PLU) invites applications for two tenuretrack ASSISTANT PROFESSORS to begin in FALL 1994. The MOLECULAR BIOLOGIST will teach upper-division molecular biology and team-teach introductory and advanced courses where molecular biology is a strong component. The ANIMAL PHYSIOLOGIST will teach upper-division vertebrate physiology for nonmajors. Ph.D. required. Successful candidates must have a commitment to undergraduate teaching; research involving undergraduate students is expected. Pacific Lutheran University, located in the Puget Sound area, is a liberal arts institution with 3500 students. The Biology Department is housed in a modern science center and includes 12 full-time faculty members. Applicants should send curriculum vitae, transcripts, statements of teaching philosophy and research interests, and three letters of recommendation to: Dr. Angelia Alexander, Chair, Department of Biology, Pacific Lutheran University, Tacoma, WA 98447. Review of applications begins 20 December 1993. PLU is an Affirmative Action/Equal Opportunity Employer; applications from minority and women candidates are especially encouraged.

#### TENURE-TRACK FACULTY POSITION DEPARTMENT OF PHARMACOLOGY BAYLOR COLLEGE OF MEDICINE (BCM)

The Department of Pharmacology, Baylor College of Medicine, is seeking to fill a tenure-track **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** position. The candidate should have a Ph.D. and/or M.D., postdoctoral experience, and a strong commitment to excellence in research and teaching. Evidence of scientific accomplishment and success in attaining extramural funding are essential.

Salary is competitive, and based on experience and qualifications. Candidates should send curriculum vitae and a list of three references to: Lynn C. Yeoman, Ph.D., Faculty Search Committee, Department of Pharmacology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. BCM is an Affirmative Action/Equal Opportunity Employer.

#### FACULTY POSITION IN PHARMACOLOGY AND TOXICOLOGY THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level in the Department of Pharmacology and Toxicology. Exceptional candidates at higher ranks also will be considered. The position offers competitive start-up funds and access to core equipment. Candidates with research interests in all areas of pharmacology or toxicology will be considered. A Ph.D. and/or M.D. degree and postdoctoral training are required. Position responsibilities include development of a strong research program and participation in medical, dental and graduate programs. Candidates should submit curriculum vitae, a statement of future research interests and the names of three references to: Dr. Rodney C. Baker, Chair, Search Committee, Department of Pharmacology and Toxicology, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216–4505. Closing date for application is January 31, 1994. Equal Opportunity Employer, M/F/D/V.

### **POSITIONS OPEN**

#### BEHAVIORAL AND SYSTEMS NEUROSCIENCE The Center for Behavioral Neuroscience SUNY at Stony Brook (SUSB)

The Center for Behavioral Neuroscience (CBN) is a newly established facility dedicated to collaborative, multidisciplinary research on the functional organization of the nervous system. CBN invites applications for tenure-track positions at the ASSISTANT or ASSOCIATE PRO-FESSOR level. Existing CBN faculty have strong interests in learning, memory and aging and new faculty will be selected to complement strengths in the Center. Researchers with interests in the functional organization of sensory systems, in functional neuroplasticity or in human neuroscience are particularly encouraged to apply. Applicants should have the Ph.D. and/or M.D. degree,

Applicants should have the Ph.D. and/or M.D. degree, substantial postdoctoral training, and a proven record of research accomplishment. The successful applicant will establish an independent, funded research program and will participate in the teaching mission of the Center. Closing date for applications is December 31, 1993. Initial appointments will begin in September 1994, however, recruitment will continue for at least two additional years.

For consideration, applicants should submit current curriculum vitae, description of research directions and name, address and telephone numbers of three references to: Search Committee, Center for Behavioral Neuroscience, SUNY at Stony Brook, Stony Brook, NY 11794-2575. SUSB is an Equal Opportunity/Affirmative Action Employer.

#### ASSISTANT PROFESSOR ENVIRONMENTAL MICROBIOLOGIST

The Department of Environmental, Population and Organismic Biology invites applications for a tenure-track faculty position in environmental microbiology. Preference will be given to candidates at the assistant professor level, but all levels will be considered. Research interests may include any aspect of environmental microbiology or microbial ecology. Development of strong teaching and research programs in microbiology consistent with the broad themes of this department will be required. Send curriculum vitae, statements of research and teaching interests and names and addresses of 4 references to: Steven K. Schmidt, search committee chair, Department of EPO Biology, University of Colorado, Boulder, CO 80309–0334. Applications should be postmarked no later than 1 December 1993. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.

PLANT EVOLUTION/ECOLOGY: VISITING ASSISTANT PROFESSOR (Ph.D. required) renewable up to 3 years. Field expertise combined with molecular approaches required. Interests in both pure and applied areas desired and a commitment to research with advanced undergraduates expected. Teaching responsibilities include an introductory course integrating genetics, evolution and ecology; an elective course in specialty; and likely involvement in interdisciplinary environmental studies program. Franklin and Marshall College, a highly selective liberal arts college, is a national leader among small colleges in preparing undergraduates for graduate and professional training in science and medicine. The College is committed to cultural pluralism through the hiring of minorities and women, and encourages all interested individuals to apply (Equal Opportunity Employer/Affirmative Action). Send curriculum vitae, graduate and undergraduate transcripts, research/teaching statement by December 20, 1993, and arrange for 3 reference letters to be sent to: Prof. Ira Feit, Chair, Search Committee, Department of Biology, Franklin & Marshall College, P.O. Box 3003, Lancaster, PA 17604–3003. FAX: (717) 291-4088.

PENN STATE: TWO ASSISTANT PROFES-SORS (tenure-track) of Biobehavioral Health are sought for an established interdisciplinary program in the College of Health and Human Development. For this search we are particularly, but not exclusively, interested in the areas of gender and health, psychoimmunology, and cardiovascular health. Send curriculum vitae and three letters to: Chair, BHH Search Committee, Penn State University, E210 Health and Human Development Building, University Park, PA 16802. Review of applications will begin December 8, 1993, and continue until the positions are filled. Penn State is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

### **POSITIONS OPEN**

### FACULTY POSITION IN MICROBIOLOGY

Southern Illinois University at Carbondale

Applications are invited for a tenure-track position in the Department of Microbiology at the level of **ASSIST-ANT PROFESSOR**. In addition to establishing a strong research program, teaching microbiology at both the graduate and undergraduate levels is expected. All qualified applicants will be considered, but preference will be given to a microbiologist who works on the molecular biology of environmentally significant or pathogenic microorganisms. All candidates are required to have an earned doctorate and postdoctoral research experience. Salary, research facilities and start-up funds will be competitive. Applications will be accepted until December 1, 1993, or until the position is filled. The position is subject to final approval. Applicants should send a letter of application, curriculum vitae, a statement of research plans, and have at least three letters of reference sent to: Dr. John Martinko, Department of Microbiology, Southern Illinois University at Carbondale, II 62901. Southern Illinois University at Carbondale is an Equal Opportunity/ Affirmative Action Employer.

#### FACULTY POSITIONS Cornell University Medical College Department of Pharmacology

Candidates are sought for two tenure-track positions at the level of **ASSISTANT** or **ASSOCIATE PRO-FESSOR**. Candidates with interests in a wide range of areas related to the discipline of pharmacology will be considered. The responsibilities of this position include development of an active, independent research program and participation in both medical and graduate student teaching programs in the department. Applicants should send curriculum vitae, a summary of proposed research, and should arrange to have letters sent from at least three scientists who can evaluate the candidate's accomplishments. Cornell University Medical College is a part of the New York Hospital-Cornell Medical Conter and adjacent to Memorial Sloan-Kettering Cancer Center and Rockefeller University. Applications should be sent to: **Chair, Pharmacology Department, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Equal Employment Opportunity/Affirmative Action/M/F/H/V.** 

#### FACULTY POSITION DEPARTMENT OF MICROBIOLOGY MOUNT SINAI SCHOOL OF MEDICINE

An opportunity for a tenure-track ASSISTANT/AS-SOCIATE PROFESSOR at this center of medical excellence. We seek outstanding, highly motivated scientists interested in investigating the molecular biology and genetics of animal viruses and/or viral pathogenesis. Individuals working with DNA or RNA viruses are invited.

Please send curriculum vitae, names of references, and a one-page research summary to: Dr. Peter Palese, Department of Microbiology, Box 1124, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.

ASSISTANT PROFESSOR—AQUATIC BOTA-NY. The Department of Biological Sciences, Murray State University, invites applications for a tenure-track position in freshwater aquatic botany with specialization in either phycology or aquatic vascular macrophytes. The candidate is expected to teach undergraduate Botany, develop upper-level/graduate courses, and maintain a productive, externally funded research program. There are opportunities to interact with the Center for Reservoir Research, a multidisciplinary group examining reservoir phenomena at the ecosystem level. Additional opportunities exist at the department's Hancock Biological Station, a well-equipped, year-round facility on Kentucky Lake. Ph. D. required, postdoctoral experience preferred. Submit curriculum vitae, statements of research/teaching interests, unofficial transcripts of all college work, and names, addresses and telephone numbers of three references to: Dr. David S. White, Chair, Search Committee, Department of Biological Sciences, Murray State University, Murray, KY 42071. Deadline for submission is December 22, 1993, and expected starting date is fall 1994. Murray State University is an Equal Education and Employment Opportunity, M/F/D, Affirmative Action Employer.



The South Florida Water Management District has the following opportunities currently available:

### Aquatic Animal Ecologist Ref.# SCILS7140

Requires a PhD research scientist to study wetland community structure and dynamics in the Everglades and Florida Bay, collaborating with plant ecologists, biogeochemists, and ecosystems modelers. We prefer an ecologist with a strong publication record and interests in **quantifying** food-web linkages leading to wading birds, plant/animal interactions, and hydrologic controls on life-history patterns. Technical skills should include a background in experimental design, computer modeling, bioenergetics, or physiological ecology. For additional information, contact Fred Sklar, 407-687-6504.

### Water Quality Modeler Ref.# SCILS7130

Successful candidate will develop, enhance and interface hydrodynamic and water quality models of Lake Okeechobee to assess management practices (regulation schedules; nutrient load reduction; sediment re-suspension). PE/PhD/MS in Engineering is required, along with four years experience, including hydrodynamic and water quality modeling, and computer programming (FORTRAN and UNIX). A strong publication record and a PhD are desirable. For additional information, contact Al Steinman, 407-687-6500.

### Estuarine Ecologist Ref.# SCILS7130

Will conduct multi-disciplinary research addressing long range water management plans. Minimum requirements include an MS in Estuarine Ecology or related environmental science and four years experience in estuarine research. Preferred qualifications include a PhD and a publication record demonstrating estuarine ecosystem research in response to anthropogenic environmental areas, especially as it relates to freshwater inflow. For additional information, contact Bob Chamberlain, 407-687-6610.

### Postdoctoral Environmental Scientist/Engineer Ref.# SCILS7140

This temporary, postdoctoral position within our Everglades Systems Research Division conducts applied research/engineering studies to address environmental resource issues. Possible areas of study include: paleoecology; periphyton, macrophyte, and sediment metabolism, as well as vegetation analysis through aerial photography, hydrology (surface/ground water modeling; macrophytic flow resistance analysis) and atmospheric deposition study.

### Postdoctoral Fish Ecologist Ref.# SCILS7130

This one-year research opportunity involves environmental impact analysis of the Kissimmee River Restoration Project. The candidate will be responsible for designing and initiating pre-restoration baseline studies on the fish communities of the channelized river and floodplain. This position requires a PhD and a strong background in river and wetland ecology and their associated fish communities, as well as a demonstrated knowledge of relevant sampling methodologies, experimental design, and statistics. Experience in sub-tropical river/floodplain wetland ecosystems is preferred. This position extends from October 1, 1993 through September 30, 1994, with a possible one-year extension. For additional information, contact Lou Toth, 407-687-6615.

### Senior Environmental Scientist Ref.# SCILS9050

Responsibilities of this position include managing the Lake Okeechobee SWIM Plan and Programs. We require a PhD or MS in a scientific field, four years related experience, and knowledge of freshwater ecology. Must be able to conduct effective public presentations, manage multi-disciplinary water management projects, and address complex environmental issues associated with long-range water management plans.

### Candidates selected to interview will be required to give a research seminar as part of the interview process.

We offer competitive salaries, a comprehensive and flexible benefits program (benefits are not available to temporary, postdoctoral positions), and a diverse and supportive non-smoking, harassment-free environment. Our South Florida location offers exceptional social and economic/tax advantages. Pre-employment drug screening is required. All inquiries must include your social security number and ad reference code. Send resumes, with three references, to: South Florida Water Management District, Attn: Human Resources Division, 3301 Gun Club Road, West Palm Beach, FL 33416-4680.

### **South Florida Water Management District**

The SFWMD is committed to an environment enriched by diversity. We encourage inquiry from all applicants EOE M/F/D/



MOREHOUSE SCHOOL OF MEDICINE **ANNOUNCES** AN INNOVATIVE MULTIDISCIPLINARY GRADUATION PROGRAM **LEADING TO** THE DOCTOR OF PHILOSOPHY DEGREE IN

**BIOMEDICAL SCIENCES** 

This predoctoral program has been accredited by the Southern Association of Colleges and Schools. Program support in the form of Graduate fellowships range from \$12,000 - \$15,000. Interdisciplinary M.D./Ph.D. programs are available to selected students (prospective candidates must first be accepted by the Medical School).

MSM has developed a number of state-of-the art core research facilities to support its interdisciplinary research programs in Neuroscience \* Molecular Biology \* Physiology/Endocrinology \* Microbiology/Immunology \* Pharmacology/Toxicology \* Cell Biology/Biochemistry.

MSM basic science and clinical faculty currently have more that \$20,000,000 in extramural funding supporting these research programs.

A limited number of postdoctoral positions are immediately available in some of the research areas listed above.

For additional information, contact: David E. Potter, Ph.D. Chairman, Department of Pharmacology/ Toxicology Morehouse School of Medicine 720 Westview Dr., SW Atlanta, Georgia 30310-1495

> (404) 752-1708/752-1757 FAX 752-8443/756-8675

ADE Life Sciences Research **Division of Biology** Kansas State University

Graduate and Postdoctoral training opportunities are available in cellular and developmental biology, supported by:

A NASA Specialized Center of Research and A ☆ Training (NSCORT) in Gravitational Biology ☆

#### **Research Areas Include:**

Bevelopmental and molecular genetics

SP Organ development and tissue culture

Signal transduction mechanisms

Second Se

Reference Extracellular matrix and development

🖙 Plant and animal model systems

Contact: Space Life Sciences Division of Biology 201 Ackert Hall Kansas State University Manhattan, KS 66506 FAX: 913-532-6653

Interested?

Kansas State University is an equal opportunity/affirmative action employer.





announces an INTERDISCIPLINARY PROGRAM OF GRADUATE STUDY

#### in MOLECULAR AND CELLULAR BIOLOGY

The Graduate School of Medical Sciences, composed of faculty drawn from Cornell University Medical College and The Sloan-Kettering Institute, has established a training program in Molecular and Cellular Biology leading to the Ph.D. degree.

Successful applicants will be awarded full graduate fellowships covering living expenses and tuition. Low-cost university housing is provided for all students. Fellows will be admitted "at large" and will participate in a core curriculum of courses and laboratory rotations. These activities will expose the student to the many research opportunities at the participating institutions and eventually lead to his or her affiliation with one of the seven fields of study in the Graduate School of Medical Sciences. These are: Biochemistry and Structural Biology, Cell Biology and Genetics, Immunology, Molecular Biology, Neuroscience, Pharmacology, and Physiology and Biophysics.

The Cornell University Graduate School of Medical Sciences constitutes the New York City Campus of Cornell University at Ithaca, New York. It is part of a large biomedical research complex extending along York Avenue on Manhattan's East Side, including Cornell University Medical College-New York Hospital, The Memorial-Sloan Kettering Cancer Center, The Hospital for Special Surgery, and The Rockefeller University.

The Cornell University Graduate School of Medical Sciences is committed to the successful recruitment and training of qualified women and members of underrepresented minority groups, including, but not limit-ed to, African Americans, Alaskan Natives, American Indians, Hispanic Americans, and Pacific Islanders.

Cornell University is an Equal Opportunity/Affirmative Action Employer. To receive additional information

and an application kit, call or write to: **Cornell University Graduate School of Medical Sciences** 1300 York Avenue New York, NY 10021

tel: 212-746-6565 fax: 212-746-8906

# **COMPUTATIONAL SCIENTIST**

### **High-Performance Computing in Environmental Technologies**

The Center for Computational Sciences (CCS) at the Oak Ridge National Laboratory (ORNL), a recognized leader in multidisciplinary research and development, is seeking a Computational Scientist for the development and implementation of computational methods on massively parallel computer architectures to help solve environmental problems of critical importance to industry. The position is part of a multidisciplinary team of national laboratory and university collaborators working on the "Grand Challenges" related to environmental areas such as groundwater remediation and global change.

The successful applicant will be able to work with scientists, programmers, and vendors to create effective implementations of existing codes on state-of-the-art parallel supercomputers employing new

hardware and software. Where existing codes are inadequate, the researcher will be encouraged to develop innovative algorithms and software tools to simulate environmental systems. The CCS currently houses a Kendall Square Research computer and two Intel Paragons.

The position requires a PhD (or MS and equivalent combination of education and experience) in a quantitative science (computer science, math, engineering, physics, hydrology, or geochemistry). Application programming experience on massively parallel processors and FORTRAN programming proficiency are required. Familiarity with C and UNIX or OSF/1 based computers is desired, along with experience in development and use of visualization software and spatial analysis. Demonstrated interpersonal skills, oral and written communication

skills and strong personal motivation are essential.

ORNL is a multi-purpose research facility managed by Martin Marietta Energy Systems for the US Department of Energy. ORNL offers a competitive compensation and benefits package, including relocation. For immediate consideration, send your resume to: J.K. Johnson, Oak Ridge National Laboratory, Dept. SCI, P.O. Box 2008, Oak Ridge, TN 37831-6216.

ORNL is an equal opportunity employer committed to building and maintaining a diverse workforce.



The Charles A. Dana Foundation is pleased to announce the 1993 winners of the Charles A. Dana Awards for Pioneering Achievements in Health

Anders Björklund, M.D., and Fred H. Gage, Ph.D. for pioneering methods of transplanting and genetically engineering cells that can repair and replace damaged neurons

### Larry R. Souire, Ph.D.

for research demonstrating the biological reality of the brain's multiple systems for learning and memory

The \$50,000 Award honors discoveries in neuroscience that will lead or have already led to significant advances in the diagnosis, prevention, or treatment of human health problems.

Nominations for the 1994 Awards are now solicited from the neuroscience community; the deadline for submission of nominations is February 1, 1994. Information and application packets can be obtained from The Charles A. Dana Awards for Pioneering Achievements in Health, Nominating Committee-Box S, c/o Joan McCarthy-Griffin, Biology Department, Brandeis University, Waltham, MA 02254; telephone (617) 736-3140, fax (617) 736-3142.

### DFAN

### **COLLEGE OF NATURAL RESOURCES**

COLLEGE OF NATURAL RESOURCES The University of California at Berkeley invites applications or nomi-nations for the position of Dean of the College of Natural Resources. The position is available on July 1, 1994. The College of Natural Resources has been reorganized recently into four departments of instruction: Plant Biology; Environmental Science, Policy and Management, Agricultural and Resource Economics and Policy; and Nutritional Sciences; and an organized research unit; the Institute for Natural Resource Systems. These new units constitute a multi-disciplinary program designed to combine the natural and social sciences to address the complex issues of interaction between society and the natural environment; to conduct fundamental research on biological problems related to agriculture and natural resources; to promote sustainable use of natural resources; and to provide the foundation for responsible and socially acceptable management of the urban and rural environments. The College is now positioned to respond to the challenges and opportunities posed by the rapid growth and transformation of urbanized society, the development of bio-technology, and the evolving nature of environmental and resource management. The College has an interdisciplinary faculty of 115 members and an enrollment of about 300 graduate and 700 undergraduate students. It enjoys interaction with campus programs in the natural and social sciences and engineering that are among the best in the world. Through the Division of Agriculture and Natural Resources of the University the College also has ties with strong programs at the Davis and Riverside campuses of the University of California. The Dean of the College acts as the Associate Director of the California Agricultural Experiment Station under whose auspices substantial research is conducted. We are searching for an individual with an outstanding record of

as the Associate Director of the California Agricultural Agricultural Station under whose auspices substantial research is conducted. We are searching for an individual with an outstanding record of scholarly achievements in teaching and research, commensurate with appointment to full professorship at the University, and a proven record of successful management and consensus building. We seek an excep-tional Dean who will take on the challenge of leading the College through the implementation of a new reconstruction of an exceptional directive and construction of a section of a sect tional Dean who will take on the challenge of leading the College through the implementation of a new organizational structure and academic plan, while maintaining a long standing record of excellence in instruction and research. The many opportunities of this position include a period of faculty growth and renewal, a Cooperative Extension program, and a Capital Fund campaign already underway. Applications or nominations should be sent, together with the names and addresses of three references to the following address no later than Lanuary 15, 1994:

January 15, 1994:

Chair, Search Committee for Dean of the College of Natural Resources Office of the Provost, Professional Schools and Colleges 200 California Hall, University of California, Berkeley, CA 94720 Phone: 510-642-6474 FAX: 510-642-3359 The University of California is an Equal Opportunity, Affirmative Action Employer

CELL BIOLOGIST—ASSISTANT PROFESSOR. The Biology Department of Hobart and William Smith Colleges invites applications for a tenure-track position starting July 1994, pending final approval. Individuals with experience in eukaryotic cell biology are encouraged to apply. Responsibilities include teaching a course in cell biology, participating in a physiology course and an introductory biology course, and contributing to the Colleges' general curriculum. In addition, the candidate is expected to demonstrate excellence in teaching and implement a research program that involves undergraduates. Candidates must have the Ph.D. degree by the starting date. Hobart College for men and William Smith College for women are coordinate residential colleges that share a campus on Seneca Lake in upstate New York. The Biology Department has just received a four-year grant from the Howard Hughes Medical Institute and a new facility for biology and chemistry will be completed in summer 1994. Applicants should send curriculum vitae, a statement of teaching philosophy, a statement of research interests, oficial transcripts for all degrees received, and three letters of reference to: Dr. Joel Kerlan, Biology Department, Hobart & William Smith Colleges, Geneva, NY 14456. To ensure full consideration, applications should be received by December 15, 1993.

EVOLUTIONARY BIOLOGIST: The Department of Cell, Molecular and Structural Biology, Northwestern University Medical School, announces a tenure-track position at the ASSISTANT PROFESSOR level. We are particularly interested in individuals who apply molecular, genetic, developmental, functional, or phylogenetic approaches to understanding primate or vertebrate structure and its evolutionary context. The Department is composed of a large and diverse group of researchers working on aspects of modern structural, molecular, cell, developmental, and evolutionary biology. Applicants must be qualified to assist in the teaching of human gross anatomy and participate in the Program in Evolutionary Biology in the Integrated Graduate Program in the Life Sciences. Please send curriculum vitae, statement of research interests, names of references, and representative publications by January 31, 1994, to: Marian Dagosto, CMS Biology, Northwestern University, 303 East Chicago Avenue, Chicago, IL 60611.

Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer and invites applications from all qualified individuals. Applications from women and minorities are especially sought.

