

ABL-Basic Research Program

POSTDOCTORAL FELLOWSHIPS

at the National Cancer Institute-Frederick Cancer Research and Development Center

Molecular Mechanisms of Carcinogenesis

George F. Vande Woude, Ph.D., Program Director molecular basis of neoplastic transformation; role of proto-oncogenes in cell cycle regulation

Stephen H. Hughes, Ph.D. structure and function of HIV reverse transcriptase; *ski* oncogene; expression of cytoskeletal genes; retroviral vectors; transgenic birds and mammals

George N. Pavlakis, M.D., Ph.D. eukaryotic gene regulation; molecular biology of HIV and pathogenesis of AIDS

Barbara K. Felber, Ph.D. molecular biology of human retroviruses; posttranscriptional mechanisms of gene regulation

Peter F. Johnson, Ph.D. mammalian bZIP transcription factors: protein structure, dimeric interactions, mechanisms of transcriptional activation, and regulatory functions during cell differentiation and development

Deborah Morrison, Ph.D. role of the proto-oncogene *c-raf* in mitogenic and developmental pathways; structure/function analysis of *c-raf*; identification of signal-transducing molecules

David Kaplan, Ph.D. signal-transducing molecules in mitogenesis, oncogenesis, and development; identification and characterization of substrates of receptor and nonreceptor tyrosine kinases; function of *trk* genes

Chemistry of Carcinogenesis

Anthony Dipple, Ph.D. polycyclic aromatic hydrocarbon carcinogenesis and mutational specificity; chemical carcinogen-DNA interactions

Robert C. Moschel, Ph.D. chemical synthesis of carcinogen-modified DNA; physical chemistry of carcinogen-DNA interactions; DNA adduct-induced mutagenesis in bacteria and mammalian cells; chemotherapy adjuvants

Macromolecular Structure

Alexander Wlodawer, Ph.D. structure of enzymes and cytokines studied by X-ray diffraction

Christopher J. Michejda, Ph.D. antineoplastic and antiviral drug design; biochemical and molecular pharmacology

R. Andrew Byrd, Ph.D. structure of proteins and carbohydrates studied by macromolecular NMR techniques

The ABL-Basic Research Program is dedicated to basic research in molecular biology, biochemistry, crystallography, genetics, virology, and organic chemistry. The scope of current projects is indicated by the research interests of the senior scientists listed above. Senior staff members enjoy complete independence in their choice of research problems and are accorded excellent facilities to accomplish their goals. A vigorous seminar program, implemented by formal and informal arrangements with the National Institutes of Health, Johns Hopkins University, University of Maryland, and other research and academic institutions, provides opportunities for extensive interaction within the scientific community.

The Frederick Cancer Research and Development Center is located in Frederick, Maryland, which with its proximity to Washington, D.C., and Baltimore offers a rich scientific and cultural environment, as well as a quiet country setting.

Fellowships are awarded on an equal opportunity basis to recent recipients of an M.D., a Ph.D., or an equivalent degree in the biological or biochemical sciences. Postdoctoral training opportunities are available with the staff members listed above as well as other scientists associated with the Program.

Appointments are made for one to three years. Annual stipends generally range from \$25,000 to \$31,000, depending upon experience.

Eukaryotic Gene Expression

Jeffrey N. Strathern, Ph.D. recombination; pseudogene formation; DNA repair in yeast; cell type regulation; gene expression

David J. Garfinkel, Ph.D. molecular biology of the retrotransposon Ty; genome rearrangement; insertional mutagenesis; gene regulation

Amar J.S. Klar, Ph.D. mating-type switching of fission and budding yeast; genetics and molecular biology of recombination; gene regulation

Molecular Virology and Carcinogenesis

Stephen Oroszlan, Ph.D. immunochemistry and protein chemistry of retroviruses; structure and function of retroviral gene products; viral proteases

Alan R. Rein, Ph.D. retroviral genetics; functional analysis of retroviral genes using natural and synthetic mutants; viral pathogenicity

Nancy R. Rice, Ph.D. study of the *rel* oncogene and the related NF- κ B family of transcription factors.

Mammalian Genetics

Neal G. Copeland, Ph.D. development of mouse models of human disease; neurofibromatosis; gene targeting in ES cells

Nancy A. Jenkins, Ph.D. molecular genetics of mouse development; transgenic mice; receptor/ligand interactions and their role in development

Luis F. Parada, Ph.D. developmental neurobiology; the role of proto-oncogenes in development; gene targeting in ES cells; *trk* genes and neurotrophic receptors

Peter J. Donovan, Ph.D. development of the mouse germ line; germ cell gene expression; sterile mutants; cell adhesion molecules

Chromosome Biology

Stuart J. Austin, Ph.D. chromosome stability in bacteria: regulation of plasmid replication and distribution of copies to daughter cells

Donald Court, Ph.D. regulation of gene expression by transcription initiation, transcription termination, and RNA processing

Applications are accepted at any time during the calendar year. Interested individuals are encouraged to apply well in advance of their availability date. The ABL-Basic Research Program does not discriminate in employment on the grounds of sex, race, color, age, religion, disability, or national origin.

To apply, send a letter describing your research interests, a curriculum vitae, and the names and addresses of three references to the investigator(s) of interest, c/o: ABL-Basic Research Program, Personnel Department/PF, NCI-FCRDC, P.O. Box B, Bldg. 428, Frederick, Maryland 21702-1201

The Basic Research Program is operated by Advanced BioScience Laboratories, Inc., under contract with the National Cancer Institute. EOE M/F/D/V



BASIC RESEARCH
PROGRAM

Science

PERSONNEL PLACEMENT

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- **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Advertisements must be submitted in writing.
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POSITIONS OPEN

TENURE-TRACK POSITION IN STRUCTURAL BIOLOGY

The School of Biological Sciences invites applications for a tenure-track ASSISTANT or ASSOCIATE PROFESSOR in the Division of Cell Biology and Biophysics. This position is intended to expand faculty expertise in the area of electron microscopy and diffraction, and will complement the simultaneous but independent development of a high-resolution X-ray crystallography facility. The candidate's research area in microscopy should be compatible with graduate research programs of the School emphasizing molecular structure and recognition as applied to biological molecules and their supramolecular assemblies. We seek an individual with demonstrated potential to establish independent, extramurally funded research programs, and with good communication and organizational skills. Teaching responsibilities of the School include graduate courses in the biological sciences, basic health science courses in medical and dental programs and undergraduate programs in biology. Competitive salaries, newly renovated research space, start-up funds, and excellent core facilities are available. Review of applications will begin November 5, 1993, and will continue until the position is filled. Submit curriculum vitae, statement of research goals and teaching interests, and three letters of reference to: **CBB-EM Search Committee, School of Biological Sciences, 5100 Rockhill Road, University of Missouri, Kansas City, MO 64110-2499. Equal Opportunity/Affirmative Action Employer.**