AQUACULTURE RESEARCH/EXTENSION POSITION. Tenure-track, 12-month, ASSISTANT PROFESSOR. Ph.D. required. 70 percent research, 30 percent extension. Candidate will develop a research and extension program relevant to warm water aquaculture in his/her discipline. Interdisciplinary background required for cooperative work with producers, extension agents, agribusinesses, agencies, and academic departments. Experience in production preferred. Located at Research and Extension Center, Plymouth, North Carolina, 130 miles east of Raleigh. Open until December 6, 1993, or until filled. *Minorities encouraged*. Send résumé, career plans, and three letters of reference to: Dr. Richard L. Noble, Chair, Search Committee, Department of Zoology, North Carolina State University, Campus Box 7646, Raleigh, NC 27695. NCSU is an Equal Opportunity/Affirmative Action Employer.

#### ANIMAL PHYSIOLOGIST

Tenure-track ASSISTANT PROFESSOR, fall 1994, to teach undergraduate and graduate (M.S.) physiology courses in Human Physiology and Anatomy, General Physiology, and one or more specialty courses in physiology, such as Neurophysiology. Expectations include development of a strong student-oriented research program; obtaining independent funding for research; participation in M.S. Program; and student advising and mentoring. Ph.D. required; university teaching and postdoctoral experience preferred. The Department seeks to create a stimulating atmosphere for its ethnically diverse student population, therefore, applications from physiologists of color are especially encouraged. Submit curriculum vitae, transcripts, names of three references, and brief summaries of teaching and research goals to: Physiology Search Committee, Department of Biological Sciences, California State University, Hayward, CA 94542. Closing date: 17 December 1993. Affirmative Action/Equal Opportunity Employer.

#### MOLECULAR GENETICIST

The Department of Biological Sciences invites applications for a tenure-track position at the rank of ASSOCIATE PROFESSOR beginning in fall 1994. Ph.D. in biological sciences required, postdoctoral experience desirable. Candidates should have a commitment to teaching and show evidence of participation in extramurally funded research. Main teaching responsibilities are in Genetics and Molecular Biology. Development of graduate courses in the candidate's area of specialization will also be encouraged. Initial teaching load reduced to allow time for required development of research program. Salary competitive. Graduate programs include the M.S. in Biology and Ph.D. in Marine Sciences. The Department of Biological Sciences has 15 full-time faculty and modern research facilities. USA has 12,000 students, 8 colleges, many M.S. programs, 4 Ph.D. programs, and includes a comprehensive medical center. The location is a wooded campus in a mild Gulf Coast environment. Send a letter of application, statement of professional goals, curriculum vitae, and names, addresse, and telephone numbers of at least 3 references to: Dr. John A. Freeman, Chair, Department of Biological Sciences, University of South Alabama, Mobile, AL 36688. (Telephone: 205-460-6331). Deadline for receipt of applications is January 14, 1994. Equal Employment Opportunity/Affirmative Action/M/F/D.

#### ASSISTANT RESEARCH PROFESSOR MOLECULAR ENDOCRINOLOGY

The Diabetes and Metabolic Diseases Research Program at Stony Brook invites applications for an Assistant Research Professorship within the Program available in the fall of 1993. The candidate is expected to have a Ph.D. or equivalent degree and postdoctoral experience related to the field of Molecular Endocrinology. Prior experience in transmembrane signaling and the biology of G-protein-linked receptor-effector systems will be given preference. Women and minority groups are encouraged to apply. Salary commensurate with experience. Applicants are to provide curriculum vitae, an outline of research interests, and three letters of recommendation by December 1, 1993, to: Dr. C. C. Malbon, Director, DMDRP, Department of Molecular Pharmacology, Health Science Center, University at Stony Brook, Stony Brook, NY 11794–8651. An Equal Opportunity/ Affirmative Action Employer.

#### REMOTE SENSING ASSISTANT PROFESSOR

The University of Wyoming invites applications for a tenure-track, 9-month position beginning September 1994 in terrestrial remote sensing and image processing. The appointment will be made either, or jointly, in the Departments of Botany or Geography where principal teaching duties will be based. Candidates are expected to bring basic research skills in remote sensing and image processing to these disciplines plus contribute to inter-disciplinary research programs within the University's Planetary and Space Science Center. Qualifications include a Ph.D. in a discipline appropriate to the appointment in either of these departments, broad experience in terrestrial remote sensing, enthusiasm for interdisciplinary research, and experience in acquiring grant funding. The deadline for application is 15 January 1994. Applications including curriculum vitae and names of at least three referees should be sent to: Dr. William A. Reiners, Planetary and Space Science Center, P.O. Box 3905, The University of Wyoming, Laramie, WY 82071. For further information, call W. A. Reiners at (307) 766-2235. The University of Wyoming is an Equal Opportunity/Affirmative Action Employer.

PHYSIOLOGIST: One-year position as VISITING ASSISTANT PROFESSOR at Kenyon College for an animal or cell physiologist. Teaching duties include animal or cell physiology with lab, an introductory or non-majors course, and introductory laboratories. We seek a candidate with a Ph.D. and evidence of teaching and research excellence. Research opportunities are available. Applicants should submit curriculum vitae, graduate and undergraduate transcripts, 3 letters of reference, and a cover letter describing teaching and research interests to: Search Committee, Department of Biology, Kenyon College, Gambier, OH 43022. Review of applications will begin 10 January 1994. An Equal Opportunity Employer, Kenyon College's strategic plan affirms the values and goals of diversity; therefore, applications from women and minorities are particularly encouraged.

#### CELL/DEVELOPMENTAL BIOLOGIST UNIVERSITY OF TORONTO

The Department of Zoology, University of Toronto, invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level to begin July 1, 1994, subject to budgetary approval. We are particularly interested in applicants using molecular and genetic approaches to cell and developmental problems. The Department of Zoology has traditional strengths in Cell/Developmental Biology, Evolution, Ecology, and Animal Physiology, which provide a stimulus for interdisciplinary interactions. We have excellent research facilities and offer a competitive salary. The successful applicant is expected to develop an internationally recognized research program and to teach at the undergraduate and graduate level. Applicants with a Ph.D. and postdoctoral experience in a relevant field should send curriculum vitae and a one-page statement of future research plans, and arrange for three letters of reference to be sent to: Chair, Cell/Developmental Biology Search Committee, Department of Zoology, University of Toronto, Toronto, Ontario M5S 1A1, Canada. Applications will be considered beginning January 5, 1994. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. In accordance with is Employment Equity Policy, the University of Toronto encourages applications from qualified women or men, members of visible minorities, aborginal peoples and persons with disabilities.

VERTEBRATE PHYSIOLOGIST. The Department of Biology at New Mexico State University anticipates appointing a tenure-track ASSISTANT PRO-FESSOR for fall 1994. Applicants should have postdoctoral experience and take an integrative approach to research problems in animal function. The successful candidate will seek external funding to develop a vigorous research program and will teach at the undergraduate and graduate levels. He or she may also participate in the Molecular Biology M.S./Ph.D. Program and in the NIHsponsored Minority Access to Research Careers and Minority Biomedical Research Support Programs. The department has excellent facilities for electron microscopy. Degrees offered include the B.A., B.S., M.S., and Ph.D. in biology, and the B.S. in microbiology. Submit curriculum vitae, statements of research and teaching interests; and the names, addresses, and telephone numbers of at least three references to: Dr. V. P. Gutschick, Department of Biology, NMSU, Las Cruces, NM 88003. Closing date is four weeks after advertisement appears. NMSU is an Affirmative Action/Equal Employment Opportunity Employer. Women and minority candidates are strongly encouraged to apply.

#### PLANT ECOLOGIST

The Department of Biological Sciences, University of Southern Mississippi, invites applications for a tenuretrack faculty appointment at the ASSISTANT PRO-FESSOR level. We are seeking a Plant Ecologist with strong taxonomic skills and a field orientation. The successful candidate, who must have a Ph.D., will teach undergraduate and graduate (M.S.- and Ph.D.-level) courses in his/her area of expertise. The candidate must also develop a vigorous, externally funded research program. Send a letter of application, including a statement of research and teaching interests, curriculum vitae, and names of at least three references to: Frank R. Moore, Search Committee, Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 39406–5018. Review of applications will begin December 13, 1993. The University of Southerm Mississippi is an Equal Opportunity/Affirmative Action Employer.

#### **RESEARCH DIRECTOR**

Midwestern specialty agricultural chemical firm seeks an executive-level Research Director to head its 85member Technical Department. This person will report directly to the President. Principal duties will be to direct all research, quality assurance and government regulatory efforts. The successful candidate will thrive in a salesdriven environment. Excellent communication skills, Ph.D. in Biochemistry, experience in microbiology, analytical chemistry and organic chemistry required. Please send résumé in confidence to: Mr. Dwaine Francis, Francis & Associates, 6923 Vista Drive, West Des Moines, IA 50266. Physical with drug test required.

### Postdoctoral Research at The Wistar Institute



The Wistar Institute is seeking Postdoctoral applicants interested in Molecular Genetics, Molecular Virology, Cell & Developmental Biology, Cell & Molecular

Immunology, and Structural Biology. Fellows can anticipate a stimulating and challenging experience in an environment characterized by strong, interdisciplinary collaboration and state-of-the-art biotechnology.

Wistar is an independent, non-profit biomedical research institution with close collaborative relationships with the University of Pennsylvania and other major research and clinical organizations within the Philadelphia region. The Wistar Institute is an NIH-designated Basic Cancer Research Center.

For more information, contact: Coordinator of Research Training, THE WISTAR INSTITUTE, 3601 Spruce Street, Philadelphia, PA 19104. Interested Postdoctoral applicants are requested to send a Curriculum Vitae and the names of three (3) references. EOE, M/F/D/V. Minority candidates are strongly encouraged to apply.

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### PROGRAM LEADER Ovarian Cancer Program

The Department of Internal Medicine and the H. Lee Moffitt Cancer Center and Research Institute at The University of South Florida are seeking a board-certified or board-eligible medical oncologist (M.D. or M.D./Ph.D.) with an active basic research program relevant to ovarian cancer. This individual would serve as Program Leader for the Ovarian Cancer Program within the Cancer Center. The primary time commitments would be to the individual's own laboratory research program and to the organization, leadership, and administration of the Ovarian Cancer program, which also includes significant input into the Cancer Center planning and administration. The clinical commitments would be very modest. This position may be tenure earning.

Send curriculum vitae and a brief statement of major academic interests to Roy H. Behnke, M.D., Chairman, Department of Medicine, University of South Florida and Kenneth S. Zuckerman, M.D., Director, Division of Medical Oncology and Hematology, University of South Florida and H. Lee Moffitt Cancer Center and Research Institute. Address: Office of Faculty Recruitment, H. Lee Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, FL 33612. Deadline for receipt of applications is January 13, 1994.

The H. Lee Moffitt Cancer Center and Research Institute, adjacent to the Health Sciences Center on the University of South Florida's Tampa campus, includes a modern, dedicated cancer hospital with 162 inpatient beds and ambulatory facilities for adults and children, an expanding 20-bed bone marrow transplantation program, a recently established, high volume screening program, and new basic research and conference facilities.



### ASSISTANT PROFESSOR MICROBIOLOGY

The Department of Microbiology at the University of Illinois at Urbana-Champaign seeks candidates for a full-time tenure track position at the Assistant Professor level. Applicants should have a Ph.D. degree, postdoctoral experience, and show exceptional promise in developing an active research program in Microbiology. Preference will be given to applicants with research interests in the physiology, biochemistry, or molecular genetics of microorganisms that further expand the Department's breadth of microbial diversity. Responsibilities include teaching undergraduate and graduate students. Starting date August 1994. Salary will be commensurate with experience. The Department of Microbiology offers a supportive and collegial atmosphere and a strong graduate program. There are extensive interdepartmental interactions in microbial and eukaryotic cell and molecular biology, immunology, developmental biology, evolution, biochemistry, and biophysics. The University of Illinois at Urbana-Champaign offers an outstanding and exciting academic research environment including a Biotechnology Center and stateof-the-art facilities for hybridoma production, flow cytometry, electron microscopy, X-ray crystallography, and computer analyses. Applicants should submit a curriculum vitae, a description of research interests and future plans, and have at least three letters of reference sent to:

> Stanley Maloy, Chair Faculty Search Committee Department of Microbiology University of Illinois 131 Burrill Hall 407 S. Goodwin Avenue Urbana, IL 61801 Telephone: (217) 333-1736 FAX: (217) 244-6697

To ensure full consideration, applications should be received by December 15, 1993. Interviews may be conducted before the closing date, but no final decision will be made before that time.

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

### ECOLOGIST

The California Coastal Commission seeks a scientist for a long-term marine resource mitigation program consisting primarily of a 150-acre wetland restoration project and a 300-acre artificial reef project. Mitigation monitoring will continue for approximately 30 years. The position will be located in San Francisco at the Coastal Commission's headquarters.

The ecologist will evaluate designs for the mitigation projects, monitor their performance, and evaluate their effectiveness. Together with other project ecologists and consultants, the successful candidate will coordinate and oversee the scientific program. Duties include designing a longterm sampling program to determine whether the mitigation projects meet specific performance standards, evaluating contractor reports, and providing advice on scientific issues. The ecologist will work closely with Coastal Commission staff and a scientific advisory panel to achieve the project's objectives.

Candidates must have a doctorate in ecology or a related field and postdoctoral or other professional experience. Preference will be given to candidates with a strong scientific background, good quantitative and writing skills, demonstrated project management abilities, and the ability to work productively on an interdisciplinary team.

Competitive salary, commensurate with experience, and excellent benefits. Submit curriculum vitae, selected reprints, and three letters of reference to: Chris Parry, California Coastal Commission, 45 Fremont Street, Suite 2000, San Francisco, CA 94105-2219. Please include fax numbers and e-mail addresses, if possible. Deadline for applications is January 7, 1994.

> Women and minorities are strongly encouraged to apply for this unique opportunity.



San Onofre Nuclear Generating Station • Mitigation Monitoring Program

### Thomas Jefferson University

### JEFFERSON CANCER INSTITUTE Ph. D. Training and Postdoctoral Opportunities

**Training Program in Molecular Genetics of Cancer**: Provides training in molecular biology of cancer with strong emphasis on study of geness involved in regulation and/or proliferation of mammalian cells. C. Croce, M.D.; W.E. Mercer, Ph.D.; R. Baserga, M.D.; B. Calabretta, M.D., Ph.D.; K. Huebner, Ph.D.; G. Iliakie, Ph.D.; G. Litwack, Ph.D., and others.

**Training Program in Cancer Immunology:** Provides solid foundation in the field of immunology while directing interest toward immunological aspects of human oncology. R. Korngold, Ph.D.; D. Abraham, Ph.D.; B. Calabretta, M.D., Ph.D.; C. Croce, M.D.; B. Jameson, Ph.D.; R. Knobler, M.D., Ph.D.; E. Lattlme, Ph.D.; T. Manser, Ph.D.; B. Perussia, M.D.; J. B. Smith, M.D.

**Training Program in Molecular Cell Biology of Cancer:** Provides training focused on signal transduction associated with normal and aberrant growth control, on the molecular mechanisms of intracellular and intercellular transport as modalities for therapeutic intervention, and on cell-cell interactions and their role in metastasis and malignancy. J. Keen, Ph.D.; K. Baserga, M.D.; J. Benovic, Ph.D.; G. Litwack, Ph.D.; S. Rittenhouse, Ph. D.; E. Wickstrom, Ph.D., and others.

**Training Program in Hematopoietic and Vascular Cell Functions:** Provides foundation in field of hematopoietic and vascular cell function while directing interest toward larger area of altered cell function, including neoplastic as well as non-neoplastic disorders. B. Calabretta, M.D., Ph.D.; R. Baserga, M.D.; J. Caro, M.D.; C. Croce, M.D.; B. Perussia, M.D.; S. Rittenhouse, Ph.D.; S. Shapiro, M.D., and others.

Support for programs require USA citizenship or Permanent Residence. We are an Equal Opportunity Employer. For further information contact: Ms. Joanne Balitzky, Jefferson Center Institute, 233 S. 10th St., Rm. 910 BLSB, Phila., PA 19107-5541, FAX 215-923-1098.

### SEVENTH ANNUAL

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Co-Directors:

Lynn Nadel, Psychology, University of Arizona Daniel Stein, Physics, University of Arizona

U.S. Applicants: Further information from: Andi Sutherland, Santa Fe Institute 1660 Old Pecos Trail, Ste. A, Santa Fe, NM 87501 505-989-7372; fax 505-982-0565 e-mail: 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. Have two scientists who know your work write letters recommending you for this program. Send material to above address. Include your e-mail address and/or fax number. No funds available for travel.

Application Deadline: FEBRUARY 1, 1994. Applications incomplete at this time will not be considered. Editor

The Proceedings Office of the National Academy of Sciences is seeking an associate editor for staff of a multidisciplinary semimonthly scientific journal. Position requires a Ph.D. or equivalent in a biological or physical science or a related field, and at least 5 years of related experience. Excellent English skills required; some editorial experience desirable. Please send letter of application and curriculum vitae in confidence to: NRC/PNAS, 1010-530 (FZ), 2101 Constitution Avenue, NW,

Washington, DC 20418. EOE. Nonsmoking work environment.



### HISTORIAN OF SCIENCE

The Science Division at Northeast Missouri State University offers a tenure-track position at 1994. Teaching responsibilities include an undergraduate course, Science and Intellectual History, and development of undergraduate/ graduate courses in the History and Philosophy of Science that meet the needs of the Physics, Chemistry, Biology and Agriculture disciplines. Teaching and research are mutually supportive activities at NMSU. A strong commitment to both teaching and the development of a research program involving undergraduates and M.S. students is encouraged and expected. The successful candidate will take a leadership role in helping the Science faculty include historical, sociological, and philosophical information in their courses. In addition, the successful candidate will be expected to be actively involved in one of the four disciplines in the Division.

The mission of Northeast Missouri State University, the state's public Liberal Arts and Sciences University, is to provide an outstanding education to an academically-talented student body while remaining economically accessible. Northeast is committed to challenging and supporting students in their learning, and encourages the use of active learning methodologies in the classroom, in advising sessions, and in collaborative research with the students.

Candidates should possess a Ph.D. Women, minorities, the disabled, and veterans are particularly encouraged to apply as NMSU seeks to culturally broaden and diversify both faculty and student bodies. Complete applications including a cover letter, curriculum vitae, statements of teaching philosophy and research goals, undergraduate and graduate transcripts, and three letters of reference, should be sent to Dr. James Shaddy, Historian of Science Search Committee, Division of Science, Northeast Missouri State University, Kirksville, MO 63501 (816-785-4597). Completed applications will be reviewed beginning 30 December 1993.

### SANDOZ RESEARCH INSTITUTE IF YOUR CAREER BELONGS ON THE LEADING EDGE OF SCIENTIFIC RESEARCH, YOU BELONG WITH SANDOZ.

At Sandoz Pharmaceuticals Corporation, research is the tool by which we gain the knowledge needed to improve the lives of thousands across the country and around the world. That is why we have committed substantial resources to expanding our Research Institute and its state-of-the-art technologies. Our developments are the result of research conducted by professionals who specialize in many different fields.

### Associate Fellow Cell Adhesion Biology

The Cell Receptors and Mediators research group has an opening for a Cell Adhesion Biologist with a strong background in immunology or inflammation. Experience with integrin or selectin biochemistry/ cell biology, cell-matrix interactions and modeling inflammation *in vitro* and *in vivo* as well as a background in leukocyte endothelial cell adhesion and transmigration are required. Experience with animal models of inflammation and immunity is a strong asset.

A Ph.D. or equivalent in a relevant life science field and at least two years of postdoctoral experience are required. Expertise and accomplishments in the area of cellular inflammation/immunity should be demonstrated by a strong publication record. **Position #2779**.

### Senior Scientist Atherosclerosis and Lipoprotein Metabolism

The Atherosclerosis and Vascular Biology research group is seeking a Senior Scientist to conduct biochemical and molecular biological studies to develop and implement compound discovery screens in collaboration with other scientists in the lipoprotein and atherosclerosis discovery programs. The successful candidate will provide analytical support to the *in vivo* modeling group, formulate and evaluate future research opportunities as an active scientific leader and provide a role-model for junior scientists.

A BS/MS in the Life Sciences and extensive hands-on experience with biochemical and molecular biological techniques and assay development are required. Working knowledge of immunoassay development and microplate robotics is desirable. This position requires strong data analysis and presentation skills as well as a flexible and dynamic approach to research problems. **Position #2665DJ.** 

Positions at Sandoz offer personal satisfaction, professional opportunity/challenge, competitive salaries and an excellent benefits package. Our campus-like facilities are conveniently located in northern New Jersey. For consideration, please refer to the position number of interest and forward your curriculum vitae and the names and addresses of three references to:

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#### GRADUATE STUDIES at the UNIVERSITY OF PUERTO RICO MEDICAL SCIENCE CAMPUS SCHOOL OF MEDICINE

Inquiries and/or applications are invited from individuals who are interested in entering a program of study leading to MS or PhD in the following areas:

#### ANATOMY BIOCHEMISTRY MICROBIOLOGY AND MEDICAL ZOOLOGY PHARMACOLOGY PHYSIOLOGY

Research facilities are located in the Medical Sciences Campus buildings, with ancillary facilities in the Institute of Neurobiology, the Caribbean Primate Research Center, the Veterans Administration Hospital, the University Hospital, and affiliated hospitals. A central library serves the general needs of the academic community, and there are linkages with other local and national libraries. A system of core laboratories includes facilities for electron microscopy, image, analysis, flow cytometry, protein sequencing, tissue culture, DNA synthesis and molecular biology.

Financial support, especially for minority students, is available through institutional funds, NIH-RCMI, NIH-MBRS, NIH-MIRDP, MARC and the Forgarty International Center.

The deadlines for applications are February 15 (Fall semester) and September 15 (Spring semester).

Inquiries should be addressed to:

Luis José Torres-Bauzá, Ph.D. Associate Dean Biomedical Sciences and Director of Graduate Studies University of Puerto Rico Medical Sciences Campus School of Medicine GPO Box 365067 San Juan, Puerto Rico 00936-5067

### **POSTDOCTORAL POSITIONS**

The Gladstone Institute of Cardiovascular Disease, University of California, San Francisco. Available immediately in the labs of:

Robert W. Mahley, M.D., Ph.D.: 2 positions: 1) Study the development of transgenic mouse models of type III hyperlipoproteinemia and examine effects of expression of apo E mutants on lipid metabolism and atherosclerosis. Experience in lipid metabolism required. 2) Study the role of apo-E in neurodegenerative disease. A combination of *in vitro* and *in vivo* techniques, using transgenic animals expressing different apo-E isoforms, will be used to assess the role of the apo-E isoforms in Alzheimer's disease and other neurodegenerative disorders. Experience in neurobiology required.

Israel F. Charo, M.D., Ph.D.: Research on the molecular biology of monocyte-endothelial cell interactions in the vasculature. Current projects are focused on receptors for the rapidly emerging family of cytokines known as the chemokines. Methodology includes receptor mutagenesis and expression in Xenopus oocytes and mammalian cells.

Karl H. Weisgraber, Ph.D.: Studies on the effect of overexpression of human genes on lipoprotein metabolism in transgenic mice.

Stephen G. Young, M.D.: 2 positions: Research on the structure and function of apolipoprotein B (apoB). Characterization of recently developed transgenic mice expressing large amounts of human apo B, generation of mice with targeted mutations in the apo B gene, and investigation of the molecular mechanism of hypobetalipoproteinemia. Experience with transgenic mice and/or molecular biology techniques is desirable.

*Thomas L. Innerarity, Ph.D.*: Study the mechanism and physiology of apo B RNA editing and investigate mutations of apo B 100 that disrupt LDL binding to the LDL receptor.

Candidates should possess an M.D. or Ph.D. in molecular biology or biochemistry. Competitive salary and benefits. Send C.V. and names of three references to: **Postdoctoral Recruitment; Gladstone Institute of Cardiovascular Disease, UCSF; P.O. Box 419100; SF, CA 94141-9100. EOE.** 



### THE UNIVERSITY OF TEXAS invites nominations and applications

for the position of

DEAN

### OF THE COLLEGE OF NATURAL SCIENCES

The College of Natural Sciences is the second largest of the 14 colleges and schools that comprise The University, with approximately 382 tenured and tenure-track faculty, 6,500 undergraduate majors, 1,695 graduate students, an academic budget of nearly \$34 million, federal grants and research contracts totaling over \$40 million annually and \$85 million in endowments. The College includes 12 academic units and 32 organized research units and has a dual mission of excellence in teaching and research. The Dean is the chief executive officer of the College and is expected to provide vision and leadership in both of these areas as well as to administer the varied academic and research programs in the College, to manage the budget, and to engage in fund raising in the private sector. The Dean reports to the President of the University. We are looking for a congenial, dynamic leader with demonstrated outstanding abilities in research, teaching, administration, service to the community, and communication with the private sector. The candidate must qualify for appointment to the rank of Professor with tenure in a department of the College Applications and partment with ollege. Applications and nominations will be accepted until January 15, 1994; after this date the Committee may request and consider credentials from candidates nominated by responsible sources. Nominations and applications should be accompanied by a letter discussing relevant experience and accom-plishments, a *curriculum vicae*, and the names of four references. These materials should be sent to

> Professor M.A. Rankin, Co-chairperson Consultative Committee for the Selection of the Dean of Natural Sciences Division of Biological Sciences The University of Texas Austin, Texas 78712

The University of Texas of Austin is an affirmative action, equal opportunity employer.

### MEDICAL COLLEGE OF PENNSYLVANIA

The Department of Anatomy and Neurobiology at the Medical College of Pennsylvania has a strong research focus on developmental neurobiology, synaptic transmission and plasticity, regeneration and mechanisms of recovery from CNS injury. The Department's funding includes, in addition to individual grants, two Program Project Grants, (one held jointly with the Pharmacology Dept.) and a training grant. One Program Project Grant on Mechanisms of Recovery of Function after Spinal Cord Injury includes projects on recovery of locomotor function mediated by transplanted fetal tissue, compensatory responses to spinal injury, physiological studies of central and peripheral regeneration and cell and molecular mechanisms underlying axonal regeneration. The Program Project Grant on The Effects of Prenatal Cocaine Exposure includes studies on structural, functional, biochemical and behavioral changes induced by chronic cocaine administration. The training grant on The Neurobiology of Development and Regeneration supports pre- and postdoctoral fellows. Training in this highly interactive environment is available in gene cloning and sequencing, transplantation techniques, tissue culture, cell motility, microscopy and imaging, behavioral neurobiology, intracellular recording, patch clamping, and neuropharmacology. Faculty include Drs. D. S. Faber, D. Baird, T. J. Cunningham, I. Fischer, J. Harvey, R. Levine, L. Lillien, E. H. Murphy, M. Murray, M. Nowycky, M. Pinter, and A. Tessler. The Department of Anatomy and Neurobiology encourages applications by qualified minority students. For further information write to Dr. E. Hazel Murphy or Dr. Marion Murray, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, Philadelphia, Pa., 19129.

### PHYTERA. INC. is an

exciting, venture-backed start-up company applying unique, world-class capabilities in plant tissue culture to the discovery and development of natural compounds to treat major human illnesses. We are currently seeking to fill several newly-created **Research Scientist/Senior Research Scientist positions** at our Worcester. MA facility to spearhead projects in ANTI-INFECTIVE DRUG DIS-COVERY and NATURAL PRODUCTS CHEMISTRY. These senior-level research positions will have a direct impact on the selection and development of compounds for clinical study, and require highly-motivated hands-on professionals who are creative, independent, communicative, and flexible.

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### **Antifungal Research**

The focus of this position will be the discovery and precliniactivity. You will apply your knowledge of fungal biology and state-of-the-art antifungal assay methods to the discovery of novel therapeutic mechanisms and to the develop-ment of innovative high-throughput assay systems. You will also play a major role in the selection of lead candidates for human clinical trials. Requires a Ph.D. and postdoctoral training with a minimum of 2-4 years industrial or academic antifungal research experience. **Respond to position Al110**.

### **Antiviral Research**

This position will be responsible for the development of assay methods to test plant-derived compounds with antiviral activity. You will apply your expertise and understanding of antiviral targets to the development of innovative highthroughput assays and to the discovery of novel antiviral

mechanisms. You will also play a major role in the selection of lead candidates for human clinical trials. Requires a Ph.D. and postdoctoral training with experience in antiviral research. Additional research experience is helpful but not required. Respond to position Ai140.

### Research **Assistants/Associates**

We are also seeking highly-qualified BS and MS scientists with experience in high-throughput screening methods, viral and fungal microbiology, and natural products chemistry to fill key research positions in our Worcester, MA facility. Respond to position RA 310.

### **Natural Products Chemistry**

The core responsibilities of this position will be to develop and implement state-of-the-art procedures to isolate and identify novel bioactive chemical entities from plant cell culture extracts. Structure activity relationships and patent protection will be pursued both via analog synthesis and via extraction of similar chemical entities from distinct but related plant species. This position requires a Ph.D. and experience in natural products chemistry including separative, analytical and synthetic techniques. Respond to position NP230.

Phytera, Inc. is located in the Worcester, MA Biotech Park adjacent to the UMass Medical Center, and within convenient driving distance to the major university and cultural institutions in Boston. We have additional research and development facilities located in Sheffield, U.K. We offer a competitive compensation package and the opportunity to contribute to the realization of exciting new technologies in a high-spirited, team-oriented environment. Please forward your curriculum vitae, specifying the



vard your curriculum vitae, specifying the position code, to: Ms. Hilary Clayton, Human Resources, Phytera, Inc., One Innovation Drive, Worcester, MA 01605. No phone calls, please. An equal opportunity employer

### Senior Program Officer

The Institute of Medicine is seeking a Senior Program Officer to direct an 18-month study on HIV transmission to Hemophiliacs through blood products. Incumbent will perform a wide range of tasks for a study which describes and evaluates the policy options on how policy decisions were made related to the transmission of HIV through blood and blood products in 1982-1986. This evaluation will include a review of the amount of information and technology available to decision-makers during this period and the scientific basis of the available to decision-makers during this period and the scientific basis of the decisions made vis a vis HIV transmission through the blood supply. Responsibilities include: conducting and overseeing all aspects of study administration including planning committee meetings; preparing background/briefing materials; organizing a public hearing; and preparing committee reports. Requires coordination with committee chair and members maintaining liaison with coordination with committee chair and members, maintaining liaison with sponsoring agency, outside experts, and policy makers. Candidates should have M.D., Ph.D. with MPH, or equivalent with at least four to five years experience with public health policy and decision making, preferably with regard to infectious disease or laboratory standards. Demonstrated oral and written disease or laboratory standards. Demonstrated oral and written communication skills, historical research,

and management skills also required. Send resume to: IOM, MS-FO 3026, 2101 MS-FO 3026, 2101 Constitution Avenue, NW, Washington, DC 20418. EOE



### EVOLUTIONARY PRIMATOLOGY

### (3) POSTDOCTORAL POSITION; (6) GRADUATE FELLOWSHIPS

NYCEP. The New York Consortium in Evolutionary Primatology, is a graduate training program in all aspects of the behavioral and evolutionary biology of primates funded by an NSF Research Training Grant. The faculty Includes 28 researchers drawn from the City University of New York (CUNY), Columbia University, New York University (NYU), the American Museum of Natural History, and NYZS the Wildlife Conservation Society (WCS). NYCEP faculty and student research focuses on human as well as nonhuman primates from the perspectives of comparative morphology, paleontology and systematics, molecular and population genetics, behavior and ecology, and conservation biology. NYCEP is now consistent of CINY. seeking applications for three one-year postdoctoral positions (at CUNY, NYU & WCS) to begin July 1, 1994 and for at least six graduate student fellowships distributed among the three participating universities. NSF requirements limit eligibility to U.S. citizens, nationals and permanent residents.

Postdoctoral applications should include a full curriculum vitae, names (and telephone numbers) of three references and a one page statement of proposed research for the year. Salary and benefits are competitive

CUNY and NYU are each seeking a postdoctoral candidate to complement the research of and work with one or more members of their Anthropology Department faculty. At CUNY, current research of the physical anthropology faculty (P. Bridges, T. Bromage, E. Delson, W. Kinzey, J. Laitman, J. Oates, S. Stinson & F. Szalay) focuses on bioarcheology, bone biology, primate behavioral ecology and conservation biology, human variation, primate (including human) paleontology, functional morphology and systematics. Contact Dr.J. Oates, Dept. Anthropology, Hunter College-CUNY, 695 Park Ave., New York, / 10021

The NYU physical anthropology faculty (T. Disotell, T. Harrison and C. Jolly) conduct field and laboratory research in primate population genetics and ecology, comparative anatomy, paleontology, ontology, functional morphology and systematics (morphological & molecular). Contact Dr. C. Jolly, NYU Anthro-pology, 25 Waverly Place, New York, NY 10003. WCS, dedicated to preserving the earth's wildlife and wildlands, operates an International conservation

program with over 200 field projects in 46 countries, as well as 4 conservation parks, including the Bronx Zoo, in NYC. Postdoctoral applications in the area of **primate conservation** are encouraged from those interested in approaches and techniques being used in viability analysis and the intensive management of small primate populations, in captivity and in the field. Contact Dr. J. Robinson, Conservation, or Dr. F. Koontz, Mammals, NYZS the Wildlife Conservation Society, Bronx, NY 10460. The **fellowship** program provides full tuition and a stipend of \$12,000 annually for three to five years.

Students formally enroll in the Anthropology Department at one of the three universities but participate In an Integrated and overarching doctoral program which unites students and faculty of all five institutions. Minority students are especially encouraged to apply to NYCEP, and special funding support may be available to them. Application is made jointly to NYCEP and to one or more of the cooperating universities. Application forms and information about all three schools and the consortium may be obtained from Dr. E. Delson, Department of Vertebrate Paleontology, the American Museum of Natural History, New York, NY 10024; phone 212-769-5992; fax 212-769-5842.

All applications are due January 5, 1994. NYCEP and its component institutions are Equal Opportunity/Affirmative Action Employers

ASSISTANT PROFESSOR—PHYSICAL CHEM-ISTRY—AMHERST COLLEGE. A full-time tenuretrack faculty position is available for a Ph.D. experimental physical chemist beginning in July 1994. The successful candidate will be expected to teach introductory chemistry as well as physical chemistry at the advanced undergradutate level, and will be encouraged to participate in interdisciplinary teaching. She/he will also be expected to establish a vigorous research program in which undergraduates can substantively participate. The research program can be drawn from any area of experimental physical chemistry, as well as from fields that span the boundaries between physical chemistry and other sciences. Amherst College, a private coeducational liberal arts college of some 1570 students and 165 faculty located in the Connecticut River Valley of Western Massachusetts, participates with Hampshire, Mount Holyoke, and Smith Colleges, and the University of Massachusetts, in the Five-College Consortium. Applicants should submit detailed curriculum vitae and a description of their teaching and research plans, and should arrange for the forwarding of three letters of reference, all to: Dr. J. N. Kushick, Chairman, Department of Chemistry, Amherst College, and especially welcomes applications from women, minority and disabled candidates.

ANALYTICAL CHEMIST—ASSISTANT PRO-FESSOR, tenure-track, Ph.D., September 1, 1994; teach general chemistry and analytical chemistry. The candidate's potential as a teacher and researcher for an undergraduate program is essential. Preference given to individuals with research background and resultant publication in refereed journals. Application deadline is December 15, 1993. Midwestern State University is a liberal arts university with an enrollment of 5,800 students. The Chemistry Department is ACS-certified, offering the B.S. in chemistry and in environmental chemical technology. Submit curriculum vitae, description of proposed research, a statement of educational philosophy and three letters of recommendation to: Dr. Norman Horner, Director, Division of Sciences, Midwestern State University, 3410 Taft Boulevard, Wichita Falls, TX 76308–2099. Equal Opportunity/Affirmative Action Employer.

#### ASSOCIATE DEAN FOR RESEARCH AND GRADUATE STUDIES

The Auburn University College of Veterinary Medicine invites applicants with a distinguished record of achievement in veterinary or biomedical research and substantial experience in graduate education. Veterinary and Ph.D. degrees are highly desirable; administrative experience is preferred. Application deadline is January 1, 1994, or until the position is filled. Please direct inquiries or submit letter of intent, curriculum vitae, and names of 5 references to: L. G. Wolfe, Chair of Search Committee, College of Veterinary Medicine, Auburn University, AL 36849–5519. Telephone: 205/844-4539. Auburn University is an Affirmative Action/Equal Employment Opportunity Institution. Women and minorities are encouraged to apply.

#### PRESIDENT/SCIENTIFIC DIRECTOR

The Neuropsychiatric Research Institute (NRI) invites applications and nominations for a senior position from well-established investigators who will lead and develop research programs in neuroscience. NRI is an independent, nonprofit, clinical and basic science research institution located in Fargo, North Dakota. It has a long history of amicable cooperation with the University of North Dakota School of Medicine and affiliated hospitals and with North Dakota State University where excellent opportunities exist for the development of collaborative research programs and the potential for faculty appointments and teaching activity. Minimum qualification re-quirements include an M.D. and/or Ph.D. degree with demonstrated excellence in research and leadership and the ability to develop research programs in neuroscience. Applicants should submit, prior to December 1, 1993, curriculum vitae, statements of current and planned research interests and letters from at least three references to: Dr. John W. Vennes, Interim President, Neuropsychiatric Research Institute, 120 Eighth Street South, Fargo, ND 58103. For information call (701) 239-1606. NRI is an Equal Opportunity and Affirmative Action Employer.

#### DIRECTOR OF MICROSCOPY FACILITIES Department of Cell Biology and Anatomy

Opportunity for an experienced Electron Microscopist to join this new, multi-user microscopy facility. Experience with immunoelectron microscopy, fluorescence, confocal microscopy, and image analysis is desirable. The successful candidate will have management and supervisory abilities. Responsibilities include advising faculty, training and supervising technicians, and teaching students and postdoctoral fellows. A Ph.D. is not essential. Rank and salary will be commensurate with experience.

Rank and salary will be commensurate with experience. Interested applicants should send curriculum vitae to: Dr. Paul B. Lazarow, Chairman, Cell Biology and Anatomy, Box 1007, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029–6574. An Equal Opportunity Employer; women and minorities are encouraged to apply.

National Museum of Natural Science invites applications for an ASSOCIATE CURATOR/CURATOR specialized in Plant Systematics, Botanic Garden Management and Herbarium Curatorial Management. Ph.D. is required with a demonstrated capacity for research and scholarly publications on plants in Taiwan or East Asia. Annual salary is \$28,000 or more. Please send 3 recommendations, curriculum vitae, reprints of publication, copy of diploma by December 15, 1993. Contact: Search Committee/Dr. Shau-ting Chiu, National Museum of Natural Science, 1, Kuan Chien Road, Taichuang, Taiwan, R.O.C. FAX: 1-886-4-3222290.

ROWE CHAIR OF HUMAN MOLECULAR GENETICS: The University of California, Davis, announces the search for the Rowe Chair of Human Molecular Genetics. The Rowe Chair must provide prominent leadership in the establishment and development of a basic research and teaching program in Human Molecular Genetics in the Department of Biological Chemistry, School of Medicine and the Division of Biological Sciences. Incumbent will be expected to play an entrepreneurial leadership role in the development of molecular genetics and recruitment of faculty with demonstrated ability and achievement in investigator-initiated discovery research.

Successful candidate must possess M.D. or M.D./ Ph.D. degree and an outstanding record in high-quality basic molecular biological discovery research.

basic molecular biological discovery research. Please forward the following: (1) letter describing administrative, teaching, and research background; (2) curriculum vitae; and (3) names and addresses of five references to: Deans Gerald Lazarus and Mark McNamee c/o Karen Eilers, Office of the Dean, School of Medicine, 100 Medical Sciences I-C, East Health Sciences Drive, University of California, Davis, CA 95616. This position will be "Open Until Filled." Applications will not be accepted after April 15, 1994. The Search Committee will begin review of applications two weeks after publication of position announcement. The University is an Affirmative Action/Equal Opportunity Employer.

#### CARDIAC MOLECULAR BIOLOGY/BIOCHEMISTRY RESEARCH FACULTY POSITION Cardiac Surgery Research Laboratory Department of Surgery Duke University Medical Center

The Department of Surgery at Duke University Medical Center seeks well-qualified applicants with a background in cardiac molecular biology and biochemistry to direct a laboratory in the Division of Cardiac Surgery. Candidates should have completed 3 to 5 years of relevant postdoctoral experience and be prepared to conduct an independent program of molecular cardiac research. The position includes an academic appointment in the Department of Surgery and would involve opportunities to participate in teaching as well as opportunities to act as research adviser to medical students, graduate students, residents and postdoctoral fellows. Areas of interest include, but are not limited to, molecular pathways to myocyte differentiation and growth, cardiac receptor interactions, myosin regulation, study of cardiac ion channels, and myocardial gene transfer. Applicants should send curriculum vitae and statement of research interest, as well as the names of three references to: Dr. David C. Sabiston, Jr., M.D., James B. Duke Professor and Chairman, Department of Surgery, Post Office Box 3704, Duke University Medical Center, Durham, NC 27710.

#### EXECUTIVE DIRECTOR PHIPPS CONSERVATORY

**EXECUTIVE DIRECTOR**, Phipps Conservatory, Pittsburgh, Pennsylvania. A unique opportunity to direct and develop the facility and programs of this historic landmark as it moves into its second century as a recently privatized institution. Successful candidates probably will have these qualifications: Ph.D. or Master's in plant sciences; strong leadership skills; experience in operations, administration, and financial management of conservatories and gardens. Responsibilities will include management and development of facilities, staff, budget and programs; strategic planning and public relations. Position now open; review of applications will begin 15 January 1994. Résumés and professional references to: Chairman, Search Committee, Phipps Conservatory, P.O. Box 81038, Pittsburgh, PA 15217. Telephone: (412) 361-0661. Phipps Conservatory is an Affirmative Action/Equal Opportunity Employer.

CAL POLY, SAN LUIS OBISPO. Candidates are sought from the fields of Biotechnology, Biochemistry, Chemistry, Biological Sciences, Microbiology and Science Education for a TENURE-TRACK POSITION. Starting date September 1994. Salary is commensurate with qualifications and experience. Responsibilities include courses in area of specialty and introductory courses es. The successful candidate will show awareness of California's multicultural population, commitment to cross-cultural education, and leadership potential in related activities. Ph.D. required. Send letter of application with reference to Recruitment #43011, résumé, and statement of professional goals to: Phil Bailey, Dean, College of Science and Math, Cal Poly, San Luis Obispo, CA 93407. Three letters of recommendation should be supplied directly by references. Deadline: January 17, 1994. Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of women, persons of color, applicants with disabilities, and members of other underrepresented groups.

CALIFORNIA INSTITUTE OF TECHNOLO-GY invites applications for a tenure-track, JUNIOR FACULTY POSITION in Biochemistry. Outstanding individuals with a strong commitment to research and teaching excellence are encouraged to apply. Curriculum vitae including a list of publications, a description of proposed research activities, and three letters of recommendation should be sent to: Professor D. C. Rees, Division of Chemistry and Chemical Engineering 147-74 CH, California Institute of Technology, Pasadena, CA 91125. The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer. We welcome applications from qualified women and minority candidates.

#### FACULTY POSITION IN BIOLOGY

The Department of Biology at Boston College seeks an individual with a Ph.D. and postdoctoral experience for a tenure-track position in **eukaryotic cellular biology** to be filled in the fall of 1994. A detailed announcement appeared in *Science*, October 8, 1993. Complete applications, including curriculum vitae, publications list and a **one-page** summary of current and future research plans should be received no later than December 10, 1993. Applicants should solicit three letters of recommendation to be sent to: Search Committee, Department of Biology, Boston College, Chestnut Hill, MA 02167. An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

FACULTY POSITION AT LIBERAL ARTS IN-STITUTION: The Ouachita Baptist University Department of Biology invites applications for a fall 1994 entry-level or higher tenure-track position. The successful applicant must have a Ph.D. in biology and a strong commitment to liberal arts education, to teaching courses for science and non-science majors, and to directing undergraduate research. Applicants with backgrounds in histology and developmental biology are most desirable; other specialties that will be considered are microbiology and cell biology. Salary and rank are commensurate with experience. Review of applications begins January 15, 1994. Send résumé and arrange for three letters of recommendation to be sent to: Randall D. Wight, Ph.D., Biology Search Committee Chair, Ouachita Baptist University, Arkadelphia, AR 71998–0001.

### UNIVERSITY OF **CONNECTICU**

### Assistant/Associate Professor

### Neuroscience

The Department of Physiology and Neurobiology, University of Connecticut, Storrs, invites applications for an anticipated full-time tenure-track faculty position at the Assistant or Associate Professor level commencing September 1994 Applicants must have a doctoral degree and at least two years of postdoctoral experience The candidate will be expected to maintain a strong independent research program supported by extramural funding, directed towards understanding central nervous system functions using cellular, molecular, or computational approaches The candidate is expected to participate in the Department's undergraduate and graduate teaching programs. Generous laboratory space and start-up funds are available as well as access to a wide range of research facilities and resources. The candidate should interact with and complement our existing faculty in neurobiology, membrane transport, and endocrinology. Send a curriculum vitae, a brief statement on research direction, and the names of three references to: Professor Guillermo Pilar, Department of Physiology and Neurobiology, U-42, University of Connecticut, Storrs, CT 06269-3042. We actively encourage ap-

plications from under-represented groups, including minorities women and people with disabilities. (Search #4A118)

# IMMUNOPHARMACOLOGIST

ZENECA Pharmaceuticals Group (formerly ICI Pharmaceuticals Group), dedicated to the challenge of discovering and developing important new therapeutic agents, has an opening in the Pulmonary Pharmacology Group at our suburban Wilmington, Delaware location.

We seek an immunopharmacologist to study the role of cytokines in various aspects of airway allergy and inflammation, and contribute to drug discovery research. A background in inflammation, allergy or immune models is necessary. A Ph.D. with postdoctoral experience in Immunology, Molecular Biology, Pathology, Pharmacology or a related biological science and a proven record of scientific achievement is sought. Must demonstrate leadership capability to create innovative research plans and supervise assistants.

We offer competitive compensation, comprehensive flexible benefits, a unique investment plan, and the opportunity for growth with one of the world's leading pharmceutical research organizations.