TENURE-TRACK ASSISTANT PROFESSOR

A tenure-track assistant professor position is available at the Center for Functional and Metabolic Imaging (CFMI), in the Department of Radiology, University of Pennsylvania. Candidates should have a Ph.D. or M.D. degree with a strong background in neuroanatomy and neuroscience, as well as an ability to work with non-human primates in PET, SPECT and MRI imaging procedures. The position will also play a key role in bridging the gap between basic chemistry, pharmacology and clinical research. Working knowledge of image analysis and development of imaging protocols for animals and humans is required. The successful candidate is expected to join the ongoing research program at CFMI and attract extramural funding. *The University of Pennsylvania is an Equal Opportunity Employer; women and minorities are encouraged to apply.* Please send résumé to: **Dr. Hank F. Kung, Room 305, 3700 Market Street, Philadelphia, PA 19104. Equal Opportunity Employer/Affirmative Action/M/F/D/V.**

UNIVERSITY OF VERMONT MOLECULAR/CELLULAR PHYSIOLOGIST

The Department of Molecular Physiology and Biophysics seeks two tenure-track faculty members at a level commensurate with experience. The Department has strengths in the following aspects of muscle physiology: 1) Contraction and motility; 2) Ion channels; 3) Cellular growth and remodeling; 4) Intra- and intercellular signaling. We are seeking individuals whose research directly complements existing strengths. Strong preference will be given to individuals applying forefront cellular and/or molecular biological techniques to the study of physiological function. Candidates for ASSISTANT PROFESSOR must have an earned doctorate, plus 2 or more years of postdoctoral experience at time of application. They must demonstrate the potential to develop an active independent research program and to contribute effectively to department teaching at both graduate and undergraduate levels. Applicants at the ASSOCIATE/FULL PROFESSOR level must have demonstrated excellence in teaching and their ability to direct and sustain vigorous and productive research programs. *The University of Vermont is an Equal Opportunity/Affirmative Action Employer. Women and individuals from diverse racial, ethnic, and cultural backgrounds are encouraged to apply.* Consideration will be given until the positions are filled. Formal review will begin on October 15, 1993, and the expectation is to fill the positions within 9 months. Applicants should send curriculum vitae along with a description of career goals, research objectives, and names of three references to:

**Chair, Faculty Search Committee
 Department of Molecular Physiology & Biophysics
 University of Vermont College of Medicine
 Burlington, VT 05405-0068**

POSITIONS OPEN

ASSISTANT PROFESSOR: Applications are invited for a position at the level of assistant professor (tenure-track) in the Department of Chemistry at Stanford University, with primary research and teaching interests in the general area of either organic or physical chemistry. This appointment would commence on September 1, 1994, and is subject to final approval. Applicants must be strongly motivated toward creative research and have a commitment to teaching at the undergraduate and graduate levels. In applying, please send curriculum vitae, list of publications, a brief statement of research interests (three pages or less) and, in addition, have three letters of recommendation sent to: **Professor Robert Pecora, Chairman, Department of Chemistry, Stanford University, Stanford, CA 94305. Stanford is committed to Equal Opportunity through Affirmative Action in employment, and we are especially eager to identify minority persons and women with appropriate qualifications.** Applications should be received by November 1, 1993.

IMMUNOLOGIST/ASSISTANT, ASSOCIATE or FULL PROFESSOR. Department of Microbiology, Montana State University. Doctoral degree required, M.D. preferred, 2 to 3 years of postdoctoral experience preferred. Desired start date June 1 to July 30, 1994. Supported by Department of Microbiology and WAMI Regional Medical Educational Program providing first-year medical school curriculum at Montana State University for 20 medical students enrolled in University of Washington School of Medicine. Primary teaching responsibilities in general pathology; participation in immunology or infectious disease. Successful candidate will establish vigorous independently funded research program. Individuals with research interests in cellular and molecular immunology, inflammation or infectious disease are preferred. Teaching component about one-third funded by Montana State University instructional budget; research component, about two-thirds, funded by candidate's extramural program. Send letter of application, curriculum vitae and names and telephone numbers of four references to: **Search Committee Chair, Department of Microbiology, Montana State University, Bozeman, MT 59717. Telephone: (406) 994-2373. Screening begins November 30, 1993. Contingent upon availability of funds. American Disabilities Act/Affirmative Action/Equal Opportunity and Veterans Preference Employer.**

CORNELL UNIVERSITY SECTION OF GENETICS AND DEVELOPMENT

Our Section is seeking an ASSISTANT PROFESSOR for a tenure-track position, available in the fall of 1994. The successful candidate will be expected to establish a vigorous externally funded research program in an important area of modern Genetics. The primary teaching responsibility will be to design and offer a lecture course in genetic analysis, with emphasis on eukaryotes, for advanced undergraduate and beginning graduate students. *We strongly encourage applications from women and members of underrepresented minority groups.* Applications should include curriculum vitae, reprints of recent publications and a brief statement of present and future research interests. Complete applications and three letters of recommendation, solicited by the applicant, should be mailed to: **G & D Search Committee, 101 Biotechnology Building, Cornell University, Ithaca, NY 14853-2703.** Applications will be reviewed beginning November 15, 1993. *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT OR ASSOCIATE PROFESSOR

Applications are invited for tenure-track positions in the Department of Microbiology and Immunology at Loyola University Chicago, Stritch School of Medicine. We are seeking talented investigators whose research interests are in molecular aspects of the immune system, virology, or microbial pathogenicity to join a growing interactive group of investigators. Candidates are expected to develop independent, externally funded, high-quality research programs. Excellent new facilities and attractive start-up funds are available.

Submit curriculum vitae, statement of research interest and a list of three references to: **Dr. Katherine L. Knight, Chairperson, Department of Microbiology & Immunology, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153.**

Loyola University Chicago is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

FACULTY POSITION—DRUG DELIVERY

The Center for Imaging and Pharmaceutical Research, Massachusetts General Hospital/Harvard Medical School seeks a **CHEMIST/ASSOCIATE PROFESSOR**. Plan, design, conduct research projects in: the chemistry and biochemistry of controlled drug release and delivery, targeted transport of diagnostic and therapeutic agents, and development of antibody-based drug carrier systems (polymers, microcapsules, liposomes) for intracellular delivery of pharmaceuticals.

Applicants must have M.D. or Ph.D. in related area, more than 10 years of experience conducting and leading scientific studies, and broad knowledge of biochemistry, bioorganic and medicinal chemistry. Send résumés to: **Gerald Wolf, Ph.D., M.D., Director, Center for Imaging and Pharmaceutical Research, Massachusetts General Hospital, 149 13th Street, Charlestown, MA 02129. Massachusetts General Hospital and Harvard Medical School are Equal Opportunity/Affirmative Action Employers.**

ASSISTANT PROFESSOR (tenure-track)

The Department of Experimental Pathology invites Ph.D. and/or M.D. degree candidate applications for a new **ASSISTANT PROFESSOR** position. Candidates with 3 years of postdoctoral training who wish to develop an independent career in cellular or molecular investigation of vascular disorders, tumor biology or immunology are particularly encouraged to apply. Please send curriculum vitae, description of research interest and three professional references to: **Chairman, Department of Experimental Pathology, New York Medical College, Valhalla, NY 10595 or via FAX: (914) 993-4679.**