Interested candidates should submit c.v. to: Melanie M. Lewis, ZENECA Pharmaceuticals Group, 1800 Concord Pike, Wilmington, DE 19897. An Equal Opportunity Employer M/F.



ZENECA Pharmaceuticals/Stuart Pharmaceuticals Business Units of ZENECA Inc.

### Chair Biology

Georgia Southern University invites applications for the position of Chair in the Department of Biology. This 12-month, tenure-track position at the rank of Associate or Full Professor starts July 1, 1994.

We seek a dynamic individual with the following gualifications:

- proven administrative ability
- demonstrated leadership and organizational skills
   effective interpersonal skills

- strong teaching credentials
  Ph.D. or Sc.D. at the time of application with proven record of research

and 650 undergraduate majors. The GSU Botanical Garden, the Institu-tion of Arthropodology and Parasitology, the Smithsonian Institution's National Tick Collection, and the GSU Herbarium are located on campus and are affiliated with the department

Georgia Southern University, a unit of the University System of Georgia, is located in Statesboro, a community of approximately 30,000 residents. The 601-acre campus lies 200 miles southeast of Atlanta and 50 miles northwest of historic Savannah within easy driving distance of beaches, islands, and resorts of Georgia and South Carolina. The enrollment of over 14,000 reflects a 115% enrollment growth since 1984, resulting in the addition of over 200 faculty positions. The university offers 25 under-graduate degrees in 75 major fields of study, 13 master's degrees in 49 fields, the Education Specialist degree, and the Ed. D. in Educational Administration. Georgia Southern offers selected graduate programs in Savannah in affiliation with Armstrong State and Savannah State Col-leges. leaes.

Send a letter of application addressing job description, a curriculum vitae, and three letters of reference to Dr. B. W. Ponder, Chair Biology Search Committee, Landrum Box 8142, Georgia Southern University, Statesboro, GA, 30460-8142. FAX (912-681-5346). To ensure consideration for the position all materials must be postmarked by Dec. 20, 1993. The names of applicants and nominees, *curricula vitae*, and other general non-evaluative information are subject to public inspection under the Georgia Open Records Act. Georgia Southern is an Equal Opportunity/Affirmative Action Institution. Persons who need accommodations in the application process under the American with Disabilities Act should notify the search chair. SEARCH # 27372.

# **Biological Leadership**

### New Directions in Biotechnology

n your search for an exciting career opportunity, consider joining our well-funded state-of-the-art biotechnology site. We are committed to the development and production of a new generation of healthcare products through biotechnology.

ositions are available in departments engaged in media preparation, cell culture, fermentation, protein purification, bulk formulation, sterile filtration and analytical development. Some positions involve the start-up of new facilities and the development of new production processes.

epending on the specific position, job requirements Cinclude: B.S., M.S., Ph.D., or equivalent experience in applicable discipline, with specific experience in industrial mammalian cell culture, purification, or media production.

dditional positions available in Validation, Biochemical Research & Development , and Cellular and Molecular Biology Research.

Excellent salary and benefits package. Interested candidates are invited to submit resumes to:

Human Resources Miles Inc. P.O. Box 1986 Berkeley, CA 94701 EOE/AA/D **/|| FS** PHARMACEUTICAL DIVISION

🖩 An Equal Opportunity Employer 🛚

### SUCCEEDING TOGETHER Research $\blacklozenge$ Treatment $\blacklozenge$ Education

Ontario Cancer Institute/Princess Margaret Hospital, one of North America's largest cancer research and treatment centres, houses the Department of Medical Biophysics of the University of Toronto. The Institute seeks a Senior Scientist to establish and direct a protein expression laboratory.

### **Director** PROTEIN EXPRESSION LABORATORY

The aim of this new facility will be to assist other members of the Institute in overexpressing and purifying recombinant proteins using the latest expression technologies. The recombinant proteins will be used for biochemical studies and structural studies using X-rays, NMR or electron microscopy. The Director will also be expected to carry out a strong independent research program. Extensive practical experience in molecular cloning, protein expression using eukaryotic and prokaryotic cells and related techniques is essential. The successful applicant should possess excellent interpersonal skills, enjoy teamwork, and be eligible for appointment at the assistant or associate professor level in the Department of Medical Biophysics of the University of Toronto.

Interested persons should send their curriculum vitae, statement of research interests, and the names of three references to: Dr. Victor Ling, Ontario Cancer Institute/Princess Margaret Hospital, 500 Sherbourne Street, Toronto, Ontario, Canada, M4X 1K9.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

### Ontario Cancer Institute Princess Margaret Hospital

### TWO ENDOWED CHAIRS IN PHYSICAL CHEMISTRY

Bunn.

University of California, San Diego

The Joseph E. Mayer Chair of Theoretical Chemistry and the Distinguished Chair of Physical Chemistry have been established at the Chemistry Department of the University of California, San Diego. Both are full, tenured professorships, salaries to be commensurate with experience and University of California salary scale. Applications, indications of interest, and recommendations of others who should be considered are most welcome. Please submit to Professor Katja Lindenberg, Chair, Department of Chemistry, University of California, San Diego, La Jolla, CA USA 92093-0332. All areas of physical chemistry, including applications of physical chemistry to other branches of chemistry and to other fields of science, including physical, biological, material, and environmental sciences, will be considered. All applications received by November 30, 1993 or thereafter until position is filled will be assured consideration. Affirmative Action/Equal Opportunity Employer.



CENTER DIRECTOR, USDA ARS WESTERN HUMAN NUTRITION RE-SEARCH CENTER. The USDA Agricultural Research Service seeks a Center Director for the Western Human Nutrition Research Center at the Presidio of San Francisco. The Center Director provides leadership for the overall mission of the WHNRC, which is to develop reliable, efficient and inexpensive methods for defining nutritional status and to define human nutritional requirements. The Center Director is also encouraged to pursue a personal research program. The Center is located in a well-equipped modern research facility which includes a 12-bed, fully staffed metabolic unit. Qualified applicants will have a PhD in nutrition or related area and/or MD; will be internationally recognized as an authority in nutrition research; and will have experience in the management of human nutrition research programs, including financial and human resource management. This is a federal Senior Executive Service position, salary \$92,900-\$115,700 per year. ARS is an Equal Opportunity Employer; qualified women and minorities are encouraged to apply. For additional informa-tion, contact Dr. Robert Reginato, USDA, ARS, 800 Buchanan St., Albany, CA 94710; phone (510) 559-6060. For official position announcement and application contact Gwen Donovan, phone (301) 344-4622. Applications must be postmarked by Jan. 15, 1994.

### FACULTY POSITIONS Microbiology, Molecular Biology and Biochemistry

Applications are invited for two tenure-track 12 month faculty positions at the Assistant Professor level from individuals interested in 1) experimental analysis of protein structure-function relationships, and 2) anaerobic bacteria. Both positions include generous start-up packages and full laboratory support for three years. They are the first of four positions to be filled over the next two years and represent an expansion of the department into new research areas. Successful candidates will complement existing teaching and research programs in environmental microbiology, medical microbiology, plant molecular biology and biochemistry, and developmental biology, We seek one individual with an active research program in application of either biochemical or biophysical techniques to the study of protein structure and function. Examples of specific interests include xray crystallography, evolution of protein structure and function, ligand-cell receptor interactions, and protein-nucleic acid interactions. A second position is available for an individual with an active research program investigating anaerobic bacteria. Examples of research interests include physiology and molecular biology of anaerobes in-volved in: i) bioremediation of toxic wastes, ii) methanogenesis, iii) the rumen, and iv) host-parasite interactions. The successful candidate should have a strong background in either biochemistry or molecular biology. Submit letter of application, statement of present and future research inter-ests, curriculum vitae, and three letters of recommendation solicited by the applicant to: Chair, Search Committee, Department of Microbiology, Molecular Biology and Biochemistry, University of Idaho, Moscow, ID 83844-3052 (208-882-7966). The search will be closed on January 1, 1994, or when a sufficient number of qualified applicants have been identified. AA/EOE.

#### CHAIR, DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY WRIGHT STATE UNIVERSITY SCHOOL OF MEDICINE, DAYTON, OHIO

We seek a Ph.D. or M.D. with an established record of external funding, and a commitment to scholarly achievement in research and teaching. We participate in the University's Biomedical Sciences Ph.D. Program and have teaching responsibilities for medical and nursing students.

The School of Medicine has 240 full-time faculty and over \$7 million in extramural research support. It is a model for communitybased medical education and is a leader in recruiting and retaining minority students.

The combined chair/faculty position has a 12 month salary commensurate with experience, start-up funds, and an opportunity to build and shape the direction of the department. Opportunities exist for collaboration with basic and clinical scientists at the Tri-Service Toxicology Center at WPAFB and the Dayton VA Medical Center.

Submit curriculum vitae, and the names and telephone numbers of three references to Jane N. Scott, Ph.D., Chair, Search Committee, Wright State University, School of Medicine, P.O. Box 927, Dayton, Ohio 45401-0927; (FAX: 513-873-3672).

Review of applications will begin January 15 and will continue until the position is filled.

Wright State University is an EO/AA Employer. National Cancer Institute National Institutes of Health Public Health Service

Endocrinologist The Endocrinology Section, Metabolism Branch, National Cancer Institute, seeks an outstanding candidate with M.D. or Ph.D. for a non-tenure track position to participate in a research program on signaling by the insulin-like growth factor-I receptor. The candidate should have at least 5 years of research publi-cations in this area. Familiarity with techniques of cell biology, protein purification and characterization and molecular biology is required. Starting salary range \$37,000 to \$53,000. USA citizenship required. Interested candidates should submit curriculum vitae, several reprints, and names of three references to:

Dr. Peter Nissley National Institutes of Health 9000 Rockville Pike Building 10, Room 4N1215 Bethesda, MD 20892

Applications must be received by December 15, 1993.



NIH is an Equal Opportunity Employer

### **COLD SPRING HARBOR LABORATORY CONFERENCE ON ZEBRAFISH DEVELOPMENT AND GENETICS** April 27-May 1, 1994

Organized by:

Wolfgang Driever, Massachusetts General Hospital Judith Eisen, University of Oregon David Grunwald, University of Utah Charles Kimmel. University of Oregon The meeting will cover a broad range of topics. The sessions will focus on:

- Gastrulation, body patterning and morphogenesis
- Determination of cell fate
- Development of the nervous system
- Growth control
- Organogenesis
- Genetics and Genomics
- Gene transfer, gene expression, new methodologies Submitted abstracts will be considered for oral or poster presentations. The abstract deadline is February 9, 1994 Registration and abstract materials are available from:

**Meetings Coordinator** Cold Spring Harbor Laboratory **1** Bungtown Road Cold Spring Harbor, NY 11724-2213

516-367-8346 FAX: 516-367-8845



### STANFORD UNIVERSITY

### COMBINED ADMISSIONS MODE IN **BIOLOGICAL AND BIOMEDICAL SCIENCES**

In addition to entering a given program directly, students may now opt to enter graduate study in the biological and biomedical sciences through the Combined Admissions Mode or CAM. This program enables a small number of select students to begin graduate study at Stanford University without first committing to a given department or program. During the first year, following a series of "rotations" in different departments, CAM students select a thesis advisor and program in which to complete the Ph.D. The flexibility and breadth offered by CAM should appeal to those who view two or more departments or programs as equally attractive. Participating programs are:

### **DEPARTMENTAL:**

Biochemistry **Biological Sciences** Cell **B**iology Chemistry **Developmental Biology** Genetics Pharmacology

**INTERDEPARTMENTAL:** 

**Biophysics** Cancer Biology Immunology Medical Information Sciences Neurosciences

Microbiology and Immunology Molecular and Cellular Physiology

More Information and application forms for CAM can be obtained from: Office of Graduate Admissions, Old Union, Room 137, Stanford University, Stanford, CA 94305-3005. Deadline for receipt of completed applications is Dec. 15, 1992.

Stanford University is committed to the principles of Affirmative Action and welcomes applications from students of either sex and any race, color, religion, sexual orientation or national and ethnic origin.

### FACULTY POSITION BIOCHEMISTRY/ CELLULAR & MOLECULAR BIOLOGY

The North Central College Biology and Chemistry Departments seek a broadly trained person to teach biochemistry, cellular/molecular biology, and introduc-tory courses. Rank open. This tenure-track joint appoint-ment starts September 1994. Ph.D. required. Applicants should have the potential for excellence in undergraduate teaching and research. For more detail. cell **708**, **420**. 4002. North Central College is a 132-year-old compre-hensive liberal arts institution of 2500 students with a distinguished tradition in the sciences located 20 million west of Chicago in the heart of Illinois' research and

west of Chicago in the heart of Illinois' research and development corridor. The departments offer majors in biochemistry, biology, and chemistry. Send letter of application, curriculum vitae, graduate and undergraduate transcripts, and have three letters of recommendation sent to: Anne Redding, Secretary to the Biology/Chemistry Search, North Central Col-lege, P.O. Box 3063, Naperville, IL 60566-7063. Review of applications begins January 3, 1994, and continues until the position is filled. We particularly welcome applications from women and minorities. Equal Opportunity Employer. Opportunity Employer.

#### FACULTY POSITIONS Institute of Biosciences and Technology

The Institute of Biosciences and Technology in Houston, Texas, a component of Texas A&M University (TAMU), invites applicants at all academic levels for tenure-track positions. The mission of the Institute is Hereditary Studies related to Medicine and Agriculture. Focus areas include: Genome Research, Mammalian Viruses, Matrix Biology, Cancer Biology, Human Nutri-tion, Carcinogen-Mutagen Research, Transgenic Animal Models of Disease, and Genetic Regulation. Faculty appointments will be at TAMU in College Station. Substantial resources are available in our new 11-story building in the Texas Medical Center. Applicants should submit curriculum vitae, a description of future research plans, and three references to:

s, and three references to: Dr. Robert D. Wells, Director Institute of Biosciences and Technology Texas A&M University 2121 West Holcombe Boulevard, Suite 202 Houston, TX 77030–3303 FAX: 713-677-7725

Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

#### 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 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 to problems such as cumulative impacts, ecosystem linkages and transfers or land use changes are desirable. Applicants should send curriculum vitae and three references to: Chair, Landscape Ecology Search Commit-Applicants should send curricularly vitae and infer feter-ences to: Chair, Landscape Ecology Search Commit-tee, School of the Environment, Duke University, Durham, NC 27708–0328, USA. Applications will be accepted through December 15, 1993, or until a suitable candidate is identified. Duke University is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY FOR EUROPE AND ASIA

The University of Maryland anticipates openings for faculty to teach undergraduate science courses on U.S. military bases overseas. Requirements include the Ph.D. or two Master's degrees, recent college teaching experience, U.S. *citizenship*, and competence to teach in two of the following fields: astronomy, biology, chemistry, computer studies, geology, mathematics, and physics. Renewable annual appointments begin August 1994. Frequent travel and the cost of schooling make these positions difficult for those with children. Send résumé to: Dr. Ralph E. Millis, University of Maryland University College, College Park, MD 20742–1642. Affirmative Action/Equal Employment Opportunity.

The Department of Behavioral Neuroscience is seeking candidates for a **TENURE-TRACK POSITION** avail-able July 1994, subject to budgetary approval. We are able July 1994, subject to budgetary approval. We are primarily interested in candidates for appointment at the rank of **ASSISTANT PROFESSOR**, but exceptional candidates will be considered for appointment at higher rank. The successful candidate will be expected to establish a research program in the area of neural basis of learning and memory employing both electrophysiological and behavioral analyses, teach undergraduate- and graduate-level courses, and be actively involved in the training of graduate students. Applicants should have a Ph.D. or M.D. degree and postdoctoral experience. Please send curriculum vitae, a one-page statement of research goals, the name of three references, and three representative publications to: Dr. German Barrio-nuevo, Search Committee Chairperson, 446 Craw-ford Hall, University of Pittsburgh, Pittsburgh, PA 15260.

**POSITIONS OPEN** 

FACULTY POSITION

UNIVERSITY OF PITTSBURGH

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

INSTRUCTOR-BIOLOGY LAB COORDINA-TOR. The Biology Department at Penn State University notices applications for a full-time position to manage our large introductory biology laboratories. Candidates should have an M.S. in the biological sciences, initiative to work independently, ability to skillfully teach graduate teaching assistants laboratory procedures, exceptional organization-al abilities, and knowledge of equipment and material beneford to set up and manage numerous laboratory sections needed to set up and manage numerous laboratory sections of introductory biology. Send résumé, transcripts, names and addresses of three references to: Dr. Linda Maxson, Head, Department of Biology, Box B, 208 Mueller Laboratory, University Park, PA 16802. Starting date will be July 1994. Deadline for applications is January 10, 1994, or until a suitable candidate is found. Equal Opportunity/Affirmative Action Employer. Women and minorities encouraged to apply.

PENN STATE: JOINT STATISTICS/BIOLOGY TENURE-TRACK POSITION (academic rank

open). Qualifications: Ph.D. in Statistics, Biology, or related area; excellence in research; interest in teaching; demon-strated computing skills. Candidates expected to collaborate in statistics, computational molecular biology, or molecular evolutionary genetics. Duties: research, teach-ing, and advising. Affiliation with Institute of Molecular olutionary Genetics encouraged. Apply by February 1, Evolutionary Genetics chroniaged. Approved the second seco minorities encouraged to apply.

POSTDOCTORAL POSITION available for investigating the existence and biology of DNA supercoiling and alternate DNA conformations (Z-DNA, intramolecular triplex, cruciforms) in eukaryotic cells. Molecular biology experience preferred. Submit curriculum vitae and 3 letters of recommendation to: Dr. Richard R. Sinden, Center for Genome Research, Institute of Biosciences and Technology, Texas A&M University, 2121 West Holcombe Boulevard, Houston, TX 77030–3303. Affirmative Action/ Equal Employment Opportunity.

#### POSTDOCTORAL POSITIONS Fred Hutchinson Cancer Research Center

Postdoctoral positions are available in the Division of Basic Sciences and Program in Molecular Medicine for candidates with research interests in cellular, develop-mental and molecular biology, genetics, immunology mental and molecular biology, genetics, immunology and virology. Applications from women and underrepresented minorities are strongly encouraged. Please send curriculum vitae, brief description of research background and names and addresses of three references to: Division of Basic Sciences, Fred Hutchinson Cancer Research Center, 1124 Columbia Street, B1-030, Seattle, WA 98104. The Center is an Equal Opportunity Employer/ Committed to work force diversity and provides a smoke-free environment. environment.

### Victoria University of Wellington LECTURESHIP IN BIOCHEMISTRY

Applications are invited for the above post in the School of Biological Sciences. The appointee will be expected to teach both undergraduate and postgraduate courses covering a broad range of subject matter, to conduct an active research programme and to supervise graduate students. Expertise is sought in the broad area of gene expression but applicants with research experience in any area of biochemistry and molecular biology will be considered. A willingness and ability to attract support from external funding sources, and experience in the application of molecular biological techniques to

the application of molecular biological techniques to biochemical questions will be an advantage. The salary scale for Lecturers is currently NZ\$37,440 to NZ\$49,088 per annum. Conditions of appointment and method of application are available from: Appoint-ments Administrator, Victoria University of Welling-ton, P.O. Box 600, Wellington, New Zealand, (FAX: +64 4 495 5238; Email: marriott@vuw.ac.nz) with whom applications close on 8 December 1993. THE UNIVERSITY IS AN EQUAL OPPORTU-NITY EMPLOYER

NITY EMPLOYER.

BIOLOGY SABBATICAL REPLACEMENT: Teach Population and Community Ecology, Field Botany, Biological Diversity, and Evolution in a leading liberal arts college, with a strong biology department. Ph.D. or A.B.D. to serve one year as a sabbatical replacement with possible renewal for a second year. Apply: Jerry Woolpy, Earlham College, Richmond, IN 47374. Send transcripts, curriculum vitae, three latters of reference and a letter describing biology teach letters of reference, and a letter describing biology teachletters of reference, and a letter describing biology teach-ing experience and philosophy. Earlham College is an Affirmative Action/Equal Opportunity Employer. We par-ticularly encourage applications from women, minorities, and Quakers. Reviewed after January 4, 1994.

POSTDOCTORAL POSITION: Positions are immediately available for fellows to work on projects (e.g. signal transduction, autoimmunity, cytokines/CMI) with a group of internationally recognized immunologists. Underrepresented minorities and women are especially encouraged to apply. Career progression will be emphasized. Send curriculum vitae and references to: Dr. Gary Send curriculum vitae and references to: Dr. Gary Klimpel, Department of Microbiology and Immunol-ogy, The University of Texas Medical Branch, Galveston, TX 77555–1019; Telephone: (409) 772-4917, FAX: (409) 772-5065. Equal Opportunity/Affir-mative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.

POSTDOCTORAL POSITION. Available immediately to either study regulation of gene expression during fetal lung development with emphasis on the surfactant protein genes or to work on studies where the genetic basis of certain pulmonary diseases is being genetic basis of certain pulmonary diseases is being explored. Prefer applicant experienced in recombinant DNA techniques or molecular genetics, but also interest-ed in highly motivated applicants without experience. Send curriculum vitae to: Joanna Floros, Ph.D., De-partment of Cellular and Molecular Physiology, Pennsylvania State University College of Medicine, 500 University Drive, Hershey, PA 17033. Tele-phone: 717/531-6972. We are an Equal Opportunity/ Affirmative Action Employer and encourage minority and female applicants to apply. female applicants to apply.

POSTDOCTORAL SCIENTIFIC RE-SEARCH OPPORTUNITIES IN INDIA. 3 to 12-month fellowships in India awarded to U.S. citizens in 1993–94. For more information, contact: Jeanine Marie Greene, Academy for Educational Development, 1255 23rd Street, N.W., Washington, DC 20037, or 1-800-545-8007.

#### POSTDOCTORAL POSITION

Position available, immediately, for a postdoctoral conditate with a background in autonomic pharmacolo-gy and physiology to investigate a collaborative NIH-funded project on imidazolines. Investigative laboratory skills in quantitative methods of receptor pharmacology and in electrophysiology will be preferred. Stipend \$23,000 per year. Contact: Prof. P. N. Patil, The Ohio State University, College of Pharmacy, Columbus, OH 43210. Telephone: (614) 292-7238.

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**At ImmuLogic,** an expanding biopharmaceutical company, we're developing products to treat allergies and autoimmune diseases.

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In this position, you will define the intracellular signalling pathways associated with IL-2 and IL-4 production in a unique set of murine Th0 cell hybridomas. Qualifications: Ph.D. with experience in intracellular signalling, (preferably in lymphoid cells) required. Background in immunology strongly preferred. This position is funded by the National Institutes of Health for approximately 2 1/2 years. **Dept. PFD.** 

We offer a competitive compensation and benefits package. Please send your CV, referencing the department, to: Human Resources Department, ImmuLogic Pharmaceutical Corporation, 610 Lincoln Street, Waltham, MA 02154. An equal opportunity employer. Principals.



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### Sr. Research Microbiologist

You will assist in all aspects of *in vitro* characterization of anti-bacterial and antifungal agents and may be involved in the identification of new molecular targets for antimicrobial therapy. Duties will also include supervision of routine screening, design and implementation of methods for detailed evaluation of antimicrobial agents and the development of an independent research program.