ASSISTANT PROFESSOR OF CELL BIOLOGY UNIVERSITY OF PENNSYLVANIA

The Department of Animal Biology, School of Veterinary Medicine, has a full-time tenure-track opening for a cell/molecular biologist to join an interactive, multidisciplinary department, within the biomedical community at the University of Pennsylvania. Individuals working at the cellular or molecular level are encouraged to apply, particularly those in the fields of endocrinology, developmental biology, and neuroscience. Applicants should have a Ph.D. or equivalent degree in Cell Biology/Physiology or related field and postdoctoral training, be prepared to maintain an independent, extramurally funded research program, and participate in departmental teaching in Physiology. Send curriculum vitae, names and addresses of three referees and a statement of research program to: **Dr. Michael Kotlikoff, Department of Animal Biology, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA 19104-6046. An Equal Opportunity/Affirmative Action Employer.**

University of Waterloo, Department of Health Studies and Gerontology

The Department of Health Studies and Gerontology is an interdisciplinary department uniquely integrating biological and behavioural sciences in the study of disease prevention, health promotion, and aging. It has established B.Sc., M.A., M.Sc., and Ph.D. programs. Opportunities exist for the development of collaborative activities across the university and with external agencies. The department has two tenure-track positions available for (a) a scientist with strong interests in the biological mechanisms of risk reduction and (b) a behavioural or social scientist with strong interests in population health and health promotion (a focus on community-based health behaviour change and/or aging is desirable). Applicants must have a Ph.D. or equivalent and a demonstrated commitment to both teaching and funded research. An appointment at the rank of **ASSISTANT to ASSOCIATE PROFESSOR** is anticipated, although exceptional candidates will be considered at a more senior level. Expected starting date is May 1, 1994. Send curriculum vitae and three letters of reference by October 15, 1993, to: **Roy Cameron, Faculty Search Committee, Department of Health Studies and Gerontology, University of Waterloo, Waterloo, Ontario, N2L 3G1, Canada. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Waterloo encourages applications from qualified women and men, members of visible minorities, native peoples, and persons with disabilities.**

POSITIONS OPEN

TENURE-TRACK POSITION CELL/MOLECULAR BIOLOGIST

The Biology Department of Santa Clara University invites applications for a **CELL/MOLECULAR BIOLOGIST** to fill a tenure-track position at the **ASSISTANT 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.**

ASSISTANT PROFESSOR/PHYSICS

The Smith College Physics Department invites applications for a three-year, tenure-track appointment in experimental condensed matter physics at the Assistant Professor level, starting September 1, 1994. The candidate should have a Ph.D., a commitment to undergraduate teaching, and should have a strong research program with projects that allow undergraduate involvement. Preference will be given to persons with postdoctoral experience. Located in western Massachusetts, Smith College is a leader in the education of women and has an outstanding record in the number of professional women physicists who are alumnae. The Five College Consortium, comprised of Smith, Amherst, Mt. Holyoke, and Hampshire Colleges and the University of Massachusetts, provides a rich intellectual and cultural life for faculty and students as well as additional collegial opportunities in teaching and research. Curriculum vitae, statement of teaching and research interests and experience, and three letters of reference should be sent to: **Professor Malgorzata Pfabé, Chair, Department of Physics, Clark Science Center, Smith College, Box 685, Northampton, MA 01063. Preference will be given to applications received before December 15, 1993. An Affirmative Action/Equal Opportunity Institution. Minorities and women are encouraged to apply.**

ASSISTANT PROFESSOR. A position is available to combine the study of extracellular matrix (ECM) molecules and the vertebrate retina using biochemical, cellular and/or molecular biological approaches. Research should emphasize the role of ECM molecules during development and aging. Prior experience studying the retina is not essential. The successful candidate will hold a joint appointment in the Department of Ophthalmology and the Department of Cell Biology and Anatomy, will be required to maintain an active and externally funded research program and will be expected to teach in one of the major medical or graduate school courses offered by the Department of Cell Biology and Anatomy. Numerous opportunities exist for collaborations with basic science faculty at Cornell University Medical College, with clinical faculty at the affiliated New York Hospital and with investigators at the neighboring institutions, the Rockefeller University and Memorial-Sloan Kettering Cancer Center. Deadline for applications is October 31, 1993. Interested applicants should send curriculum vitae, statement of research interests and the name, address and telephone number of each of three referees to:

Peter R. MacLeish, Ph.D.

Director of Research

**The Margaret M. Dyson Vision Research Institute
Department of Ophthalmology
Cornell University Medical College
1300 York Avenue
New York, NY 10021**

Cornell University Medical College is an Equal Opportunity/Affirmative Action Employer. Qualified female and minority applicants are encouraged to apply.

POSITIONS OPEN

ASSISTANT PROFESSOR

The Department of Obstetrics and Gynecology, F. Edward Hebert School of Medicine, Uniformed Services University of the Health Sciences, is seeking applications from U.S. citizens for the position of **Assistant Professor** in the Research Division. For a qualified candidate, tenure-track appointment is available.

Applicants must have a Ph.D. or equivalent with postdoctoral training in **Molecular Biology and Biochemistry/Physiology**. Applicants are expected to have the ability to establish a strong research program in the area of **Reproduction**. The successful applicant is expected to collaborate with other scientists in his/her field of expertise with minimal teaching requirements. The Research Division is equipped with modern equipment and excellent technical support is available.

Final appointment is subject to completion of appropriate security clearance and successfully passing the applicant drug test with negative results.

Send a letter describing your career goals together with curriculum vitae and have four letters of recommendation sent to: **CHR-Room A1022, ATTN: GYN:JK, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Applications will be accepted until 30 NOVEMBER 1993 and the position will be filled as soon as a successful candidate is available. The Uniformed Services University is an Equal Opportunity/Affirmative Action Employer.**

The Department of Breast and Gynecologic Medical Oncology at the University of Texas M. D. Anderson Cancer Center in Houston is seeking an oncologist at the level of **ASSISTANT PROFESSOR**. Candidates must have completed training in Internal Medicine and Medical Oncology and must have a demonstrated interest in clinical and laboratory investigation, including research experience with the HER2/neu oncogene in breast cancer. The position includes direct patient care, clinical research in diagnosis, prevention, and translational research-driven therapeutic approaches for breast cancer. Teaching medical trainees and close interaction with clinical and laboratory investigators are responsibilities of the position. Salary range is \$90,000 to \$105,000 per year.

Equal Opportunity/Affirmative Action Employer. Non-smoking environment.

Applicants should submit curriculum vitae to: **Gabriel N. Hortobagyi, M.D., U.T. M. D. Anderson Cancer Center, Department of Breast & Gynecologic Medical Oncology, 1515 Holcombe Boulevard, Box 56, Houston, TX 77030.**

VOLLUM INSTITUTE OREGON HEALTH SCIENCES UNIVERSITY FACULTY POSITION

The Vollum Institute will be considering applications for a faculty position at a rank equivalent to an **ASSISTANT, ASSOCIATE or FULL PROFESSOR**. Applicants should have a strong record in one of the following areas: (1) transmembrane signaling mediated by heterotrimeric G proteins, (2) tyrosine kinase pathways, including activation mechanisms, (3) intracellular trafficking of proteins including exocytosis and synaptic vesicle formation, (4) transcriptional regulation. By November 15, 1993, applicants should submit curriculum vitae, a one-page statement of research interests and the names of three references to: **Dr. Michael Forte, Chair, Faculty, Search Committee, Vollum Institute L-474, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201. An Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.**

BIOLOGY—ECOLOGIST, ASSISTANT PROFESSOR. Tenure-track, fall 1994. Ph.D. in Ecology with organismal background. Undergraduate teaching and research in a scholarly community committed to Christian higher education in the Lutheran tradition. Submit letter, curriculum vitae, transcripts, and three recommendations by October 31, 1993, to: **James Tan, Department of Biology, Valparaiso University, Valparaiso, IN 46383. Telephone: 219-464-5373. FAX: 219-464-5489. Affirmative Action/Equal Opportunity Employer.**

ANNOUNCEMENT



POTAMKIN PRIZE FOR ALZHEIMER'S DISEASE RESEARCH

A prize of \$100,00 will be awarded by the American Academy of Neurology to a person in recognition of major contributions to the understanding of the causes and the prevention, treatment, and ultimately the cure for Alzheimer's disease and related disorders.

Candidates may be nominated on a world-wide basis from any of the biological disciplines including biochemistry, molecular biology, molecular genetics, pharmacology, immunology, physiology, cell biology, neuropathology or epidemiology.

A nomination application, nominating letter citing the scientific accomplishments of the candidate in detail, two supporting nominating letters, a curriculum vitae, and up to six (6) selected reprints in nine (9) complete sets are required.

The deadline for receipt of materials is November 1, 1993. No nomination will be considered unless it is complete. The awardee must be present for the AAN Scientific Program, at the annual meeting in Washington, DC, U.S.A. on Tuesday, May 3, 1994.

Request application and submit nomination to:

**Potamkin Prize for Alzheimer's Disease Research
Award Committee
American Academy of Neurology
2221 University Avenue S.W.-Suite 335
Minneapolis, MN 55414
(612) 623-8115**

The Potamkin Prize is funded through the philanthropy of the Potamkin Foundation.

DHHS, PHS, Food and Drug Administration, Center for Biologics Evaluation and Research, Rockville, Maryland, is searching for outstanding physicians and scientists interested in a challenge by participating in the development and approval process for new biological products. The Center's mission is to protect and enhance the public health with respect to vaccines, biological therapeutics, and the blood supply. As members of a multidisciplinary team of scientists, the incumbents will work as reviewers in the approval process for new biological products. Some positions offer the unique opportunity to conduct biomedical research in combination with review responsibilities. These positions have a high degree of independence and involve complex medical, scientific, and regulatory issues. Opportunities for professional development may include further training, attendance at scientific meetings and conferences, and clinical activities. **Qualifications: Physicians** must have completed all requirements for a Doctor of Medicine or Osteopathy Degree from an accredited institution. Graduates of foreign medical schools must submit a copy of their permanent Educational Commission for Foreign Medical Graduates (ECFMG) certification. Physicians should be board eligible or certified in a primary specialty or have completed at least four years of residency training or possess equivalent experience. **Scientists**, doctoral level degree in biological or physical sciences, pharmacology, toxicology, or related disciplines, along with advanced training and/or experience in the development, manufacture or testing of biologics is desirable. In addition, all candidates should have highly developed analytical, written and oral skills, as well as the ability to research problems and issues and to use mature judgment in problem solving. Candidates for Civil Service or Commissioned Corps appointments must be U.S. citizens. Candidates for fellowships may be either U.S. citizens or resident aliens eligible for citizenship within four years. **Salary:** For **physicians**, Civil Service salary range for GS-13 through GS-15 is \$59,099 to \$91,029 per annum. In addition, physicians may also be eligible for a physicians' comparability allowance up to \$20,000 per annum. For **scientists** (other than M.D.), Civil Service salary range for GS-11 through GS-15 is \$33,623 to \$86,589 per annum. Salary, benefits, research support, and level of responsibility are commensurate with education and experience. Also, positions may be filled by appointment in the U.S. Public Health Service, Commissioned Corps, or in the Fellowship Program, with commensurate salary and benefits. Interested candidates should send a detailed Curriculum Vitae with bibliography, statement of regulatory/research interest, transcripts, and names of three references to: Food and Drug Administration, Center for Biologics Evaluation and Research, 1401 Rockville Pike, Rockville, Maryland 20852-1448, Attention: General Recruitment Coordinator (88) and/or Equal Employment Opportunity Recruitment Coordinator (93).

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

RESEARCH UPDATE

Our commitment to biotechnology begins with you in San Leandro.

At the Agricultural Research Division of American Cyanamid, we're investing in the talent, technology and facilities that will ensure our continued success. The following opportunities, located in our San Leandro facility in Alameda County (near Oakland and San Francisco, CA), offer significant opportunity for personal and career development.

Research Biologist

We seek a Biologist who can work with minimum supervision to plan, schedule and execute projects related to improving production of insect cells and baculoviruses in chemically defined media. An MS in Cell Biology, Virology or Biochemistry and 3-5 years experience are required. Recent PhD's, however, will be considered. Your background must include tissue culture experience, knowledge of statistical design/analyses and of general biochemical pathways (preferably insect specific). Experience with cellular or viral assays desired. Dept. EW-1

Biologist

We also seek a Biologist to develop methods related to media testing, virus stock testing and sampling of large scale bioreactors. You will assist in conducting large scale insect cell culture and virus production in the pilot plant, and be responsible for writing protocols, SOP's and formal reports. We require a BS in biology or related science and 0-3 years of experience with mammalian or insect cell culture. Dept. EW-2

American Cyanamid Company offers an excellent compensation and benefits package. Please forward your resume with salary requirements, indicating appropriate department code, to: Employment Office, American Cyanamid Company, Agricultural Research Division, P.O. Box 400, Princeton, NJ 08543-0400. An Equal Opportunity Employer.



POSITIONS OPEN



UNIVERSITY OF PENNSYLVANIA Department of Physiology School of Medicine

The Department of Physiology seeks to fill a tenure-track position, preferably at the **ASSISTANT PROFESSOR** level, in the area of **Transport Proteins**. Candidates expert in combining structure-function analyses and molecular biological techniques are especially encouraged to apply. Before December 15, 1993, please send curriculum vitae, two reprints or preprints, and a statement of research interests to the search committee (address below). Also have three letters of reference sent to:

**Transport Protein Search
Department of Physiology
University of Pennsylvania
Philadelphia, PA 19104-6085**

Applications from female and minority candidates are particularly encouraged. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

Stanford University School of Medicine Department of Genetics FACULTY POSITION

The Department of Genetics at the Stanford University School of Medicine is seeking qualified applicants for a tenure-track position in mathematical biology. Rank is open, although applicants at the **ASSISTANT PROFESSOR** level are particularly welcome. We plan to develop further, with this appointment, our program of research and teaching in areas relevant directly or indirectly to the genetics of humans and human diseases as well as to the mapping and sequencing of the human genome and the genomes of model organisms.