The successful candidate will have a PhD in Microbiology with 2-6 years of experience in clinical or general microbiology. Knowledge of molecular biology and antibiotic evaluation on mechanism of drug action is desirable. Experience with mycobacteria, mycoplasma or fungi helpful. **Reply to Patricia Handy, Job# SKT71222.** 

### Research Associate Cell/Molecular Biology

You will participate in the recombinant expression of human proteins which will be used for the assays in the discovery of potential therapeutics and in the determination of the structure of protein and ligand/protein complexes. As your primary focus will be in the use and improvement of a baculovirus expression system, experience in this area would be a definite advantage. A BS/MS and proficiency in cell biology and molecular biology are also required. **Reply to Alison Burke Job# RS69959.** 

Abbott Laboratories provides an excellent compensation and benefits package, including profit sharing and a stock retirement plan. We are located in an attractive suburban setting approximately 30 miles north of Chicago. For confidential consideration, send your resume with salary history (indicating appropriate reply name and Job#) to: Dept. 583, AP6D, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.

### **ABBOTT LABORATORIES**



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Applications are invited for a post of Lecturer in Genetics in the Department of Genetics, tenable from 1 October 1994. Candidates with interests in any exciting area of genetics are encouraged to apply, although researchers in cell and developmental biology would be particularly welcome.

The Department of Genetics embraces a wide spectrum of genetical research involving 13 research groups including Professors Alec Jeffreys (DNA 'fingerprinting'), Gabby Dover (molecular and genome evolution) and Peter Williams (bacterial pathogenicity).

The Department is accommodated in modern laboratories with excellent research facilities and achieved the highest rate of 5 in the recent U.K. University Research Assessment Exercise.

Initial salary, dependent on qualifications and experience, will be on the Lecturer Grade B scale - £19,642 to £25,107, or the Lecturer Grade A scale - £13,601 to £18,855 p.a.

Further particulars and an application form are available from the Staffing Office (Academic Appointments), University of Leicester, University Road, Leicester LE17RH, telephone (0533) 522758. The closing date for applications is 3 December 1993.

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At ImmuLogic, our discoveries have allowed us to develop an advanced understanding of the events controlling the human immune system. Through advanced research in immunology and pharmaceutical product development, we're focused on developing therapeutics for Type I diabetes, rheumatoid arthritis, and other autoimmune disorders. At our state-of-the-art research facility in Palo Alto, California, we have the following current opening:

### CELLULAR IMMUNOLOGIST

Will investigate the events leading up to T cell activation in human immune mediated diseases and the subcellular processes involved in antigen processing. This program requires the development of transgenic animal models, the use of novel and traditional techniques, as well as interaction with collaborators and consultants. **Requirements:** Ph.D. in Immunology or related field. Minimum of 2 years of relevant postdoctoral experience in human T cell immunology and cell biology, and hands-on experience with transgenic models.

ImmuLogic offers a competitive salary and an excellent benefits package, as well as participation in a stock option program. Please send your C.V. to: *Human Resources, ImmuLogic Pharmaceutical Corporation, 855 California Avenue, Palo Alto, CA 94304*. An Equal Opportunity Employer.



#### FACULTY POSITION DEPARTMENT OF CELLULAR AND STRUCTURAL BIOLOGY UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

Applications for a tenure-track position at the Assistant Professor level in the Department of Cellular and Structural Biology, UTHSCSA, are invited in the area of molecular biology. The successful candidate will be expected to establish an independent research program in the area of environmental health and to participate in the teaching activities of the department. Also required for this position will be the development and direction of a clinical molecular genetics laboratory with an emphasis on prenatal diagnosis. A history of successful research will be positively considered. The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer. The deadline for applications is January 31, 1994. Interested individuals should send a statement of research interests and current activities, a curriculum vitae, and letters from three referees to:

Dr. Robin Leach Department of Cellular and Structural Biology The University of Texas Health Science Center at San Antonio 7703 Floyd Curl Drive San Antonio, TX 78284-7762 Telephone: (210) 567-6947 or 3831 FAX: (210) 567-3803

### cold spring HARBOR LABORATORY Postdoctoral Position in Developmental Neurobiology

Positions starting Jan '94 to investigate the cellular mechanisms controlling neuronal growth and development of synaptic connectivity in the visual system. Projects focus on the roles of 1) glutamate receptor activity 2) intracellular calcium 3) protein kinases and 4) cytoskeletal components. The lab uses pharmacological and recombinant viral technology to alter neuronal growth and synaptic activity and in vivo confocal microscopy to assay the effects of manipulations. Experience in imaging or cellular neurobiology required.

Cold Spring Harbor Labs has built an energetic Neuroscience group organized around a multidisciplinary approach to neuronal plasticity. Send curriculum vitae and 3 letters of recommendation to: Dr. Holly Cline, Personnel Office, Cold Spring Harbor Laboratory, P.O. Box 100, Cold Spring Harbor, NY 11724.

Equal Opportunity Employer M/F

### Assistant Professor NEUROBIOLOGIST

The Department of Biology at Bates College, a selective liberal arts college with an enrollment of 1540 students, has an opening for a tenure track faculty position in Neurobiology beginning in Fall 1994. The successful candidate will become the eighth full time faculty member in Biology and will interact with additional faculty in Biopsychology. Teaching responsibilities include a general course in neurobiology, electives in area of specialization, and participation in the Department's core curriculum in Biology. Candidates are required to conduct a vigorous research program involving Bates undergraduates. The Department prefers candidates whose research interests involve the cellular or molecular mechanisms of neural function. The Ph.D. is required and post doctoral research experience is preferred. Applicants should provide a cover letter indicating teaching and research interests and experience, curriculum vitae, and three letters of recommendation to the NEUROBIOLOGY SEARCH COMMIT-TEE, c/o Secretarial Services, Andrews Road, 7 Lane Hall, Bates College, Lewiston, Maine 04240. APPLICATION DEADLINE: January 1, 1994. BATES COLLEGE values a diverse college community and seeks to assure equal opportunity through a continuing and effective affirmative action program. We welcome applications from women and minorities.

> Department of Biology Bates College Lewiston, Maine 04240

### VERTEBRATE PHYSIOLOGIST

Tenure-track position at Assistant Professor level to begin Sept 94: Ph.D. and postdoctoral experience required. The Biology Department at Western Washington University seeks applicants with expertise in vertebrate physiology; strength at the organismal level is preferred. The successful applicant should be able to teach courses in introductory animal biology and vertebrate physiology, and to develop advanced courses in areas of expertise. The teaching assignment will include a human physiology service course one quarter per year. An active research program is expected, involving advanced undergraduate and graduate (MS) students. The successful applicant is expected to seek external funding for research and instructional development. The department is committed to excellence in undergraduate teaching, with research playing an important role in the educational process. The department will occupy a new building in 1995, with modern research laboratories, controlled environmental rooms, marine and fresh water facilities, and facilities to maintain animals except mammals and birds. WWU is located in northwest Washington, near the foothills of the Cascade Mountains and on Puget Sound.

Applicants should submit a curriculum vitae, a concise statement of teaching and research interests and accomplishments, and the names, addresses, and phone numbers of three references to:

> Dr. June Ross Search Committee Chair Biology department MS 9060 Westem Washington University Bellinham, WA 98225-9060 Phone 206-650-3627; FAX 206-650-3148

We shall begin reviewing applicants on 18 Jan 94, and the position will remain open until filled.

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## Research opportunities in an ideal setting.

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### **Research Scientists**

Molecular Biologist — Requires a PhD in Molecular or Cellular Biology and 2+ years' industrial experience in the study of human T cells and macrophages at the molecular level.

Cellular Immunologist — Requires a PhD in Immunology and 3+ years' experience in human immunology, including T cell cloning. Knowledge of flow cytometry and lymphokine biology beneficial.

### **Research Associates**

Cellular Immunology — Requires a BS/MS in Biology or related field, a minimum of 2 years generating and propagating human T cell clones, and experience in analyzing activation of T cell clones, proliferation, lymphokine production, and background in flow cytometry.

Anergen offers an attractive compensation, and benefits package. For immediate consideration, please forward your resume indicating area of interest to: Anergen, Inc., Attn: Joan Shields, 301 Penobscot Drive, Redwood City, CA 94063; or fax it to: (415) 361-8958. EOE.



### RESEARCH & DEVELOPMENT POSITIONS

Promega Corporation, leading the biotechnology industry worldwide, is currently seeking qualified professionals with the following expertise to enhance our R & D team and join a dynamic and rapidly expanding company.

### **SENIOR SCIENTISTS (Ph.D.)**

• Cellular Immunology - TR. Immunology/related degree and 2-4 yrs.' postdoc research exp. in cellular/clinical immunoassay development required. Background developing, utilizing, researching contemporary immunology topics/techniques; familiarity with current literature in the field essential.

• Complex Genome Analysis - DS. Degree in molecular biology with at least 2 yrs. postdoc experience; significant experience with DNA analysis techniques including Northern and Southern hybridization, library construction/ screening, DNA sequencing and PCR amplification; and experience with non-radioactive nucleic acid detection techniques. Prefer experience with fluorescent DNA detection instrumentation and experience with HPLC and capillary electrophoresis instrumentation.

 Genetic Analysis - JS. Degree in molecular biology or related area. Prefer experience with nucleic acid purification and amplification methods, linkage analysis, fluorescent *in situ* hybridization, and/or non-isotopic detection methods. Experience handling clinical or forensic materials; facility with computer-based analyses, especially national genome databases and DNA analysis software; and 2 yrs.' exp. in an industrial research setting.

 Signal Transduction - SG. Biochemistry, molecular endocrinology, or cellular biology degree and proven record of research publication required. Extensive protein purification exp. a must.

### SCIENTISTS (MS/BS)

• Genetic Analysis - JS. Degree in molecular biology or related area and at least 2 yrs. lab exp. with molecular biology of nucleic acids with a demonstrated record of success.

 Molecular Biologist - KW. Degree or equivalent experience in molecular biology techniques with emphasis in DNA sequencing. Prefer broad experience in molecular genetics techniques.

• Nucleic Acid Detection & Purification - CS. Degree with 3-5 yrs.' experience; extensive experience with routine molecular biology methods including nucleic acid isolation (RNA and DNA), library construction, nucleic acid amplification techniques, hybridization and probe labeling systems; and expertise with fluorescent *in situ* hybridization or other *in situ* hybridization methods is a requirement. Prefer experience in designing high throughput nucleic acid detection systems.

We offer an innovative and diverse environment with competitive salary and comprehensive benefits in the city that Money Magazine rated as 2nd best in the U.S. in 1993. To apply, forward a resume indicating position of interest with salary requirements to: PROMEGA CORPORATION, Human Resources (code), P. O. Box 7879, Madison, WI, 53711-7879. (No agency solicitation accepted.)



### **Queen's University Department of Anatomy and Cell Biology Faculty Position**

Applications are invited for:

- A tenure track appointment at the rank of Assistant or Associate 1. Professor. A Ph.D. and/or M.D. or D.D.S. degree and a minimum of two years of postdoctoral experience are essential. Outstanding candidates with strong interdisciplinary research programs in Cell Biology, Neuroscience, Human Kinetics or Physical Anthropology will be considered. Demonstrated ability to teach Human Gross Anatomy would be an asset.
- A special appointment at the rank of Assistant Professor contingent 2. on the applicant obtaining a Medical Research Council, Heart and Stroke Foundation or equivalent scholarship. A Ph.D. and /or M.D. or D.D.S. degree and a minimum of two years of postdoctoral experience are essential. Outstanding candidates with strong interdisciplinary research programs in Cell Biology, Neuroscience, Human Kinetics or Physical Anthropology will be considered. Ability to teach in two areas: Human Gross Anatomy, Histology, Neuroscience, or Embryology, in an integrated medical curriculum would be an asset. Initially, up to two years of special funding may be available for an outstanding candidate.

Candidates should indicate the position applied for and arrange to have a copy of their curriculum vitae and at least three letters of recommendation sent to: Dr. M.G. Joneja, Professor and Head, Department of Anatomy and Cell Biology, Faculty of Medicine, Queen's University, Kingston, Ontario Canada K7L 3N6. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Queen's University has an employment equity programme, welcomes diversity in the workplace and encourages applications from all qualified candidates, including women, aboriginal peoples, people with disabilities and visible minorities. Applications and letters of recommendation should be forwarded as soon as possible and no later than January 15, 1994.

## PROGRAMME OFFICER

The Royal Swedish Academy of Sciences Secretariat for the International Geosphere-Biosphere Programme

The Royal Swedish Academy of Sciences invites applications for the position of Programme Officer within the International Geosphere-Biosphere Programme (ICBP), available from the beginning of 1994. The IGBP is an internationally coordinated research effort, dealing with the causes and effects of global environmental change. Current projects address atmospheric chemistry, the ocean carbon cycle, coastal zone interactions, terrestrial ecosystems, ecological hydrology and past global changes. Integrated modelling work is also ongoing, together with the development of data systems and monitor-ing, and regional research and training.

The Programme Officer will be responsible for

- liaison with the science community with emphasis on internal linkages between IGBP core projects.
  support of the IGBP Scientific Committee
- representation of the IGBP at meetings · editing of reports and other publications

- The successful candidate will
  - have a Ph.D. in a relevant scientific field, preferably complementing the expertise of the existing staff.
  - have proven interest in global environmental change research
  - · be well acquainted with international scientific collaboration, including organisational and policy aspects be fluent in written and spoken English; knowledge of other languages
  - is an advantage

The Programme Officer is based in Stockholm, Sweden. The minimum contract period is two years, with the possibility of an extension. The salary is paid in Swedish Crowns and depending on qualifications, is based on that of a senior scientist in Sweden.

Letters of application describing past relevant experience, with a curriculum vitae and the names of three referees, should be sent no later than 15 Dec. 1993 to the IGBP Secretariat, The Royal Swedish Academy of Sciences, Box 50005, S-10405 Stock-holm, Sweden; fax +46 8 166405, tel +46 8 166448.

#### NEUROSCIENCE FACILITIES MANAGER THE CENTER FOR BEHAVIORAL NEURO-SCIENCE, SUNY AT STONY BROOK

The Center for Behavioral Neuroscience is a multidisciplinary facility dedicated to research on the functional organization of the brain. We are seeking a facilities manager who will oversee the purchase, care and use of all apparatus in the Center and who will facilitate research both for Center investigators and for collaborative efforts. The latter will often necessitate conducting pilot experiments. The candidate should be thoroughly versed in modern neuroanatomical techniques and have working knowledge of standard electrophysiological and small animal surgical techniques. The ideal candidate would have a Ph.D. or masters degree in neuroscience or closely related field, is technically proficient and interested in developing and implementing new technologies and is interested in contributing to neuroscience research. Salary is commensurate with educational level and research experience. For consideration, send curriculum vitae and names, addresses and telephone numbers of 3 references to: Facilities Manager Search Committee, Center for Behavioral Neuroscience, SUNY at Stony Brook, Health Sciences Center, Level 2, room 172, Stony Brook, New York 11794. Closing date for applications is 12/8/93.

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# Director of Animal Institute

A leading New York City medical school invites applications from individuals with experience in organization, operation and management of research animal services and supervisory skills to direct the daily operations of a large AAALAC-accredited animal facility. Primary emphasis will be on clinical and administrative duties, although research and academic activities will be encouraged and opportunity exists for the candidate to have a faculty appointment in an academic department. Duties will include overseeing veterinary care, supervising animal facility staff, guiding faculty in the use of animals in research, ensuring faculty compliance with federal, state and local agencies, and monitoring research proposals involving animal usage. This full-time professional staff position reports directly to the Associate Dean for Scientific Operations. Qualifications: DVM and/or PhD with Boardcertification or eligibility in ACLAM. Salary will be competitive and commensurate with qualifications and experience. Send résumé with names of 3-4 references to: Dr. Cedric S. Raine, Chair, Search Committee (SCI), Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. An Equal Opportunity Employer.



The Department of Biochemistry at the University of Missouri-Columbia invites applications for tenure track faculty positions at the assistant professor level. Candidates should have an excellent academic background with postdoctoral experience, and will be expected to develop a vigorous research program and to participate in undergraduate and graduate teaching. The University has undertaken the development of a program in protein and nucleic acid structure. Individuals with expertise in structural biology (especially those employing NMR or other biophysical methods) are encouraged to apply. New laboratory facilities and excellent start up support are available with which to initiate competitive research programs. Applicants should send a curriculum vitae, a research plan, and have three letters of reference sent to:

Department of Biochemistry 117 Schweitzer Hall University of Missouri Columbia, MO 65211 Attention: Dr. Thomas Quinn, Chair

Faculty Search Committee

Applications will be accepted until suitable candidates are identified.

The University of Missouri is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minorities.



### Director of Digestive Disease Research The RESEARCH INSTITUTE of the CLEVELAND CLINIC FOUNDATION

We are seeking a director for our basic digestive disease research program that is jointly sponsored by the Research Institute and the Departments of Gastroenterology and Colorectal Surgery. The successful candidate will possess an outstanding national reputation as a basic scientist using cellular and molecular approaches to study processes related to digestive diseases, including, but not limited to, cytokine and growth factor action, signaling pathways, immune cell function, and basic mechanisms of inflammatory bowel disease. The candidate will be provided with generous start-up support. Salary and fringe benefits are highly competitive. The Cleveland Clinic has a long standing commitment to excellence in basic and applied biomedical research with an annual research budget in excess of \$50 million.

A curriculum vitae and names and addresses of three references should be sent to: Dr. Paul E. DiCorleto, Search Committee for Director of Digestive Disease Research, Cleveland Clinic Research Institute, NC10, 9500 Euclid Avenue, Cleveland, OH 44195. The Search Committee will receive applications through December, 1993.

The Cleveland Clinic Foundation is an Equal Opportunity Employer.

# International Conference Immunogenetic Risk Assessment in Human Disease March 6-8, 1994 Medical University of South Carolina Environmental Hazards Assessment Program Charleston, SC Topics Include:

Recent Advances in the Genetics of Immunoglobulin Molecules. Recent Advances in the Genetics of HLA Molecules. The Role of Immunoglobulin Allotypes and HLA Antigens in Disease Susceptibility/Resistance. Neurological, Psychiatric, Autoimmune and Infectious Diseases will be among some of the diseases to be presented.

Speakers Include: J.F. Crow, PhD, University of Wisconsin F. Miller, MD, PhD, NIH R. Grubb, MD, PhD, Sweden C.I. Amos, PhD, MD Anderson, Texas Elston, PhD, LSU E. Yunis, MD, Harvard C. Alper, MD, Harvard Lublin, MD, Thomas Jefferson University C.R. Cloninger, MD, Washington University D. Propert, PhD, Australia T. Sasazuki, MD, Japan J. Pandey, PhD, Medical University of South Carolina C. Langley, PhD, UC Davis F. Black, PhD, Yale Preliminary program and meeting details can be obtained from: Sylvia Rivers • EHAP • 156 Rutledge Ave. Charleston, SC 29403 • (800) 277-3239 or (803) 792-1626

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SIBIA is continuing to expand its interdisciplinary research and development on therapeutics for neurodegenerative diseases. We have established an enviable record in the development of innovative technologies integral to the biopharmaceutical industry. Currently we are seeking the following talented candidates to join our interdisciplinary research group:

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PhD with postdoctoral experience of more than five years in recombinant expression of receptors and ion channels. You will direct a group involved in the expression of cloned voltage- and ligand-gated ion channels in mammalian cells. Two or more years' industrial experience is preferred.

### **RESEARCH SCIENTIST**

PhD with postdoctoral experience of three to five years along with a detailed understanding in functional characterization of recombinant ligand-gated ion channels in cells using calcium flux, receptor binding, and second messenger measurements.

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### UNIVERSITY OF BERN POSTDOCTORAL POSITION

The Division of Histology at the Institute of Anatomy of the University of Berne, Berne, Switzerland, invites Ph.D. or M.D. degree candidate applications for a new post doctoral position, starting on January 1, 1994 or later.

Candidates with 1 to 2 years of postdoctoral training preferentially in cell biology and who are experienced in light- and electron microscopy are encouraged to apply for this position in a research project on particle deposition in the lungs.

Please send your curriculum vitae, description of research interest and professional references to:

Dr. Peter Gehr, Institute of Anatomy, University of Berne, CH-3000 Berne 9, Switzerland.

### MOLECULAR GENETICS OF EYE DISEASE

Outstanding opportunity to join rapidly growing laboratory devoted to investigation of molecular genetics of eye disease including glaucoma and retinal and macular degeneration. New, superbly equipped facility. Experience with gene mapping and positional cloning technology is preferred. Faculty rank at Tufts University School of Medicine commensurate with experience. Reply to:

Janey L. Wiggs, M.D., Ph.D. Director, Molecular Genetics Unit New England Eye Center Tufts University School of Medicine 750 Washington Street Boston, MA 02111 FAX: (617) 956-4215

**POSTDOCTORAL POSITION:** A postdoctoral position for a biochemist/molecular biologist is available in the Lady Davis Institute/Jewish General Hospital and the Department of Oncology/McGill University. The focus of the research is the role of vav, a novel human oncogene in transformation and signal transduction in hematopoietic cells. Please send curriculum vitae and name and address of two referees to: Dr. S. Katzav, Lady Davis Institute for Medical Research, 3755 Côte Ste-Catherine Road, Montreal, Quebec, Canada H3T 1E2. FAX: (514) 340-7576.

SEVERAL POSTDOCTORAL POSITIONS. Application of enzymological and recombinant DNA technology to biomedical problems including receptors, genes involved in unique lipids of mycobacteria and to improve soybean by genetic engineering. Send curriculum vitae to: P. E. Kolattukudy, Director, Ohio State Biotechnology Center, The Ohio State University, 1060 Carmack Road, Columbus, OH 43210. An Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION IN IMMUNOLOGY St. Jude Children's Research Hospital Memphis, Tennessee

Postdoctoral Research Associate position available immediately to study the structure, function, and regulation of the gene for Bruton's tyrosine kinase (Btk), the gene responsible for the human disorder X-linked agammaglobulinemia and the murine immunodeficiency, xid. The work is directed toward understanding gene regulation and enhancing the possibility for gene therapy. The applicant should have a Ph.D. or M.D./Ph.D.; experience in molecular biology would be helpful. Please send curriculum vitae, statement of research interests, and the names, addresses and telephone numbers of three references to: Dr. M. E. Conley, Department of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. An Affirmative Action/Equal Opportunity Employer. We provide a smoke-free environment.

**POSTDOCTORAL POSITION(S)** to study the biochemistry and molecular biology of natural product and antimetabolite drug resistance in mammalian systems. Projects include, (1) the use of *in vitro* mutagenesis and drug selection *in vivo* to obtain altered forms of p-glycoprotein in order to study the functional properties of this class of membrane transporters, and (2) the biochemical and molecular characterization of the mammalian reduced folate transporter to further understand the genetic basis for intrinsic resistance to antifolates and the fundamental nature of folate vitamin transport per sec. Candidates must have a Ph.D., M.D., or equivalent degree and significant expertise in molecular biology and recombinant DNA techniques. The deadline for applications material is December 1, 1993. Send curriculum vitae to: Dr. Peter Melera, Molecular and Cell Biology Program, UMAB, 108 North Greene Street, Baltimore, MD 21201–1503.

The Basic Science Departments (Cell Biology and Neuroanatomy, Biochemistry, Microbiology, Pathology, Pharmacology, Physiology), Medical School, University of Minnesota, periodically have openings for **POST-DOCTORAL TRAINING**.