Candidates should have a strong record of research accomplishment in mathematical aspects of genetics and molecular biology, preferably in both theory and application. Candidates must be able to interact scientifically with strong programs, already in place, in human gene mapping, DNA sequencing and genetic epidemiology. Candidates should expect to become involved in teaching medical students and graduate students. We are looking for someone willing and able to teach these students the principles that underlie modern methods of genome mapping, DNA sequence analysis, and genetic epidemiology.

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

Candidates should send curriculum vitae, bibliography, statement of research interests and the names of three references to: **Dr. David Botstein, Chairman, Department of Genetics, School of Medicine, Stanford University, Stanford, CA 94305.**

FACULTY POSITIONS IN CELL, MOLECULAR AND STRUCTURAL BIOLOGY

Applications are invited for tenure-track positions, at the level of **ASSISTANT PROFESSOR**, in the Department of Cell, Molecular and Structural Biology at Northwestern University Medical School. Applicants must have a Ph.D., M.D. or equivalent degree, postdoctoral experience, and research experience in cell, molecular and structural biology. Applicants will be screened with respect to ability to carry on vigorous, independent research and to participate in the teaching programs administered by the department. Candidates whose research interests include cell biology, biochemistry or developmental biology, particularly those employing transgenic animals, are encouraged to apply, although outstanding applicants with research interests in other areas of cell and molecular biology will be considered. Send complete curriculum vitae and a brief description of research interests and plan for future research interests to: **Dr. Rex Chisholm, Chair, Search Committee, Department of Cell, Molecular and Structural Biology, Northwestern University Medical School, 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.

POSITIONS OPEN



UNIVERSITY OF PENNSYLVANIA Department of Physiology School of Medicine

Applications are encouraged from persons applying molecular biological and biophysical techniques to the study of **Ion Channels** for a tenure-track position in Physiology. Preference will be shown to applicants at the level of **ASSISTANT PROFESSOR**. Please send (before December 15, 1993) curriculum vitae, a statement of research interests, and two reprints or preprints of relevant papers to the search committee (address below). Also arrange to have three letters of reference sent to:

**Ion Channel Search
Department of Physiology
University of Pennsylvania
Philadelphia, PA 19104-6085**

Applications from female and minority candidates are particularly encouraged. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF MICROBIOLOGY

The Department of Microbiology and Immunology, Georgetown University Medical School invites applications for a tenure-track position at the rank of Assistant Professor. Although applicants in all pertinent research areas will be considered, candidates studying aspects of infectious disease with experience in applying molecular and/or immunological approaches to investigate bacterial pathogens are especially encouraged to apply. The successful candidate will be expected to establish a vigorous research program in his/her area of expertise. Teaching responsibilities include participation in a graduate-level microbiology course and in a medical microbiology course taught to second-year medical students. Send curriculum vitae, statement of research interests, and at least three letters of recommendation by October 31, 1993, to: **Chairman, Microbiology Search Committee, Department of Microbiology and Immunology, Georgetown University, Washington, DC 20007. Equal Opportunity/Affirmative Action Employer.**



UNIVERSITY OF PENNSYLVANIA Department of Physiology School of Medicine

The Department of Physiology seeks to fill a tenure-track position, preferably at the **ASSISTANT PROFESSOR** level, in the area of **Cellular Motility**. Candidates combining biophysical and molecular approaches are especially encouraged to apply. Before December 15, 1993, please send curriculum vitae, a statement of research interests, and two reprints or preprints to the search committee (address below). Also arrange to have three letters of reference sent to:

**Motility Search
Department of Physiology
University of Pennsylvania
Philadelphia, PA 19104-6085**

Applications from female and minority candidates are particularly encouraged. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR ENVIRONMENTAL BIOLOGIST Department of Biological Sciences University of Texas at El Paso (UTEP)

UTEP seeks a tenure-track Assistant Professor to participate in a new interdisciplinary environmental science program. Specialists in bioremediation, environmental toxicology, or environmental degradation in plant or invertebrate communities are especially invited to apply. Candidates should have a strong commitment to teaching and research at both the undergraduate and graduate level. Send résumé, statement of research interests, teaching philosophy, and a list of three references (name, address, telephone) to: **Search Committee, UTEP, Department of Biological Sciences, El Paso, TX 79968-0519.** Review of applicants will begin on December 1, 1993. UTEP does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.

POSITIONS OPEN

POPULATION GENETICS: ASSISTANT PROFESSOR, Ph.D. required. Full-time, tenure-track. Salary \$32,300 to \$34,300. Begin August 1994. Teach Genetics, Evolution, Introductory Biology, and graduate courses. Vertebrate research model preferred. Send résumé, transcripts, three letters of recommendation, teaching philosophy and research plan to: **Dr. Don R. Lee, Chair, Biological Sciences Search Committee, East Texas State University, Commerce, TX 75429-3011** by November 27, 1993. *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR CELL, MOLECULAR OR DEVELOPMENTAL BIOLOGIST

Outstanding candidates with a strong commitment to research and teaching in Graduate and Medical School curricula are sought for tenure-track positions. The successful candidate's research area will be in the broad area of cell, molecular or developmental biology and complement existing research programs. Salary, start-up funds and facilities are nationally competitive. Applicants should send curriculum vitae, a brief description of research plans and three letters of recommendation to: **Search Committee, Department of Cell Biology and Anatomy, Texas Tech University Health Sciences Center, 3601 4th Street, Lubbock, TX 79430** before 1 January 1994. *Equal Opportunity Employer.*

ASSISTANT PROFESSOR. Applications are invited for a tenure-track position in the Department of Genetics with primary research and teaching interests in the molecular genetics of eukaryotes. Those with research interests in fungal genetics or molecular genetic approaches to cellular and developmental biology are especially encouraged to apply. The candidate will be expected to develop a strong, creative research program and have a commitment to teaching at the undergraduate and graduate levels. The appointment could begin as early as September 1, 1994. Apply before December 5, 1993, by sending curriculum vitae, list of publications, brief statement of research interests and three letters of reference to: **Search Committee, Department of Genetics, University of Georgia, Athens, GA 30602-7223.** *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR PLANT CELL BIOLOGY

Individuals investigating structural or developmental phenomena using emerging research techniques are sought for tenure-track position. Establishment of productive research program, application for external funding, and collaboration with others are expected. A commitment to excellence in teaching is required. Course responsibilities include plant anatomy, cell/molecular biology, and introductory biology. *The department desires to increase representation of women and minorities.* Submit curriculum vitae, statements of teaching philosophy and research goals, and names of three references by 1 November 1993 to: **Head, Department of Botany, Oklahoma State University, Stillwater, OK 74078** (*Equal Opportunity/Affirmative Action Employer*).

EPITHELIAL CELL BIOLOGY FACULTY POSITION

A tenure-track **ASSISTANT PROFESSORSHIP** is available to conduct research in epithelial cell biology in relation to such topics as transport, assembly, and functions of mucosal immunoglobulins and molecular pathogenesis of infectious disease. Experience desirable in molecular biology, but not necessary in immunology. The individual (M.D. or Ph.D.) will direct an independent program in new research space in the overall context of an active mucosal immunology group. Access to graduate students. Send curriculum vitae, names of three references, and statement of background and interests to: **Dr. Michael E. Lamm, Chairman, Institute of Pathology, Case Western Reserve University School of Medicine, 2085 Adelbert Road, Cleveland, OH 44106-4907.**

An Equal Opportunity/Affirmative Action Employer.