For information about possible openings in these programs, write, specifying department of interest, to:

University of Minnesota Medical School Box 293-A UMHC 420 Delaware Street SE Minneapolis, MN 55455 Attention: Diane M. Dufault

The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION available immediately to study the molecular mechanisms which inhibit the terminally differentiated cardiac muscle cell from reentering the cell cycle and dividing. Studies involve regulation of the cell cycle and tumor suppressor genes. Experience in cellular and molecular biology preferred. Send curriculum vitae and 3 letters of reference to: William C. Claycomb, Ph.D., Department of Biochemistry and Molecular Biology, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112; Telephone: (504) 568-4737, FAX: (504) 568-7649. LSUMC is an Equal Opportunity/ Affirmative Action Employer.

#### **POSITIONS OPEN**

#### POSTDOCTORAL POSITION DEPARTMENT OF MEDICINE HARVARD MEDICAL SCHOOL

A postdoctoral position is available for a recent Ph.D. to join a multidisciplinary laboratory studying the control of blood cell differentiation and mechanisms of neoplasia. Experience with molecular biological and/or protein biochemical techniques is required. Send curriculum vitae, statement of research interests, and names of three references to: Arthur J. Sytkowski, M.D., Laboratory for Cell and Molecular Biology, New England Deaconess Hospital, Harvard Medical School, 185 Pilgrim Road, BURL Building, 5th Floor, Boston, MA 02215.

#### POSTDOCTORAL POSITION Molecular Mechanisms of Bacterial Pathogenesis

A postdoctoral position is available immediately to study the regulation of virulence determinants in *Pseudomonas aeruginosa* (Exotoxin A and Phospholipase C) by environmental factors including oxygen, iron inorganic phosphate and osmoprotectants. Other studies include structure-function analysis of hemolysins and the role of IS elements in virulence. This is a well-equipped and staffed laboratory in a desirable geographic location. Preference will be given to applicants with a background in prokaryotic molecular biology. Experience in protein chemistry would also be an asset. Send curriculum vitae and three names and telephone numbers of references to: Michael L. Vasil, Ph.D., Box B175, Department of Microbiology, University of Colorado Health Sciences Center, Denver, CO 80262.

#### MOLECULAR BIOLOGIST

POSTDOCTORAL POSITION available immediately to study cell communication by site-directed mutagenesis and expression of connexins (gap junction proteins) in *Xenopus* oocytes and small cells. Patch-clamp electrophysiology, biochemistry and EM available. Interest in learning electrophysiology/EM welcomed. Send curriculum vitae with references to: Dr. Camillo Peracchia, Department of Physiology, University of Rochester, 601 Elmwood Avenue, Rochester, NY 14642-*S642. The University of Rochester is an Equal Opportunity/ Affirmative Action Employer.* 

#### POSTDOCTORAL POSITION

Immediate opening for person with doctoral degree to carry out experiments on the integrative mechanisms of circadian locomotor activity. Strong background in cellular neuroscience is desired with knowledge and experience in electrophysiological techniques. Send curriculum vitae and three letters of recommendation (by December 15, 1993) to: Drs. J. A. Whittaker or J. W. Patrickson, Department of Anatomy, Morehouse School of Medicine, 720 Westview Drive, S.W. Atlanta, GA 30310– 1495. FAX: (404) 752-8443.

> CANCER RESEARCH POSTDOCTORAL TRAINING CASE WESTERN RESERVE UNIVERSITY CANCER CENTER

NIH-funded cancer research postdoctoral positions for individuals holding the M.D., M.D./Ph.D. or Ph.D. degrees. Research focuses include:

| Steroid hormone action        | DNA repair                    |
|-------------------------------|-------------------------------|
| Molecular biology of color    |                               |
| Molecular virology            | Immunology                    |
| Radiation biology             | Cutaneous oncology            |
| Cellular adhesion             | Regulation of cell growth     |
| Retroviral oncogenesis        | Neurooncology                 |
| Gene regulation               | Apoptosis                     |
| Send curriculum vitae and     | statement of research inter-  |
| ests to: Dr. Clark Distelh    |                               |
| (BRB), Case Western Re        | eserve University, 10900      |
| Euclid Avenue, Cleveland,     | OH 44106-4937. Must be        |
| American citizen or permanent | resident. Minorities and wom- |
| en are encouraged to apply.   |                               |
|                               |                               |

TWO POSTDOCTORAL POSITIONS, protein crystallographer and molecular biologist/protein chemist, are available to study the structure and function of the cyclophilin-calcineurin complex. Salary depends on qualifications and experience. Send curriculum vitae and three letters of references by January 1, 1994, to: Dr. Hengming Ke, Department of Biochemistry and Biophysics, The University of North Carolina, Chapel Hill, NC 27599–7260.

#### **POSTDOCTORAL POSITION.** To study signaling by natriuretic peptide receptors in pituitary. Ph.D. with experience in molecular biology required; histochemistry or tissue culture experience also useful. Send curriculum vitae and names of three references to: Michael Chinkers, Ph.D., The Vollum Institute for Advanced Biomedical Research, The Oregon Health Sciences University, Portland, OR 97201–3098. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS (2); one immediately and one from January 1, 1994, to study molecular mechanisms coupling signal transduction to receptormediated endocytosis and membrane turnover. Work focuses on the interactions of the PI signaling pathway, molecular chaperones and other proteins with receptors, clathrin coated membranes and endosomes (see *Nature* **365**: 459 [1993] for recent publication). Expertise in molecular cloning or protein biochemistry desirable. Send curriculum vitae and the names of references to: Dr. James H. Keen, Jefferson Cancer Institute and the Department of Pharmacology, Thomas Jefferson University, 233 South 10 Street, Philadelphia, PA 19107. FAX: (215) 923-1098. Equal Opportunity Employer.

#### POSTDOCTORAL POSITION IN PROTEIN CRYSTALLOGRAPHY

Position available 1 June 1993 to determine threedimensional structures of active serpins (these are 45 kD proteins which inhibit serine proteases; see Wei et al., J. Mol. Biol. 1992, 226, 273). This work is part of a multidisciplinary collaboration involving molecular biologists, enzymologists, and structural biologists. Candidates for this position should have a background in protein crystallography and some experience in protein purification. Applications, including curriculum vitae, list of publications, and names and addresses of three references should be sent to: Prof. David W. Christianson, Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104–6323.

**POSTDOCTORAL POSITION, PROTEIN CHEMISTRY** available to study protein domains, DNA-protein interactions, and GTP binding of P element transposase protein (see *Cell* 62:27, 1992). Experience in HPLC, peptide mapping and purification essential. Send curriculum vitae and names of three references to: Dr. Donald Rio, Department of Molecular and Cell Biology, 401 Barker Hall, University of California, Berkeley, CA 94720.

#### POSTDOCTORAL AND GRADUATE FELLOWSHIPS THE ANALYSIS OF BIOLOGICAL DIVERSIFICATION UNIVERSITY OF ARIZONA

A coalition of faculty members from the Departments of Ecology and Evolutionary Biology, Geosciences, and Molecular and Cellular Biology have established a Research Training Group in the Analysis of Biological Diversification, with funding from the National Science Foundation. **Postdoctoral and Graduate Fellowships** are available to pursue innovative research projects that integrate disparate approaches to diversification, including molecular biology, systematics, ecology, paleobiology, developmental biology and population genetics. Our goal is to encourage students with training in any of these areas to cross the boundaries of traditional disciplines, and in particular use phylogeny in understanding patterns of diversity and evolutionary processes. For further information and application procedures,

For further information and application procedures, contact: RTG-Diversity Program, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ 85721. Applicants for Graduate Fellowships should specify their preferred home department. Postdoctoral Fellowship applications should be received by 14 January 1994 for positions available after 1 July 1994. Fellowships are limited to U.S. citizens or permanent residents. The University of Arizona is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

#### **POSITIONS OPEN**

### Associate Director for AIDS Research, Office of the Director

The National Institute of Health (NIH) invites applications for the position of Associate Director for AIDS Research, Office of the Director. This is a Civil Service position in the Senior Executive Service (SES) with a salary ranging from the ES-1 to ES-6 pay level per annum (currently \$92,900 to \$115,700). The person selected may be eligible for a Physicians Comparability Allowance ranging from \$5,000 to \$20,000 per year. A one year probationary period must be served by the individual selected if not currently in the career Senior Executive Service.

The position of Associate Director for AIDS Research also serves as the Director, Office of AIDS Research, and is responsible for (1) planning, coordinating and evaluating all AIDS related research activities at NIH; (2) developing a comprehensive strategic plan establishing objectives, priorities and policy governing the conduct and support of all NIH AIDS related research activities; (3) developing consolidated budget estimates for presentation directly to the President; (4) receiving and allocating all appropriated funds; and (5) establishing and overseeing an AIDS Advisory Council and coordinating committees involved in AIDS activities. The Associate Director shall act as the primary Federal official with responsibility for overseeing all AIDS research conducted or supported by the NIH.

Applicants must possess biomedical research experience and knowledge of AIDS related research. <u>Desirable factors</u> <u>which should be addressed:</u> (1) Applicants should demonstrate substantive knowledge of AIDS related research by evidence of professional recognition and experience; (2) Applicants should demonstrate the ability to direct and manage a biomedical research organization; (3) Applicants will be evaluated on type and extent of training and education; and (4) Applicants will be evaluated on honors and awards received.

Applicants are required to submit an Application for Federal Employment (SF-171), available at all Federal Job Information Centers and Federal Personnel Offices. Resumes are not acceptable applications. Additionally, applicants may send a curriculum vitae and a bibliography. The vacancy announcement with mandatory/desirable qualifications requirements can be obtained by calling (301) 402-4111. Application material must be sent to the following address:

#### National Institutes of Health Office of the Director Personnel Office P.O. Box 41048, Bethesda, Maryland 20824-1048

Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the PHS Commissioned Corps may submit a resume to the above address.

#### Applications must be postmarked no later than 12-13-93

Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, sex, national origin, political affiliation, marital status, disabling condition, age, or membership or nonmembership in an employee organization.

NIH is an Equal Opportunity Employer

#### **Four Postdoctoral Positions**

### Plant Responses to Global Climate Change Program University of Nevada

The University of Nevada System, supported by a substantial grant from the NSF, is initiating a broad-scale study of plant responses to global climate change, with an emphasis on the impact of rising atmospheric CO<sub>2</sub> concentration on ecosystem to molecular-level plant processes. This research and infrastructure development program will bring together new and existing faculty from the University of Nevada, Reno, the University of Nevada, Las Vegas, and the Desert Research Institute in a collaborative effort centered around the new 5 million dollar world-class controlled environment plant growth facility at the Desert Research Institute in Reno. We are initially seeking to fill 4 postdoctoral positions with outstanding Ph.D.-level scientists who can make substantial contributions in at least one of the following three areas:

1) Effects of elevated CO<sub>2</sub> on plant gene expression/regulation (1 position)

2) Carbon and water exchange characteristics of plants at elevated CO, from the leaf to mesocosm level (2 positions)

3) Role of source-sink relations and/or hormone balances in controlling the response of plants to elevated  $CO_2$  (1 position)

Postdoctoral positions are for up to 3 years, depending on progress, with a starting salary of \$30,000 per year, plus benefits. These positions will be in Reno, Nevada, which is an outdoor-oriented community on the western edge of the Great Basin, and nestled against the eastern flank of the Sierra below Lake Tahoe. Hiking, skiing, biking, fishing and other water-related activities are primary attractions of the area. Close scientific connections and collaborations exist between scientists in this program and those at nearby institutions (e.g. UC Davis, Stanford).

Interested individuals should submit their curriculum vitae and names, addresses and phone numbers of thee references by December 31, 1993 to Dr. Jeff Seemann, Plant Responses to Global Climate Change Program, Department of Biochemistry, University of Nevada, Reno, Nevada 89557.0014. Questions can be directed to this address, 702/784-6031, 702/784-1419 (FAX) or seemann@fs.scs.unr.edu (internet).

The University of Nevada is an Equal Opportunity/Affirmative Action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and in accordance with University policy, sexual orientation, in any program or activity it operates. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States.

### NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY

The Macromolecular Structure & Dynamics Division (MS & D) of the Molecular Sciences Research Center (MSRC) at Battelle, Pacific Northwest Laboratories (PNL) invites applications for a Staff Scientist in the area of nuclear magnetic resonance spectroscopy. The position requires a PhD in chemistry, biochemistry or related science, postdoctoral experience, and an outstanding record of accomplishment in research. The rank of the position is open but more senior applicants are preferred. The successful candidate will be expected to establish an internationally recognized program of research in structural studies of proteins using state of the art NMR techniques and to successfully compete for external sources of research funds. Novel instrumentation will be available for research, including a 1 GHz NMR spectrometers. Excellent opportunities exist for collaborations across the research centers of the Laboratory.

The MSRC is one of eight centers at PNL and is dedicated to advancing the molecular sciences. The MSRC is also developing, and will manage, the Environmental and Molecular Sciences Laboratory (EMSL), which will be an international focal point of molecular science research with emphasis on environmental, waste management and health-related issues. Applicants should submit curriculum vitae, reprints, statement of current and planned research interests and letters from at least three references to: Battelle, Pacific NW Laboratories, Dept 941016 CSP, PO Box 999, MS: K6-21, Richland, WA 99352. PNL is an equal opportunity employer. Women, minorities and disabled persons are encouraged to apply.





TargeTech, Inc. (a wholly owned subsidiary of the Immune Response Corp. of Carlsbad. CA) is a research stage biopharmaceutical company pursuing a novel technology of receptor-mediated delivery of genes, antisense, and other therapeutic agents.

### **BS/MS Bio-Organic Chemist**

This is an exceptional opportunity for a highly motivated individual who desires to be an integral member of a multidisciplinary team in our entrepreneurial environment.

The successful individual will participate in the synthesis and characterization of drug-protein conjugates. A solid knowledge of organic chemistry and biochemistry is required. The individual must also possess strong analytical skills. Experience working with proteins and nucleosides is desirable.

TargeTech. Inc. is committed to providing a nurturing environment for creative. highly motivated scientists by offering competitive salaries. a comprehensive benefits package. and equity participation in the company. Submit resumes to: **TargeTech**, **Inc.**, **Human Resources**, **290 Pratt Street**, **Meriden**, **CT 06450**. We are an equal opportunity employer.



### PROFESSOR AND CHAIR DEPARTMENT OF CHEMISTRY

The Ohio State University invites nominations and applications for the position of Chair of the Department of Chemistry, The applicant must demonstrate suitable administrative and academic leadership skills for this position, which will be open in October 1994. The Ohio State University is a major comprehensive University. The Department of Chemistry, with 40 faculty, has 301 graduate and 35 postdoctoral students, and has extensive research programs in most areas of chemical research. Applicants, who must have established strong research and teaching credentials in any area of Chemistry, should write to: Professor Terry Miller, Chairman, Scarch Committee, Department of Chemistry, The Ohio State University, 120 W. 18th Avenue, Columbus, Ohio 43210-1173 (614-292-2569). Please include a curriculum vitae and the names and addresses of three or more Applications/nominations received by references. January 15, 1994, will receive full consideration. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women. minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.



**FARGETECH** inc

### COWDEN CHAIR OF MICROBIOLOGY

The Department of Biological Sciences is pleased to announce the establishment of the Cowden Chair of Microbiology. This endowed chair is to be occupied by an established teacher/scholar with an active research program in an area of microbiology related to food processing or production. For example: (i) fungal, bacterial or viral interaction, (ii) use of microorganisms as biopesticides, (iii) genetic engineering or (iv) other areas of current research interest. Appointment at the rank of Full Professor is anticipated. Teaching responsibilities will include development of microbiology courses in the area of expertise and participation in existing foundation courses in cellular, molecular and microbial biology at both the undergraduate and graduate level. Review of applications will begin 15 December, 1993 and will continue until the position is filled.

### ASSISTANT PROFESSORS

The Department of Biological Sciences at Northern Arizona University invites applications for 3 tenure-track Assistant Professors to commence August 1994 in the following areas: Cellular biology/ Electron Microscopy: The area of research specialization is open but should include ultrastructural analyses. Teaching includes a laboratory-based course in electron microscopy for advanced undergraduate and graduate students, as well as participation in the undergraduate and graduate cellular and molecular biology, general biology, Teaching includes a course in vascular plant physiology, introductory plant biology, general biology, and the development of a graduate course in the area of specialization. Environmental Microbial Ecologist: This position is shared between the Department of Biological Sciences and the Center for Environmental Sciences and Education. Teaching includes environmental microbial ecology, bioremediation, and the development of a graduate course in the area of specialization.

The Department of Biological Sciences enjoys a diversity of research interests that spans the general areas of cellular and molecular biology, ecology and behavior, and physiology. Numerous opportunities for collaborative research exist. The successful candidate should have a demonstrated competency in teaching. Ph.D. required in area of application or related field. Preference will be given to candidates with postdoctoral experience. Candidates will be expected to establish a strong extramurally funded research program, collaborate with faculty in interdisciplinary research, and help direct biology graduate students. Applications for each position should include a curriculum vitae, statements of research and teaching interests, and three letters of recommendation. Review of applications will begin 15 December, 1993 and will continue until the positions are filled. Please forward application materials to: Biology Search Committee, Department of Biological Sciences, Box 5640, Northern Arizona University, Flagstaff, AZ 86011. Northern Arizona University is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITION MOLECULAR CARDIOVASCULAR BIOLOGY

The newly formed Division of Molecular Cardiovascular Biology housed within the Department of Pediatrics, Children's Hospital Medical Center is seeking applications for two tenure track positions to be filled at the Assistant Professor level. The successful candidates will have the Ph.D., M.D. or M.D.-Ph.D. degree and at least two years of post-doctoral research experience. Holders of the M.D. degree will have the opportunity to assume some clinical duties within the Department of Pediatrics, Division of Cardiology, but will be expected to devote at least 80% of their time to building a research program. Division faculty are encouraged to participate in the multi-disciplinary graduate program in Developmental Biology and will nave the opportunity to participate in graduate student training and the teaching programs of the University of Cincinnati Graduate School. Areas of research emphasis include but are not limited to: mammalian development, basic studies in cardiovas-cular structure, and molecular and genetic analyses of normal and abnormal heart function. Individuals able to take advantage of the significant investments in the transgenic and gene targeting technologies made by the Children's Hospital Research Foundation and the University of Cincinnati, College of Medicine are particularly encouraged to apply. Applications should include a comprehensive curriculum vitae and the names of three references. A summary of past research and future plans for an independent research program Should be included. Applications should be sent to: Jeff Robbins, Children's Hospital Medical Center, Children's Hospital Research Foundation, Division of Molecular Cardiovascular Biology, TCHRF, Room 3057, 3333 Burnet Avenue, Cincinnati, OH 45229-3039.

In consideration of our children the Medical Center is committed to a smokefree workplace. Children's Hospital Medical Center conducts pre-employment drug screening as part of a comprehensive program to maintain a drug free workplace. Equal Opportunity Employer M/F.





"The Marcus M. Reindenberg Gateways to Science Program'

The Cornell University Graduate School of Medical Sciences, located in New York City, is a semi-autonomous component of the Graduate School of Cornell University at thaca. It provides training leading to the Ph.D. degree in specific areas of the biomedical sciences. The school, which is composed of faculty drawn from Cornell University Medical College and The Sloan-Kettering Institute, has established a summer internship program for training under-represented minority college students in the biomedical sciences. The aim of the program is to awaken and foster an interest in biomedical research and education. Students will gain hands-on research experience under the guidance of a faculty member. This program is open to students who have successfully completed their freshmen, sophomore, or junior years in college.

The program will consist of a seminar course on opportunities and career tracks for doctorates in the biomedical sciences, accompanied by semi-independent research projects in laboratories at either Cornell University Medical College or Sloan-Kettering Institute. Dates for the program are: Jane 13 to August 5, 1994. Deadline for applying is February 14, 1994.

Subsidized housing and a stipend of \$3,000.00 will be provided for the 8-week program. Students must have medical insurance for the period involved. Applicants must be U.S. citizens or have permanent visa status.

The application procedure is as follows:

- No separate application form is required. However, submit a one-page, typewritten, essay in which you introduce yourself, describe your background and how you developed an interest in a scientific career. Also, include home and school addresses, telephone numbers where you can be reached and your social security number.
- We require the official transcript, malled directly from your school, giving all your grades. Preference is given to students with a grade point average of B or above.
- We require a letter of recommendation from your college advisor, or one member of your science faculty who has taught you and who will give us a statement of your motivation and potential for scientific studies.
- These items should be mailed to: Ms. Francoise Freyre, Program Coordinator Cornell University Graduate School of Medical Sciences 445 East 69th Street, New York, NY 10021 Phone: 212-746-6120 Fax: 212-746-8906

### The Royal Society VACANT RESEARCH APPOINTMENTS 1994

Applications are invited for about 20 Royal Society University Research Fellowships, tenable in the first instance for five years from 1 October 1994 (or slightly later in the academic year 1994–95). Renewals of three years and then a further two may be possible. The appointments available embrace all branches of science, including agriculture, medicine, mathematics, engineering and technology.

Research Fellows are paid on the academic and academic-related staff (Lecturer A and B) salary scale which currently runs from £14 396 (age 26) to £25 107 (age 39) plus three additional discretionary points up to £28 055. Starting salaries will be on this scale, with London Allowance where appropriate, and will rise incrementally each year. A limited number of merit increments will be awarded each year to reward outstanding performance. Annual research expenses (up to about £11 000 for 1994–95) will be available together with travel expenses and a contribution to baggage costs for successful applicants from overseas and their families.

Applicants must have a Ph.D. or equivalent research experience. Fellowships must be held in a university in the United Kingdom. Those already holding substantive posts in a UK university will not be considered. University Research Fellowships are open only to European Community citizens who are either employed in the UK or who, if not employed, have been resident in the UK for a continuous period of three years other than for the sole purpose of receiving fulltime education.

Application forms and further information (including details of age restrictions) are available from the Research Appointments Department, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG (Fax 071-930 2170). Closing date 11 February 1994. Application forms are not available after 28 January 1994 and applications arriving after 4 p.m. on 11 February will not be considered.

### TROPHIX PHARMACEUTICALS, INC. "The Integrated Approach to Brain Disease"

Trophix Pharmaceuticals, Inc. (TxRx) is a development stage biopharmaceutical company devoted to developing novel therapeutics for neurological and neuropsychiatric disorders by integrating the latest advances in cell and molecular neurobiology, neuropharmacology and medicinal chemistry. Career opportunities with TxRx exist for scientists in the following areas:

### PHARMACOLOGY

**Director of Pharmacology:** The candidate should have a Ph.D. in Pharmacology with 5 years or more experience in molecular or neuropharmacology. Industry experience in drug development is essential.

<u>Research Pharmacologists</u>: Requirements are a Ph.D. degree and 1-3 years relevant postdoctoral experience in molecular pharmacology or neuropharmacology.

### **MOLECULAR BIOLOGY**

**Director of Molecular Biology**: The candidate should have a Ph.D. degree in eukaryotic molecular biology and 5 years or more of broad experience in the field. Biotechnology experience is highly desirable, but not essential.

<u>Research Molecular Biologists</u>: Requirements are a Ph.D. degree and 1-3 years of relevant postdoctoral experience in eukaryotic molecular biology.