VICE PRESIDENT DEVELOPMENT



Aviron

Aviron is an exciting new San Francisco Bay Area biopharmaceutical company focused on the prevention of viral diseases. Aviron is using proprietary technology to develop live virus vaccines for major respiratory viruses and herpesviruses. This is an opportunity to become a part of an experienced management team, talented scientists, and a highly committed and distinguished scientific advisory board.

As a member of senior management you will be responsible to plan, initiate and manage Aviron's development programs. You will participate in the formulation of operational strategies required to attain our corporate objectives.

The ideal candidate should possess a PhD or an MD with broad-based knowledge of virology and immunology. A minimum of ten years' experience with at least five years' experience in vaccine development is required.

You will have the unique opportunity to plan and organize the following functions:

**Scale-up
Animal Testing
Assay Development
Tissue Culture**

Proven managerial experience coupled with exceptional communication skills are a must. Don't miss this opportunity to make an impact

on this young and dynamic company. Please send your C.V. to: Aviron, Human Resources Dept. VS, 1450 Rollins Road, Burlingame, CA 94010. EOE.

RESEARCH Support Technicians

Seeking support staff at the B.S./M.S. level for expanding research and service programs in mammalian genetics.

Founded in 1929, The Jackson Laboratory employs nearly 600 and is located next to Acadia National Park on Mount Desert Island, a spectacularly beautiful place to live and work, 250 miles northeast of Boston.

With completion of a new research wing this year, The Jackson Laboratory has an urgent need for technicians qualified to work in genetics, metabolism, immunology, tumor biology and all aspects of molecular biology.

Please respond to:

Harold R. Wheeler
The Jackson Laboratory
600 Main St., Bar Harbor, ME 04609-1500
(207) 288-3371
FAX (207) 288-3371, ext. 1082
Internet hrw@aretha.jax.org

An Affirmative Action/Equal Opportunity Employer

**The
Jackson
Laboratory**



FACULTY POSITION IN DEVELOPMENTAL BIOLOGY

The Center for Advanced Biotechnology and Medicine (CABM) and the Department of Pediatrics, UMDNJ-Robert Wood Johnson Medical School are seeking an outstanding investigator for joint appointment as a tenure-track faculty member at the assistant, associate or full professor level. Applicants should hold a PhD and/or MD degree and have a strong commitment to studying fundamental aspects of development and differentiation including oncogenesis, cell cycle regulation, signal transduction mechanisms, control of gene expression, immunoregulation and the molecular basis of inherited disorders. The successful candidate will occupy a new laboratory space in the CABM building and join a growing life sciences community with opportunities to participate in a variety of UMDNJ and Rutgers University graduate programs. The position is highly competitive with regard to start-up funds, laboratory space, salary and benefits. Please send a CV, brief research plan and names of 3 references to: Dr. Aaron J. Shatkin and Dr. David Carver, CABM/Pediatrics Search Committee (2), 679 Hoes Lane, Piscataway, NJ 08854-5638.

The UMDNJ is an Affirmative Action/
Equal Employment Opportunity Employer, m/f/d/v

**UMD
NEW JERSEY**

C A B M

HARVARD MEDICAL SCHOOL DEPARTMENT OF DERMATOLOGY

The Harvard Medical School, Department of Dermatology is currently accepting applications for post-doctoral fellowship positions. Clinical research fellowships are available within our HMS-affiliated institutions. Laboratory research fellowship opportunities exist within the Wellman Laboratories of Photomedicine and Harvard/MGH Cutaneous Biology Research Center at MGH, as well as at our newly established immunology laboratories at the Brigham & Women's Hospital.

The Department of Dermatology, Harvard Medical School is a joint multi-institutional teaching and training program with cooperative clinical and research activities at nine teaching hospitals and affiliations which include Beth Israel Hospital, Brigham & Women's Hospital, Children's Hospital Medical Center, Dana Farber Cancer Institute, Harvard Community Health Plan, Lahey Clinic, Massachusetts General Hospital, New England Deaconess Hospital, and Brockton/W. Roxbury VA Medical Centers. A competitive salary/benefits package and an excellent academic environment are available to qualified candidates. The department is the recipient of an NIH Training Grant which provides salary support for candidates interested in a career in academic dermatology.

The Harvard Medical School Department of Dermatology is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, handicapped, and veterans are encouraged to apply.

Interested candidates should send a letter of inquiry and CV to: Howard P. Baden, M.D., Department of Dermatology, Massachusetts General Hospital, Warren 5, 32 Fruit Street, Boston, MA 02114.

POSITIONS OPEN

FACULTY POSITIONS BIOMOLECULAR STRUCTURE/FUNCTION PENN STATE

The Department of Molecular and Cell Biology solicits applications for tenure-track faculty positions in the area of biomolecular structure/function at **ASSISTANT, ASSOCIATE** or **FULL PROFESSOR** levels. Preference will be given to candidates with research interests that complement existing strengths of the department, including the dynamics and structures of proteins and protein-nucleic acid interactions. The Department has excellent research facilities and provides significant start-up packages. Senior applicants should have an exceptionally strong record of productivity. Send curriculum vitae, research plan and names of 3 references by **November 1, 1993**, to: **Dr. Kenneth A. Johnson, Paul Berg Professor of Biochemistry, Molecular & Cell Biology, Box SF-S, 108 Althouse Lab, Penn State, University Park, PA 16802.** An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

ASSOCIATE PROFESSOR or VISITING PROFESSOR MAGNETIC RESONANCE

The Centre of Magnetic Resonance, Aarhus University Hospital, Denmark, is seeking candidates for a two-year position. The position may also be filled with a **VISITING PROFESSOR** for one academic sabbatical year. Candidates who are educated in physics or chemistry must demonstrate excellence, originality and productivity in magnetic resonance research. You will join a group for development of Echo Planar Imaging technique and form the NMR theoretical basis for the development of this technique. Besides the research activities modest teaching at graduate level is expected. The technique is implemented on a GE 1.5 T SIGMA. At the centre's disposal is furthermore a Philips 1.5 T and a SISCO 7.0 T magnet. Application deadline: November 1, 1993. Applications/3 academic references/curriculum vitae should be sent to: **Dr. H. Stodkilde-Jørgensen, Skejby Hospital, Brendstrupgaardvej, DK-8000 Aarhus, Denmark.**

FACULTY POSITION IN PSYCHIATRY AND NEUROSCIENCE

Applications are invited for a tenure-track **ASSOCIATE** or **FULL PROFESSOR**. Candidates should document experience in the broad area of molecular biology as applied to the neurosciences and psychopharmacology. The position requires a Ph.D. degree with proven accomplishments in molecular biology. Of special interest are receptor structure and function as well as experience with neurotransmitters and other neurohormonal correlates of behavior.

A clear record of capability for generating extramural research support and for working as an independent investigator are critical factors in the selection process. Outstanding laboratory facilities and ample start-up funds are available. Salary is competitive. Rank and salary will be commensurate with experience and productivity. A joint appointment is available in a basic science department.