### CELL BIOLOGY

**<u>Research Cell Biologists</u>:** Requirements are a Ph.D. and 1-3 years experience in cell biology. Background in cellular neurobiology desirable, but not essential.

### ORGANIC CHEMISTRY

Several positions are available at the BS/MS and Ph.D. levels for scientists with experience in synthetic organic chemistry. Pharmaceutical experience is desirable, but not essential. Facilities for chemistry are excellent.

TxRx is located in Morris Township, N.J., a pleasant wooded area of central New Jersey with outstanding communities, located only 35 miles from New York City. TxRx is an exciting entrepreneurial company offering an outstanding scientific environment and an excellent compensation and benefits package.

Please send all resumes with salary history to:



Human Resources Trophix Pharmaceuticals, Inc. 89 Headquarters Plaza North Tower - 14th Floor Morristown, NJ 07960

### PREDOCTORAL TRAINING IN NEUROSCIENCE INTERDISCIPLINARY PhD PROGRAM IN NUEROSCIENCE LOUISIANA STATE UNIVERSITY MEDICAL CENTER SCHOOL OF MEDICINE NEW ORLEANS

Applications are now being accepted for the interdisciplinary PhD Training Program in Neuroscience. Established in 1992, this program offers intensive training in neuroscience. Research conducted at the LSU Neuroscience Center spans both behavioral neuroscience and molecular neurobiology, and includes the study of genes, cells, and human behavior. Generous stipend support is available on a competitive basis. Applicants should have a strong GPA in undergraduate science courses, and a combined (verbal and quantitative) GRE score of at least 1200. Three letters of reference are required. Students should have taken courses in Biology, Chemistry (including Organic), Physics, Computer Science, and Mathematics (Calculus). Highly qualified individuals should send inquiries to: Nicolas G. Bazan, M.D., Ph.D. and R. Ranney Mize, Ph.D.; Co-Directors of the Interdisciplinary Ph.D. Program, c/o LSU Neuroscience Center of Excellence, 2020 Gravier Street, Suite B, New Orleans, LA 70112, Telephone: (504) 568-6700, Fax: (504) 568-5801. EOE/AA.

#### BOSTON UNIVERSITY TWO TENURE -TRACK BIOLOGY POSITIONS 1. ASSISTANT PROFESSOR OF AQUATIC/MARINE BIOLOGY

The Boston University Marine Program of the Biology Department at Boston University is seeking an Assistant Professor, tenured or tenure-track, with interests in modern problems in aquatic/marine biology to start as early as February 1, 1994. The successful candidate is expected to have at least two years of postdoctoral experience and will be expected to conduct an active, externally funded research program including graduate students. He or she will also be expected to teach an introductory course in Marine Biology in Boston and a one -month intensive aquatic environmental biology course in Woods Hole. In addition, he or she will be responsible for advising Marine Science majors and be involved in their senior research projects. Salary and start-up costs are competitive for conducting a first-rate research and teaching program. Please send a letter of interest (with past research and teaching experience and future research and teaching plans), curriculum vitae with the names and phone numbers of at least three references, and reprints of important published works to Dr. Jelle Atema, Chair, Aquatic/Marine Biology 1, 1993.

2. ASSISTANT PROFESSOR OF ENVIRONMENTAL BIOLOGY/ECOTOXI-COLOGY

The Department of Biology and the Environmental Studies Program at Boston University invite applications for a tenure-track position at the assistant professor level to begin in September 1994 in the general areas of ecotoxicology and environmental biology. The position requires the development of a successful, externally funded research program and participation in teaching programs leading to the B.A., M.A., and Ph.D. degrees. We are seeking an energetic junior faculty member to complement ongoing research in the Biology Department in biogeochemical cycling, freshwater ecosystems, conservation biology, and physiological ecology. The research focus of the successful applicant could span the range from ecosystem ecology/freshwater ecotoxicology to organism/endangered species ecology. The applicant would teach an undergraduate course in ecotoxicology, assist in the general undergraduate program, and teach a graduate course in his/her specialization. Applicant should submit a C.V., a brief description of teaching and research interests, and three letters of recommendation by Decembert 1, 1993, to Dr. Kate Lajtha, Chair, Ecotoxicology Search Committee, Department of Biology, Boston University, Boston, MA 02215. Inquiries by email to lajtha@biology.bu.edu.

The Biology Department at Boston University has 30 faculty members in all areas of biology, including cell, molecular, developmental and neurobiology, as well as ecology, behavior and evolution. Women and minorities are encouraged strongly to apply. *Boston University is an equal opportunity/* affirmative action employer.

### Assistant Professor MARINE INVERTEBRATE BIOLOGY

The Department of Biology at Bates College, a selective liberal arts college with an enrollment of 1540 students, has a tenure track faculty position open in Marine Invertebrate Biology beginning in September of 1994. Teaching responsibilities include invertebrate zoology, electives in area of specialization, and participation in the population biology and ecology portions of our core curriculum. The successful candidate will be required to conduct a vigorous research programinvolving Bates undergraduates. A Ph.D. is required and post doctoral research is desirable. Applicants should provide a cover letter indicating teaching and research interests and experience, curriculum vitae, and three letters of recommendation to the: MA-**RINE BIOLOGY SEARCH COMMIT-**TEE, c/o Secretarial Services, Andrews Road, 7 Lane Hall, Bates College, Lewiston, Maine 04240. APPLICATION DEAD-LINE: January 1, 1994. BATES COL-LEGE values a diverse college community and seeks to assure equal opportunity through a continuing and effective affirmative action program. We welcome applications from women and minorities.

> Department of Biology Bates College Lewiston, Maine 04240

#### EMINENT SCHOLAR CHAIR IN PROTEINS THE OHIO STATE UNIVERSITY

The Department of Biochemistry at The Ohio State University invites applications and nominations of distinguished individuals for an Eminent Scholar position at the rank of Professor. The Eminent Scholar position is an Endowed Chair created by the Governor and the Board of Regents of the State of Ohio. We seek an individual who has an outstanding record and an imaginative and highly productive research program in the area of protein biochemistry, investigating significant problems in protein structure-function relationships. Representative areas of interest include protein structure and stability, protein folding, DNA-protein interactions. macromolecular assembly, hormone-receptor interactions, and signal transduction. The successful candidate will command a highly competitive salary, a generous set-up package, and a recurring annual budget for support of research. The Eminent Scholar is expected to direct a vigorous research program in proteins and to participate in some teaching in tis area. The Eminent Scholar will also play a leadership role in determining future directions of Biochemistry at Ohio State. Individuals may be nominated or may themselves apply for this position. Please submit a resume and a concise statement of research interests to: Dr. George Marzluf, Chairman, Department of Biochemistry, The Ohio State University, 484 West 12th Avenue, Columbus, OH 43210 U.S.A. The Ohio State University is an Equal Opportunity/Affirmative Action Employer.

### Postdoctoral Fellow/Associate Molecular Hemapoiesis

Indiana University School of Medicine

The Herman B. Wells Center for Pediatric Research has a position available for a Postdoctoral Fellow/Associate to conduct research into the regulation of hematopoiesis. Specific areas of research include: retroviral-mediated gene transfer; hematopoietic stem cell/stromal cell interactions, including the biology of interleukin 11 and Steel factor; ES cell technology and developmental hematopoiesis. Experience in hematopoiesis, cell biology or molecular biology is required. Salary commensurate with training and experience.

If interested, please send curriculum vitae, reprints, and three letters of reference

to: Dr. David A. Williams, Herman B. Wells Center for Pediatric Research, Indiana University School of Medicine, 702 Barnhill Drive, Indianapolis, IN 46202. An equal opportunity employer.



### Assistant Professor Center for Neuroscience/Division of Biological Sciences

### **Position Description**

The University of California at Davis has extended the application period for outstanding individuals in developmental neurobiology to apply for faculty appointment as Assistant Professor in the Center for Neuroscience and the Division of Biological Sciences. This is a full-time, nine-month tenure track position. We seek candidates who use molecular and cellular approaches to address problems in the development of the nervous system. Appropriate research areas include establishment and maintenance of specific connections in the nervous system, mechanisms that underlie neuronal differentiation, and development. Preference will be shown to applicants who have both evolutionary and functional perspectives.

The Center for Neuroscience is a campus-wide unit involving faculty from five different colleges and schools and schools at UC Davis. The faculty's fields of research range from a systems approach to cellular neurobiology. The Center is interested in candidates who are committed to the highest standards of scholarship and professional activities, and to the development of a campus climate that supports equality and respect for difference based on gender, cultural ethnicity, level of disability, and sexual preference. The University of California is an affirmative action/equal opportunity employer.

This position is open until filled, but applications should be received by November 30, 1993 to be assured of full consideration. Applicants should send a curriculum vitae and the names of at least three references to:

> Michael S. Gazzaniga Director, Center for Neuroscience University of California Davis, CA 95616

### Minority International Research Training Grants

The Fogarty International Center (FIC) and the Office of Research on Minority Health of the National Institutes of Health announce the availability of institutional research training grants under the FIC Minority International Research Training (MIRT) program. This program provides international research training opportunities for minority undergraduate and graduate students and opportunities for international research collaboration for minority faculty members in biomedical and behavioral research.

Three-year MIRT awards will be made to U.S. colleges and universities to encourage minority students to pursue degrees and careers in the biomedical and behavioral sciences by broadening their undergraduate and graduate education and establishing linkages between U.S. scientists and institutions and established research centers abroad.

Application Receipt Date: March 16, 1994

Further information may be obtained from: International Research and Awards Branch Fogarty International Center National Institutes of Health Bldg. 31, Room B2C39 9000 Rockville Pike Bethesda, MD 20892 Telephone: 301-496-1653 FAX: 401-402-0779



NIH is an Equal Opportunity Employer

### Pharmacologist

BIOFOR requires a Ph.D. level pharmacologist with broad-based training or experience in the pharmaceutical industry to guide our expanding research. The successful candidate will be responsible for the design and implementation of drug discovery strategies for our current programs and will also be responsible for positioning our future programs. We are looking for scientists with drug discovery knowledge and experience in the area of opportunistic infections, inflammation and/or cardiovascular diseases.

BIOFOR focuses its efforts on the use of computational techniques including its proprietary MultiCASE system and broad depth of efficacy and toxicity databases to facilitate its drug design. Our goal is to identify new chemical entities for the treatment of fungal infections, inflammation, and cardiovascular diseases. We offer a competitive salary, benefits, and opportunity for professional growth.

The level of the position will depend upon the candidate's experience. Please send resume to:

> BIOFOR, Inc. P.O. Box 629 Waverly, PA 18471

TWO POSITIONS UNIVERSITY OF VERMONT ASSOCIATE OR ASSISTANT PROFESSOR EVOLUTIONAR Y/BEHA VIORAL ECOLOGY AND ASSISTANT PROFESSOR SYSTEMATIC ENTOMOLOGY

The Department of Zoology invites applications for two positions, one in evolutionary ecology (Associate or Assistant level), the other in systematic entomology (Assistant level). Applicants are expected to hold the Ph.D. degree and have postdoctoral experience. Evolutionary Ecology - Appropriate research specialties include, but are not limited to, behavioral ecology, plant-animal interactions, biodiversity issues, or tropical ecology. Systematic Entomology - Applicants must use modern systematic methods (molecular/genetical; comparative methods) in studies of terrestrial arthropods and have complementary research in areas such as evolutionary processes, natural history, population genetics, or plant-animal interac-Position requires teaching an advanced course in entomology. Applicants interested in overseeing the university's invertebrate collections are welcomed. Positions require teaching undergraduate courses, mentoring graduate students, and conducting extramurally fundable research. Ap-plicants should forward a current CV, a description of research and teaching interests, and 2-3 reprints, and have three letters of reference submitted to: Dr. Jos. J. Schall, Chair, Search Committee (state ifEcology or Systematics), Department of Zoology, University of Vermont, Burlington, VT 05405-0086 (802-656-0448). No fax applications can be 0086 (802-056-0448). No tax applications can be accepted. Review of applicants will begin on January 25, 1994. WE ESPECIALLY ENCOUR-AGE WOMEN AND MINORITY CANDI-DATES TO APPLY. THE UNIVERSITY OF VERMONT IS AN AFFIRMATIVE ACTION/ EQUAL OPPORTUNITY EMPLOYER. Georgetown University Medical Center Perinatology Research Opportunities

The Department of Obstetrics and Gynecology is recruiting for faculty and staff positions in a unique perinatology research project funded for five years by NICHD. If you are interested in a career focused on perinatology discovery, you will want to join our research team. The team includes MD and Ph.D. faculty, research staff, and nursing and administrative staff. Positions are available in Maternal Fetal Medicine, Informatics, and Prenatal Diagnosis. Laboratories are being staffed for Perinatal Pathology, Reproductive Immunology, Myometrial and Cervical Biology, and Perinatal Biology. Positions are available beginning in January, 1994.

In addition to a competitive salary, Georgetown University offers a comprehensive health care program and a generous fringe benefit package. As a member of our faculty or staff, you benefit not only from a stimulating environment on campus, but also from the vibrant and cosmopolitan city of Washington, DC and its surrounding communities. Washington is far more than the nation's capital and a tourist attraction. It offers numerous cultural, educational, and recreational activities. Georgetown University is an equal opportunity employer.

Interested applicants should forward letter and Curriculum Vitae to:

John T. Queenan, MD Georgetown University 3800 Reservoir Road, NW Washington, DC 20007 Fax: 202-687-3146





#### INTERNATIONAL GRADUATE STUDENT FELLOWSHIP PROGRAM at the

#### AMERICAN MUSEUM OF NATURAL HISTORY'S CENTER FOR BIODIVERSITY AND CONSERVATION

AMNH invites applications from non U.S. citizens to enter a new doctoral program under the auspices of the Museum's Center for Biodiversity and Conservation. Students will have an outstanding opportunity to study a diversified curriculum in systematics, biodiversity, conservation, and public policy. Through their training, graduates of the program will advance environmental research and conservation programs in their countries.

Students must simultaneously apply to the Museum and to one of 4 cooperating universities depending on field of interest. Students should have a bachelors degree, and must fulfill university admission requirements which may include TOEFL. Students will receive travel assistance, full fellowship support for 12 months, and tuition will be fully paid; support is guaranteed for 4 years if the student remains in good standing. The student will be under the direction of a Museum curator, and attend classes and seminars at both the Museum and their chosen university.

Alpplicants should contact the Office of Grants and Fellowships to discuss their interests, background and eligibility for the Program. The Museum's deadline date for full application on prescribed forms is January 1, 1994, and this will include a resume of your academic background, work experience, research interests, and the names of three referees familiar with your work. The universities participating in this Program have separate deadline dates and application procedures. For this and further information please contact:

> Office of Grants and Fellowships American Museum of Natural History **Central Park West at 79th Street** New York, NY 10024 Telephone: 212-769-5467 Fax: 212-769-5495 E-mail: bynum@amnh.org

### Consortium for a Strong Minority **Presence at Liberal-Arts Colleges**

### MINORITY SCHOLAR-IN-RESIDENCE PROGRAM

With a view toward encouraging African-American, Asian-American, Hispanic-American, and Native American scholars to consider teaching and research careers at small liberal-arts colleges, the Consortium for a Strong Minority Presence at 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 Ph.D. or the M.F.A. 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 a similar institution

Scholars must be citizens of the United States and 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 1994-95 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, Vassar College, Wellesley College, and Wheaton College.



The brochure describing the program and an application form may be requested by writing to: Frank Thomas, Special Assistant to the President, Grinnell College, P.O. Box 805, Grinnell, IA 50112-0810

Application deadline: December 6, 1993

### T. JUDE CHILDREN'S **RESEARCH HOSPITAL** POSTDOCTORAL FELLOWSHIPS

 ${\mathscr{S}}{\mathfrak{t}}$ . Jude Children's Research Hospital is a premier basic science research center and one of the largest centers in the world for research and treatment of pediatric cancers and nonmalignant hematological disorders. This institution offers postdoctoral fellowships in a variety of laboratory and clinical research areas (see Science Sept. 24, Oct. 1, 1993) and we wish to strengthen minority representation in these areas. With guidance from more than 100 experienced preceptors, fellows trom more than 100 experienced preceptors, tellows conduct research in an environment ideally suited for the training of recent Ph.D., Pharm. D., M.D. and D.V.M. graduates. Laboratory based postdoctoral fellows de-vote their entire time to conducting research under the guidance of a preceptor in one of the following research areas: biochemistry, experimental oncology, experimen-tal hematology, infectious diseases, genetics, immunol-ogy, pharmaceutical sciences, molecular pharmaco-tology pharmaceutical sciences, molecular pharmaco-tal biology and visioney (molecular pharmaco-tal context). ogy, pharma ogy, tumor cell biology and virology/molecular biology. Elinical fellows devote a portion of their time to clinical experience with the remainder spent in laboratory research Areas of clinical research include diagnostic imaging, hematology/oncology, gene therapy, infectious diseases, pathology, psychology, radiation oncology and surgery. The proximity of laboratory and clinical activities fosters collaborative research and interaction among investigators working in different disciplines. Fellowship awards are made for up to three years and are based on merit, recommendations and promise

of a productive career in biomedical research. Stipends are highly competitive. For further information write:



**Director's Office** Postdoctoral Research Fellowships St. Jude Children's Research Hospital Danny Thomas, Founder P.O. Box 318 nohis, TN 38101-0318 USA

An Equal Employment/Affirmative Action Employe



### **Postdoctoral Fellowships**

Research Opportunities in Biology, Chemistry, Physics, Mathematics, Engineering, and Information Science

- Research related to Human Genome Program
- Tenable at various national and university laboratories
- Stipends \$37,500
- Doctoral degree received after April 30, 1991
- U.S. attizens or permanent resident aliens eligible
- Deadline February 1, 1994 • Information and applications:
  - Human Genome Postdoctoral Fellowships

Science/Engineering Education Division Oak Ridge Institute for Science and Education P.O. Box 117 Oak Ridge, Tennessee 37831-0117 (615) 576-9975

The Laboratory of Molecular Biology is studying the alterations of immunologi-cal cell function by external agents. We are presently assessing the biochemi-cal activities of HIV accessory proteins and their capacity to modify immuno-logical responses. A post-doctoral opening within the laboratory is now available and can provide an opportuni-

NIH Research

**Fellowship Position** 

available and can provide an opportuni-ty for a highly capable individual to join the NIH community and to explore the biochemical mechanisms of HIV patho-genesis. Stipend range is \$25,000 to \$36,000, depending on training and experience. Candidates with experience in gene transfer and retrovirology or signal transduction would be given preference. Please forward curriculum vitae and the names of three references

Dr. Jon W. Marsh, Chief Unit on Lymphocyte Function Laboratory of Molecular Biology National Institute of Mental Health Building 36, Room 1B08 9000 Rockville Pike Bethesda, Maryland, 20892



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### GRADUATE PROGRAM CELL AND MOLECULAR BIOLOGY (INTER-DISCIPLINARY)

- GENE EXPRESSION AND REGULATION
- THE HUMAN GENOME AND GENE THERAPY
- DEVELOPMENTAL BIOLOGY AND GENETICS
- CELL CYCLE, GROWTH CONTROL AND CANCER BIOLOGY
- MOLECULAR VIROLOGY, IMMUNOLOGY AND AIDS
- STRUCTURAL AND COMPUTATIONAL BIOLOGY
- SIGNAL TRANSDUCTION AND MEMBRANE BIOLOGY
- LIPID METABOLISM AND CARDIOVASCULAR BIOLOGY

The Graduate School at BAYLOR COLLEGE OF MED-ICINE has created a graduate program in CELL AND MOLECULAR BIOLOGY stressing basic research in the above areas. Students accepted for studies leading to the Ph.D. will receive financial support. For further information please contact Dr. Savio L. C. Woo, Director at the following address:

Graduate Program in Cell and Molecular Biology Baylor College of Medicine The Graduate School One Baylor Plaza Room S-101 Houston, Texas 77030

Phone: (713) 798-6557

MINORITY APPLICANTS ARE ENCOURAGED

### Planetary Astronomer Arecibo Observatory

The National Astronomy and Ionosphere Center invites applications for a NASA-supported postdoctoral research associate position in the Radar Astronomy/Planetary Studies group at the Arecibo Observatory in Puerto Rico. This will be a two-year appointment which may be renewable for an additional year. Applicants should have a doctoral degree and the ability to pursue independent research programs. The main relevant fields of research at the Observatory include the study of the orbital dynamics and surface properties of asteroids, cornets, planetary satellites, and the terrestrial planets. The successful applicant will have full access to the computational and other facilities of NAIC and travel funds are available for meetings and to allow use of other telescopes. With research groups in radio and radar astronomy and atmospheric sciences, the Arecibo Observatory provides an exciting, multi-disciplinary environment. All staff are employees of Cornell University and are eligible for the University's normal benefits package. The Arecibo Telescope and Planetary Radar System are currently undergoing an extensive NSF/NASA-sponsored upgrading, which will result in a very large increase in the sensitivity of the 12.6cm-wavelength radar system. New capabilities will include high-resolution imaging of many near-earth asteroids and any earth-aporgoching

The Arecibo Telescope and Planetary Radar System are currently undergoing an extensive NSF/NASA-sponsored upgrading, which will result in a very large increase in the sensitivity of the 12.6cm-wavelength radar system. New capabilities will include high-resolution imaging of many near-earth asteroids and any earth-approaching comets, statistical studies of main belt asteroids, observations of planetary satellites and new studies of the surfaces of the terrestrial planets. This upgrading is expected to be completed by early 1995. While the successful applicant will be expected to assist in calibration and other activities necessary to bring the upgraded telescope and radar system back into routine operation, we are primarily interested in applicants with strong research interests in planetary studies.

we are primarily interested in applicants with strong research interests in planetary studies. Applications should include a resume, the names of three individuals for references, and a statement of the type of research activity you would anticipate undertaking at Arecibo. The deadline for applications is **1 February 1994**, although consideration may be given to applications received after this date. Reply to:

Dr. Donald B. Campbell Associate Director, NAIC Cornell University Space Sciences Building Ithaca, NY 14853-6801

NAIC is operated by Cornell University under a cooperative agreement with the National Science Foundation. EOE/AAE.

### FELLOWSHIPS IN MOLECULAR BIOLOGY

The Molecular Biology Program at the University of Missouri-Columbia is accepting applications for graduate and postdoctoral fellowships. The program is designed for young scientists who want to expand the breadth and depth of their molecular biology studies through a dynamic interdisciplinary plan.

Our faculty are drawn from departments such as animal sciences, biochemistry, biological sciences, molecular microbiology and immunology, pharmacology, plant pathology, physiology, veterinary pathology and veterinary microbiology. Our facilities support protein purification and sequencing, oligonucleotide synthesis and DNA sequencing, monoclonal antibody production and cell sorting, transgenic animal production, immunocytochemistry, in situ hybridization, and advanced imaging technologies. Plus, the campus offers facilities for electron microscopy; NMR microscopy; analysis for proteins, carbohydrates, lipids, and inorganics; and neutron scattering at one of the nation's largest research reactors

Four-year graduate awards are \$14,000 per year, plus full fee and tuition waivers. Postdoctoral fellowships are competitive twoyear awards of \$22,000 per year. To receive our information packet, call 314/882-2816 or send an e-mail note to MolBioDR@ mizzou1.missouri.edu (INTERNET).

MU is an equal opportunity institution and complies with the ADA act of 1990.