Please send curriculum vitae, three representative reprints, and the names and addresses of three references to: **Dr. Anthony Kales, Department of Psychiatry, Pennsylvania State University College of Medicine, Hershey, PA 17033.** Deadline for receipt of applications is 30 October 1993.

An Affirmative Action/Equal Opportunity Employer.
Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR POSITIONS for 1994. The Department of Chemistry at the California State University, San Marcos, has an opening at the Assistant Professor level in Biochemistry. Candidates must have a Ph.D. in Chemistry; postdoctoral experience is preferred. Applicants should submit a letter of application, curriculum vitae, three letters of recommendation, a one-page statement of teaching philosophy that addresses the major and general education, and a two-page outline of future research plans to: **Chemistry Search Committee, California State University San Marcos, San Marcos, CA 92096-0001.** Position is subject to final authorization. CSU San Marcos is an Affirmative Action/Equal Opportunity Employer. The University has a strong commitment to the principle of diversity and seeks a broad spectrum of candidates including women, members of minority groups and people with disabilities.

POSITIONS OPEN

UCLA FACULTY POSITIONS UCLA-DOE LABORATORY OF STRUCTURAL BIOLOGY AND MOLECULAR MEDICINE

The new division of Structural Biology and Genetics of the UCLA-DOE Laboratory of Structural Biology and Molecular Medicine intends to make two tenure-track faculty appointments at the level of **ASSISTANT PROFESSOR** or **ASSISTANT PROFESSOR IN RESIDENCE**, jointly with departments in the College of Letters and Science or the School of Medicine. One of these is intended for a scientist in the area of NMR spectroscopy of proteins and the other in the broad area of structural biology and genetics. Set-up and research funds will come from the UCLA-DOE Lab. Candidates must have significant research accomplishments, the ability to establish and maintain a vigorous research program, and a commitment to excellence in education at the undergraduate and graduate levels. *UCLA is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.* Applicants should provide curriculum vitae, a summary of research accomplishments and proposed research, copies of key publications or preprints, and three letters of recommendation by November 1, 1993. Applications should be directed to: **Dr. David Sigman, Chair of Search Committee, Molecular Biology Institute, UCLA, Los Angeles, CA 90024-1570; FAX: (310) 206-3914.**

ASSISTANT/ASSOCIATE PROFESSOR, tenure-track, Westmont College. Two positions: (1) **CELLULAR/MOLECULAR BIOLOGIST**, (2) **ANIMAL BIOLOGIST**. Teach and conduct a research program involving undergraduate students. Teaching: introductory biology and 2 to 3 courses in area of expertise. Ph.D. required; postdoctoral research and teaching experience preferred. Westmont College is a Carnegie level I liberal arts college stressing excellence in undergraduate teaching, scholarship, and commitment to the Christian faith. Candidates are expected to contribute to the character and mission of the College. Send letter, curriculum vitae, statement of research and teaching interests and the names of four references to: **Dr. Ayoub, Search Committee Chair, Department of Biology, Westmont College, Santa Barbara, CA 93108.** Review of applications will commence on 15 November 1993.

Women and minorities are encouraged to apply.

FACULTY POSITION—ORGANIC CHEMISTRY, POMONA COLLEGE. Tenure-track position at the **ASSISTANT PROFESSOR** level starting fall 1994 to teach introductory and advanced courses in organic chemistry. The successful candidate must have a Ph.D. and a commitment to undergraduate teaching and research. Pomona College, the founding member of the Claremont Colleges, is among the nation's most selective, ethnically diverse undergraduate institutions. Excellent library and laboratory facilities (including 300 MHz NMR, FT-IR, Stopped Flow Spectrometers, and GC/MS), start-up funds, and ample space for research are available. To apply, submit a letter of interest, a résumé, transcripts, a statement of teaching philosophy, a description of research plans, and three letters of reference to: **Professor Fred J. Grieman, Chemistry Department, POMONA COLLEGE, Claremont, CA 91711-6338.** Review of applications will begin November 1, 1993. *Pomona College is an Affirmative Action/Equal Opportunity Employer and especially invites applications from women and minorities.*

ASSISTANT PROFESSOR—BIOORGANIC/BIO-CHEMIST. The Department of Chemistry at Union College invites applications for a tenure-track position at the Assistant or advanced Assistant Professor level during the current academic year to begin fall 1994-95. The candidate is expected to have a Ph.D. and preference will be given to those with postdoctoral experience. Applicants should have the potential for excellence in undergraduate teaching and research. Experience in organic laboratory teaching is desirable. Union College is a small, selective undergraduate institution with particular strengths in science and engineering. Applicants are to provide curriculum vitae, outline of research interest (and needs), three letters of recommendation, and undergraduate and graduate transcripts to: **Professor John R. Sowa, Chair of Search Committee, Department of Chemistry, Union College, Schenectady, NY 12308** by December 10, 1993. *Union College is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

EVOLUTIONARY BIOLOGIST. The Department of Biology at Vanderbilt University invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR**. The successful candidate will be expected to develop a strong, externally funded research program using modern techniques to address questions concerning some aspect of the evolutionary biology of plants or animals. Areas of interest include but are not limited to: plant/insect or parasite/host coevolution, systematic biology, and macroevolution. Those using phylogenetic approaches to answer questions in these areas are especially encouraged to apply. Teaching responsibilities will complement the needs of the department and will include a course in the candidate's area of specialization. Applicants should submit curriculum vitae, including a description of research interests, and arrange to have three letters of recommendation sent by December 15, 1993, to: **Evolutionary Biology Search Committee, Department of Biology, Vanderbilt University, P.O. Box 1812, Station B, Nashville, TN 37235, U.S.A.** *Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, BEHAVIORAL NEUROSCIENCE. Applications are invited for a tenure-track position in the Department of Psychology at State University of New York (SUNY) at Buffalo. Candidates should have a Ph.D. and at least two years of postdoctoral experience. The successful candidate will be expected to have an externally funded research program and to teach graduate and undergraduate courses in behavioral neuroscience. Specialization in psychopharmacology and/or neural bases of motivated behaviors is desirable, but highly qualified candidates in any area of research will be considered. Send curriculum vitae, a statement of current and future research interests and the names of three references to: **Behavioral Neuroscience Search Committee, Box H, Department of Psychology, SUNY at Buffalo, Buffalo, NY 14260.** Applications will begin to be reviewed by October 15, 1993. *SUNY is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGY AND GENETICS

The Department of Molecular Biology and Genetics at the Johns Hopkins University School of Medicine has a position available at the **ASSISTANT PROFESSOR** level. Candidates of exceptional promise in the general research area of eukaryotic molecular biology and in teaching are invited to apply by submitting curriculum vitae, a brief statement of future research plans and the names of three references to: **Dr. Randall R. Reed, Search Committee, Department of Molecular Biology and Genetics, The Johns Hopkins University School of Medicine, 800 PCTB 725 North Wolfe Street, Baltimore, MD 21205.** *The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.*

CELLULAR OR SYSTEMS NEUROBIOLOGIST TENURE-TRACK ASSISTANT PROFESSORSHIP

**Department of Cell Biology and Neuroanatomy
University of Minnesota Medical School**

The Department will appoint a tenure-track Assistant Professor in cellular or systems neurobiology with expertise in the development of fluorescence methods and confocal microscopy to study the nervous system. Responsibilities will include supervision of a multi-user facility for confocal microscopy and fluorescence imaging, teaching of gross anatomy to medical/dental students and participation in an appropriate graduate program. Minimum requirements include an earned doctoral degree in the biological sciences (for which verification must be supplied), at least two years of postdoctoral experience, evidence of publication (or acceptance for publication) of papers in high-quality, peer-reviewed journals, and experience in obtaining federal grants.