### THE UNIVERSITY OF CHICAGO Division of the Biological Sciences Ph.D. Training Programs

Graduate students may follow flexible, interdisciplinary programs of study. There is extensive opportunity for tailoring programs to suit the individual's own interests.

Students may work in close contact with some of the world's leading researchers and may choose the thesis adviser best suited to their academic goals, without regard to departmental affiliations.

The Division offers academically qualified applicants full financial support. Aid covers tuition, fees, and provides a competitive stipend that is periodically adjusted for inflation. Special fellowships are available for members of underrepresented minority groups.

Unique opportunities are available for pursuing M.D./Ph.D. programs. A flexible leave schedule from the Pritzker School of Medicine expands choices for joint-degree candidates.

Chicago is a leading producer of academic teachers. The Division offers a broad range of opportunities for teaching assistant experience. All students participate in the evaluated teaching program and teach two quarters for academic credit.

An extensive summer research program provides research experience for undergraduates and high school students intending to pursue a Ph.D. Preference is given to minority students.

Applications for all programs are particularly welcome from African-American, Hispanic, and Native-American students.

For further information and applications, contact:

Dr. Nancy B. Schwartz, Associate Dean of Students for Graduate Affairs, The University of Chicago, 924 East 57th Street, Suite 104, Chicago, Illinois 60637–5416. Phone 312/702-5853. Fax 312/702-2598.

#### AMERICAN MUSEUM OF NATURAL HISTORY RESEARCH FELLOWSHIPS AND GRANTS

FELLOWSHIPS—Research/Museum Fellowships are available to postdoctoral researchers and established scholars starting in summer and fall 1994. 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, 1994.

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

- Frank M. Chapman (Ornithology)—January 15, 1994
- Theodore Roosevelt (North American Fauna)—February 15, 1994
- Lerner-Gray (Marine Zoology)—March 15, 1994

Request information and application forms from: The Office of Grants and Fellowships, American Museum of Natural History, Dept. H., Central Park West at 79th Street, New York, NY 10024.

#### POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY

A postdoctoral position is immediately available to investigate the molecular biology of murine platelet storage pool diseases and murine hemolytic anemias. The focus will be on the role of defective or deficient cytoskeletal proteins in causing these mutations. I am seeking an enthusiastic individual who has experience in mouse genetics and in molecular biology techniques including polymerase chain reaction, Southern blot analysis, cDNA and genomic library construction, Northern blot analysis, and sequencing. Applications including curriculum vitae, list of publications, summary of current research efforts and names and addresses of three references should be sent to: Dr. Robert White, Children's Mercy Hospital Biomolecular Laboratories, 2801 Wyandotte Avenue, Kansas City, MO 64108. For further information please contact Dr. White at 816-931-8686. Equal Opportunity Employer/Affirmative Action Plan.

**TWO POSTDOCTORAL POSITIONS:** One to study temporal/spatial control of auxin/cytokinin levels in transgenic plants and to produce plants with traits beneficial for agriculture; the second (U.S. *citizenship*) to clone and characterize genes involved in signal transduction from a gravity or auxin stimulus to the growth response in higher plants. Experience in molecular biology and plant physiology required. Send application letter, curriculum vitae and 3 reference letters by December 1, 1993, to: Dr. Yi Li, Division of Biology, Ackert Hall, Kansas State University, Manhattan, KS 66506–4901. KSU—Equal Opportunity Employer.

#### POSTDOCTORAL FELLOWSHIPS IN CANCER RESEARCH

The University of Rochester Cancer Center invites applications for postdoctoral positions in an NCI-supported research training program. Projects include mechanisms of oncogene function and metastasis, growth factor and hormonal regulation of gene expression, evasion of immune response by tumors, immunotolerance, disease modeling in transgenic mice, investigation of cell cycle regulation using flow cytometry, antitumor drug inhibition of cell growth, mechanisms of drug resistance, and control of DNA synthesis, repair, and protein synthesis in tumor viruses and cells. Please send résumé and three reference letters to: Dr. Russell Hilf, Training Program, University of Rochester Cancer Center, 601 Elmwood Avenue, Box 704, Rochester, NY 14642. U.S. citizenship or permanent residency required. The University of Rochester is an Equal Opportunity/ Affirmative Action Employer.

**POSTDOCTORAL FELLOWS. THE MON-TEREY BAY AQUARIUM RESEARCH INSTI-TUTE (MBARI)** invites applications in the fields of *biological, chemical, or physical oceanography; marine geology; and ocean engineering* with particular emphasis on the development of better instruments, systems, procedures and methods for the support of scientific research. Please send curriculum vitae; names and addresses of at least 3 references; transcripts of undergraduate and graduate academic records; a succinct description of doctoral research; and a concise statement of research interests, including the nature of the research project to be pursued at MBARI by 15 January 1994 to: PFP, MBARI, 160 Central Avenue, Pacific Grove, CA 93950. Equal Opportunity Employer.

#### MOLECULAR MECHANISMS OF BIRTH DEFECTS POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

Position available to investigate molecular and cellular mechanisms of birth defects with focus on cellular signal transduction mechanisms. Particular emphasis directed toward clarification of interactions among growth factors, protein kinases and nuclear transcription factors in regulating gene expression and cell differentiation during normal and abnormal mammalian embryonic development. Strong background in biochemistry, cell and/or developmental biology required; expertise in molecular methodologies recommended. Inquiries may be sent to: Dr. Robert M. Greene, Molecular Determinants of Birth Defects Training Program, Jefferson Medical College, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107. We are committed to a smoke-free environment. Equal Opportunity Employer.

#### **POSITIONS OPEN**

A limited number of **POSTDOCTORAL FEL-LOWSHIPS** are available in 1994 in marine sciences, aquaculture, coastal and environmental sciences, biomedical marine research, ocean engineering, and environmental analysis and monitoring. Deadline for application is 15 January 1994. Stipends are \$22,540 for the annual appointment. Specify area of interest with request for information brochure and application packet from: Johnson Marine Education Center, Harbor Branch Oceanographic Institution, Inc., 5600 U.S. 1 North, Ft. Pierce, FL 34946. Equal Employment Opportunity/ Affirmative Action Program.

#### POSTDOCTORAL RESEARCH ASSOCIATE USDA/ARS, ORLANDO, FLORIDA

The USDA, Agricultural Research Service, Orlando, Florida, is seeking a research associate to develop IPM and biological control strategies for the sweet potato whitefly. Candidates must have Ph.D.; experience in plant/insect interactions, biological control and IPM methods, entomopathogens, botany, and ecology is desirable. Salary is commensurate with experience (\$33,623 to \$43,712); 2-year appointment. Contact: Dr. R. T. Mayer, USDA, ARS, 2120 Camden Road, Orlando, FL 32803. (Telephone: 407-897-7304). An Equal Opportunity Employer.

#### POSTDOCTORAL RESEARCH ASSOCIATES

Opportunities for postdoctoral research training and experience in the Department of Microbiology and Immunology, East Carolina University School of Medicine. Available project areas include: regulation of cytokine and cognate receptor gene expression in hematopoietic cells (Dr. James A. McCubrey); regulation of costimulatory pathways, cytokine production, and tolerance induction in rodent models of autoimmune disease (Dr. Mark D. Mannie); and regulation of glucose transport by oncogenes and mitogens (Dr. Martyn K. White). Additional areas may become available. Salaries with fringes are nationally competitive. Applicants should have the Ph.D. degree with training and experience in relevant areas of microbiology, molecular genetics, and immunology.

Send cover letter, complete curriculum vitae, publication reprints, and the names, addresses, and telephone numbers of three references to: **Postdoctoral Screening** Committee, Department of Microbiology and Immunology, East Carolina University School of Medicine, Greenville, NC 27858-4354.

East Carolina University is an Affirmative Action/Equal Opportunity Employer. Federal law requires proper documentation of identity and employability at time of employment. It is requested this documentation be included with your application.

SENIOR RESEARCH ASSOCIATE position available immediately to study the molecular and cellular basis of psychiatric disorders. Emphasis of research is on the role of brain monoaminergic neurons in the neurobiology of mood disorders and in the mechanism of action of drugs used to treat these disorders. Candidates should have a Ph.D. and/or M.D. with experience in biochemistry, biological psychology, molecular biology, or pharmacology. Salary is competitive and commensurate with experience. Send or FAX curriculum vitae, a statement of current and future research goals, and names of three references to: Gregory A. Ordway, Ph.D., Department of Psychiatry and Human Behavior, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216–4505; FAX: 601-984-5885. Equal Opportunity Employer, M/F/D/V.

> RESEARCH ASSOCIATE/ ASSISTANT SCIENTIST Krannert Institute of Cardiology Indiana University School of Medicine

A position is available at the Assistant Scientist level. The candidate must have postdoctoral experience in molecular biology with particular expertise in protein expression and construction of mutant and/or chimeric proteins. Work will involve research on selected enzymes of the vascular wall. Please send curriculum vitae to:

David R. Hathaway, M.D. Director, Cardiovascular Division & The Krannert Institute of Cardiology Indiana University School of Medicine 1111 West 10th Street Indianapolis, IN 46202-4800 Indiana University is an Equal Opportunity/ Affirmative Action Employer.

### SCIENCE • VOL. 262 • 12 NOVEMBER 1993

**RESEARCH ASSOCIATE:** Position available for postdoctoral fellow experienced in viral immunology. Support for retroviral pathogenesis studies leading to independent program. Send curriculum vitae and names of 2 to 3 references to: Paul M. Hoffman, M.D., Research Service (151), Veterans Administration Medical Center, 10 North Greene Street, Baltimore, MD 21201. Equal Employment Opportunity.

**POSITIONS OPEN** 

#### **RESEARCH ASSOCIATE**

The University of Maryland, Division of Surgical Critical Care is currently seeking a Ph.D. with a strong background in the physiology of shock and trauma and two years of relevant postdoctoral experience. Qualified applicants should have familiarity and exper-

Qualified applicants should have familiarity and expertise in hormone measurements, especially radioimmunoassay and fluorescence imaging required.

This is a full-time position at the Research Associate level. Excellent fringe benefit package and salary commensurate with experience.

Curriculum vitae and names of three professional references should be submitted to: Donald S. Gann, M.D., Professor and Head, Division of Surgical Critical Care, University of Maryland Hospital, (o Lois Reisig, Department of Surgery, 5th Floor—405 West Redwood Street, Baltimore, MD 21201. Equal Opportunity Employer/M/F/H/V. Minorities and females are encouraged to apply.

#### MEDICAL WRITER/EDITOR

Strong general biomedical background; flair for writing; ability to read scientific literature and learn new subjects quickly. For medical projects company that writes articles, lecture slides, videos, and other educational/promotional materials for pharmaceutical clients. Send résumé to: Dr. S. Phillips, Project House, One University Plaza, Suite 210, Hackensack, NJ 07601.

IMMUNOLOGISTS: Expanding bulk pharmaceutical manufacturing facility is seeking a senior M.S. and/or junior Ph.D.-level immunologist/immunochemist. Applicants should be familiar with the basics of monoclonal and polyclonal antibody production as well as ELISA and RIA formatting. Must be able to demonstrate exceptional record-keeping, written, and oral communications skills. Previous experience in an FDA-regulated environment a plus. Send résumé to Director Human Resources:

> Advanced ChemTech, Inc. 5609 Fern Valley Road Louisville, KY 40228–1075 Equal Opportunity Employer.

#### ORNITHOLOGIST

The Illinois Natural History Survey invites applications for a grant-supported full-time position. We seek applications from individuals with experience, skills, and interests in conducting extensive surveys and censuses of birds in the Midwest. Emphasis will be on assessing the potential for adverse effects on existing avian populations and habitats owing to various construction projects. Independent research compatible with primary responsibilities is expected. Duties may also include museum curation of bird specimens. Extensive experience censusing birds and a Ph.D. in an appropriate discipline with specialty in avian ecology or systematics are required. Experience with mitigation procedures is desirable. \$31,000 to \$34,000 per annum. Successful applicant will be stationed in Champaign on the campus of the University of Illinois. For full consideration, please submit letter of application, curriculum vitae, and names of at least three references by 24 December 1993 to: Ms. Jacqueline Sanders, Personnel Officer, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820. Telephone: (217) 244-7790. The Illinois Natural History Survey is an Equal Opportunity Employer and an Americans with Disabilities Employer without regard to race, age, religion, color, national origin, sex, or disabled condition.

NEUROSCIENCE Ph.D. at the University of Michigan, Section of Emergency Medicine. Active areas of research in brain injury, shock, and focal/global cerebral ischemia. Collaboration/joint appointments with basic science departments available and encouraged. Please send curriculum vitae to: William G. Barsan, M.D., University of Michigan Medical Center, Emergency Department, Room UH B1C255, 1500 East Medical Center Drive, Ann Arbor, MI 48109–0014. Telephone: (313) 936-6020.

POSTDOCTORAL POSITION, RNA SPLIC-ING available to study RNA binding proteins, RNAprotein interactions, small ribonucleoproteins (snRNPs) and pre-mRNA splicing *in vitro* (see *Genes Dev.* 6.1386, 1992). Experience in protein purification and biochemistry essential. Send curriculum vitae and names of three references to: Dr. Donald Rio, Department of Molecular and Cell Biology, 401 Barker Hall, University of California, Berkeley, CA 94720.

#### ECOLOGIST/PLANT GEOGRAPHER/ BOTANIST WITH EMPHASIS ON REMOTE SENSING

The Woods Hole Research Center is seeking a scientific staff member with a Ph.D. in plant ecology, botany, or geography who has an interest in the use of remotely sensed imagery, especially satellite imagery, to appraise land uses and changes in land uses, specifically a satellitebased appraisal of the area of forests and changes in area. Current focus on northern Asia. Interest and experience with geographical information systems are desirable. Appointment at ASSISTANT or ASSOCIATE SCI-ENTIST level. Deadline: December 13, 1993. Salary based on experience. Send letter, résumé and list of three references to: Ecologist/RS Search, The Woods Hole Research Center, P.O. Box 296, Woods Hole, MA 02543. We acknowledge all applications. A smoke-free institution. Equal Opportunity Employer.

ORGANIC SYNTHETIC CHEMIST. Postdoctoral research to design metal complexes for selective protein recognition. Send résumé and names of three references to: Prof. F. H. Arnold, Division of Chemistry and Chemical Engineering 210-41, California Institute of Technology, Pasadena, CA 91125. Caltech is an Equal Opportunity/Affirmative Action Employer. Applications from qualified women and minority candidates are welcomed.

#### RADIOCHEMIST

Qualifications: Nuclear Chemist or Radiochemist. Position and salary dependent on experience and qualifications. Candidate must have Ph.D. degree with experience in working with high levels of radioactive nuclides. Background in labeling with radio-halogens is desirable. Work entails labeling monoclonal antibodies with astatine for radioimmunotherapy of cancer. Research work will be performed in collaboration with Drs. William Eckelman, Otto Gansow and Thomas Waldmann at the NIH.

Send curriculum vitae, or for further information contact:

Ms. Jean Decker Metabolism Branch, WCI National Institutes of Health Building 10, Room 4N115 Bethesda, MD 20892 Telephone: 301-402-1898

National Institutes of Health, Public Health Service. NIH is an Equal Opportunity Employer.

#### STAFF SCIENTIST

National nonprofit organization of biomedical research societies with headquarters in Bethesda, Maryland, invites applications for the position of Staff Scientist with its Life Sciences Research Office. The candidate will assist with preparation of the Third Scientific Report on National Nutrition Monitoring under terms of a 21-month Federal contract. Preferred candidates will have an advanced degree in nutrition/epidemiology. The position requires demonstrated knowledge of the National Nutrition Monitoring and Related Research Program and expertise in nutrition monitoring data, analysis, and interpretation. The individual must have demonstrated experience in scientific report writing. Deadline for receipt of application is December 10, 1993. Please forward curriculum vitae with a cover letter to: FASEB, Human Resources, 9650 Rockville Pike, Bethesda, MD 20814–3998. An Equal Employment Opportunity Employer.

# RESEARCH UPDATE

### A commitment to top talent and technology puts Cyanamid at the forefront of Biotech Research.

At the Agricultural Research Division of American Cyanamid we're investing in the talent, technology and facilities that will ensure our continued success. Our new, on-site Process Development facility further enhances the research capabilities at our 640 acre, campus-like headquarters in Central New Jersey.

### Senior Research Manager, Biochemical Process Development

We now seek a highly motivated Manager to collaborate on leading-edge Biotech Research that's being conducted at research facilities worldwide. You will need a proven ability to manage multi-site staffs and projects, and interface effectively with our global manufacturing network. Your background must include significant experience in the development and scale-up of fermentation and downstream processes utilizing natural and recombinant systems. A Master's degree or PhD in Chemical Engineering or Biochemical Engineering is preferred.

American Cyanamid Company offers an excellent compensation and benefits package which includes tuition reimbursement, 401(k) savings plan, flex-time work schedules and a location convenient to both New York City and Philadelphia. We invite you to forward your resume and salary requirements to: Employment Office, Dept. RLS, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 08543-0400. An Equal Opportunity Employer.



### **Environmental Science**

Two faculty positions have been created in the College of Natural Sciences at the University of Northern Iowa to contribute to a new interdisciplinary graduate program in Environmental Science/ Technology. The successful applicants will have teaching and research interests compatible with core faculty in environmental science whose specialties include limnology, ecotoxicology, microbial ecology and environmental technology and will receive a tenure track appointment in chemistry (senior position) or geology (junior position).

#### ENVIRONMENTAL GEOLOGIST/HYDROLOGIST

Assistant Professor, beginning August, 1994. A doctorate in geology or closely-related discipline, a strong commitment to teaching and quality contributions in research and professional service are required. Salary is commensurate with qualifications and experience. Responsibilities will include teaching introductory and upper-level geology courses to undergraduates and mentoring and instruction in the MS Environmental Science/Technology program. Instructional load will include Global Systems, Hydrogeology, and other courses in geology and environmental science as determined by department and college needs. Applicants should submit a letter of application, curriculum vitae (including a listing of teaching experience, research interests, and a statement of educational philosophy), copies of academic transcripts, and three letters of recommendation to: Dr. Wayne Anderson, Head, Department of Earth Science, University of Northern Iowa, Cedar Falls, IA 50614-0335.

#### ENVIRONMENTAL CHEMIST

Associate or Full Professor, beginning August, 1994. Requirements include a Ph.D. in chemistry or biochemistry and an established record of productive research with external funding in environmental chemistry. Other areas that complement the existing expertise in the interdisciplinary graduate program in environmental science/technology will be considered. Successful applicants must be highly motivated toward excellence in teaching as well as research and will be expected to contribute to the departmental teaching efforts in traditional chemistry courses and to develop new courses in environmental chemistry. Applicants must submit a curriculum vitae, a detailed statement of research plans and selected publication reprints, and a statement of teaching philosophy, and arrange for three letters of recommendation be sent directly to: Chair of the Search Committee, Department of Chemistry, University of Northern Iowa, Cedar Falls, IA 50614-0423.

The new Environmental Science/Technology degree is an MS thesis degree for students with strong basic science undergraduate degrees. The University of Northern Iowa is committed to environmental programs and, in addition to the graduate degree, has established undergraduate environmental curricula and several research centers emphasizing environmental research and education. UNI is one of the three Regent's Universities in Iowa and is located in the metropolitan area of Cedar Falls/Waterloo (pop. 110,000). UNI encourages applications from minority persons, women, disabled persons and Vietnam era veterans. Review of applications will begin on December 31, 1993 and continue until an appointment is made. UNI is an equal opportunity educator and employer with a comprehensive plan for affirmative action.

#### MOLECULAR GENETICIST

The Department of Biology at Occidental College invites applications for a tenure-track position for a Molecular Geneticist. Applicants should have a strong commitment to teaching at the undergraduate level and to research. The successful candidate will normally teach courses in genetics and biochemistry. S/he is expected to develop a rigorous research program involving undergraduates. The exact area of research is open. The new faculty member will have the opportunity to participate in the Cell and Molecular Biology Emphasis and to be involved in the interdisciplinary Biochemistry major. Occidental College is a selective, small liberal arts college with excellent research and teaching facilities, located in Los Angeles. It is also a nationally recognized leader in multicultural education. Send curriculum vitae, statement of your research and teaching interests, copies of significant publications, and arrange to have three letters of reference sent, by December 8, 1993, to: Dr. Roberta Pollock, Department of Biology, Occidental College, 1600 Campus Road, Los Angeles, CA 90041. Occidental College is an Equal Opportunity/Affirmative Action Employer. Women and people of color are particularly encouraged to apply.

#### MEETINGS

SYMPOSIUM: Pharmaceutical Design: Anti-Sense, Triple Helix, Nucleic Acid Binding Drugs January 31-February 1, 1994; Hyatt Rickeys, Palo Alto, California

SPEAKERS: F. Arcamone, Italy; P. Aristoff, Upjohn; D. Boger, Scripps; C. Cantor, Boston University; D. Cook, Isis; W. Denny, Auckland; C. Edwards, Genelabs; C. Helene, Paris; M. Hogan, Baylor; L. Hurley, Texas; J.S. Lazo, Pittsburgh; S.J. Lippard, MIT; J.W. Lown, Edmonton; P. Miller, Johns Hopkins; S. Mirkin, Illinois; P. Nielsen, Copenhagen; J.J. Rossi, City of Hope; D.S. Sigman, UCLA; J. Stubbe, MIT; Y. Sugiura, Kyoto; A.H.J. Wang, Urbana; M. Waring, Cambridge; G. Zon, Lynx. ABSTRACTS due January 15, 1994. Organizers: James Larrick, Cynthia Edwards. Sponsor: Palo Alto Institute of Molecular Medicine; 2462 Wyandotte Street; Mountain View, CA 94043; FAX: 415-694-7717; Telephone: 415-694-4996.

#### **ANNOUNCEMENTS**

### WILLIAM P. DOHERTY, JR. ATTORNEY AT LAW

 Fellow, American College of Trial Lawyers
 Specializing in bioscience, environmental, and chemical dispute resolution and litigation.
 20 Franklin Street, P.O. Box 319 Bridgeton, NJ 08302
 Telephone: (609) 455-4900
 FAX: (609) 455-7222

State-of-the-Science Summer Institute in Biological Anthropology, June 6–11, 1994, International Institute for Human Evolutionary Research (IIHER), George Washington University Virginia Campus, Ashburn, Virginia. An in-depth review of the most rapidly developing research and instructional areas in biological anthropology, based on the review by Wienker and Bennett (1992 AJPA 87:383–393). Sixteen sessions taught by leading biological anthropologists in Growth & Development, Biostatistics, Paleoanthropology, Three-Dimensional Imaging, Instructional Techniques, Skeletal Biology & Forensic Anthropology, Biomedical Anthropology, Biological Anthropology & Culture, Molecular Anthropology, Electronic Information Exchange, Primate Socio-Ecology, Career Development, and Adaptation & Adaptability. Tuition of \$400 includes doubleroom accommodations, breakfasts and lunches, hotel limousine service to and from Lulles International Airport, shuttle service to IIHER, and all instructional materials. Application deadline is April 15, 1994, although early registration is advisable. There is a limit of 100 registrants. For further information contact: **IIHER, GWU, 20101 Academic Way, Ashburn, VA 22011; Telephone: 703/729-8350, FAX: 703/729-8351; EMail: IIHER@GWUVM.** 



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