Applications, due no later than November 1, 1993, should include current curriculum vitae, copies of five of the candidate's most significant publications, a statement of research goals and the names of three persons from whom recommendations can be obtained. Send applications to: **R. V. Menken, Neurobiologist Search, Department of Cell Biology & Neuroanatomy, University of Minnesota Medical School, 4-135 Jackson Hall, 321 Church Street SE, Minneapolis, MN 55455.**

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

Faculty Position in Cell Biology

A position is available at the junior or senior faculty level to investigate the organization, migration, proliferation, and differentiation of normal and abnormal eukaryotic cells. Areas of special interest include Signal Transduction, Cell Cycle, Growth Control, Gene Expression, Cell Motility, and Membrane Trafficking, as well as other areas which will fortify or complement our existing strengths. We are particularly interested in individuals employing molecular and genetic approaches, although overall scientific excellence and promise will be the primary criteria for selection.

Faculty appointments at the Worcester Foundation carry institute-backed salary guarantees and liberal start-up packages for personnel, equipment and operating costs.

Submit a detailed C.V., a brief summary of research interests and future plans, and three letters of reference to:

Cell Biology Search Committee
c/o Human Resources Office
Worcester Foundation for Experimental Biology
222 Maple Avenue
Shrewsbury, MA 01545

Review of applications will begin November 1, 1993.



Worcester Foundation for
Experimental Biology

An Affirmative Action/
Equal Opportunity Employer M/F/H

Challenging Research Career Opportunities In PROTEIN BIOCHEMISTRY AND CELL BIOLOGY

We are a well-funded, independent biomedical research institute located on the North Shore University Hospital campus in Manhasset, New York, convenient to the medical and biotechnology centers of both New York City and Long Island. We're looking for capable, creative professionals to work alongside noted investigators and become involved with well-established and new research projects:

• DNA REPLICATION AND REPAIR

As a member of the lab group headed by Dr. Mark Kenny, you will identify the proteins and mechanisms involved in the coordinated replication and repair responses to DNA damage, especially as this relates to disease mechanisms. Experience in protein chemistry is strongly preferred, and molecular biology an asset.

• ALZHEIMER'S DISEASE

Post-Doctoral and Staff Investigator Opportunities

Working with Dr. Michael P. Vitek, you'll address the role of protein processing and modification in neurotoxicity and the potential for therapeutic intervention. Expertise in cell biology or protein- or biochemistry is preferred.

We can offer you an excellent salary and benefits program, commensurate with experience. For confidential consideration, please forward your "c.v.", with salary requirement and indication of position of interest, to: **Human Resources Department-DA, The Picower Institute, 350 Community Drive, Manhasset, New York 11030.** We are an equal opportunity/affirmative action employer.



The Picower Institute for Medical Research

Molecular Biosystems, Inc. (MBI), a leader in the development of contrast agents for medical imaging, including ultrasound, CT, and MRI is seeking a strong candidate to join our expanding preclinical team.

Preclinical Scientist

Responsibilities include the initiation, design & execution of preclinical safety, efficacy, and PK studies for novel diagnostic imaging agents in the areas of Ultrasound, MRI & CT. The successful candidate must have a PhD in Toxicology, or related area with extensive knowledge in Pharmacokinetics, or Pharmacology with 2-5 years industrial experience beyond PhD in drug development, INDs, NDAs and animal studies. Excellent oral and written communications, dependable, creative and interact well with peers. This position reports to the Director of Preclinical Studies.

We offer competitive salaries, a comprehensive benefits package, and a pleasant working environment. Qualified candidates should submit their résumé with salary history to: **Molecular Biosystems, Inc., Human Resources Department A77-94, 10030 Barnes Canyon Road, San Diego, CA 92121. Job Hotline: (619) 452-7393 x411.**



An Equal Opportunity Employer

Man-in-Motion Foundation Chair in Spinal Cord Research

MOLECULAR/CELL BIOLOGIST

Applications are invited for a tenure-track faculty position in the Department of Zoology, University of British Columbia. Salary and academic rank will be commensurate with education and experience (early to mid-career preferred).

The Department of Zoology currently comprises 36 faculty members, approximately 35 postdoctoral fellows and research associates, and 140 graduate students. Three current faculty members have research interests in molecular neurobiology/development. We seek a cellular/molecular neurobiologist whose research will provide an increased understanding of the cellular mechanisms that underlie neuronal injury or growth to promote spinal cord regeneration. The appointee will be expected to develop a strong research program, complement current research strengths in the Department, and teach in appropriate undergraduate courses. **Starting date will be September 1, 1994 at the latest.** Appointment is subject to final budgetary approval.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents. The University of British Columbia welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities.

Closing date for application is December 31, 1993.

Curriculum Vitae, 3 letters of reference, and a brief outline of research interests should be submitted to:



Dr. J.D. Steeves, Chair, Search Committee
Department of Zoology
University of British Columbia
#2354-6270 University Boulevard
Vancouver, B.C. CANADA V6T 1Z4
Fax: (604) 822-2416

POSITIONS OPEN

CORNELL UNIVERSITY. The Department of Chemistry has a tenure-track faculty position available at the **ASSISTANT PROFESSOR** level. Outstanding candidates in the areas of experimental physical or biophysical chemistry will be considered. The successful applicant will be expected to carry out an effective research program and teach standard chemistry courses. A Ph.D. degree is required and postdoctoral experience is desirable. Applicants should submit curriculum vitae, publication list, summary of research experience, graduate transcript, and a brief statement of research plans. These materials and three letters of recommendation should be sent to: **Chair, Faculty Search Committee, Department of Chemistry, Baker Laboratory, Cornell University, Ithaca, NY 14853-1301**, and be received no later than November 10, 1993. *Cornell University is an Affirmative Action/Equal Opportunity Employer and Educator.*

ASSISTANT/ASSOCIATE PROFESSOR OF TOXICOLOGY

The Division of Toxicology, Department of Pharmacology and Toxicology, University of Arkansas for Medical Sciences, is recruiting a full-time tenure-track faculty position at the Assistant or Associate Professor level. Requirements include: a Ph.D. or equivalent degree, prior postdoctoral training, and a productive record of quality research. Individuals should be utilizing molecular approaches to solve basic problems in any area of toxicology. Candidates are expected to develop an independent research program with extramural funding. Candidates applying at the Associate Professor level should have extramural funding. Opportunities are available for collaborative research with other UAMS faculty and adjunct faculty at the National Center for Toxicological Research located nearby. The Division of Toxicology offers a Ph.D. in Interdisciplinary Toxicology. A competitive start-up package and research space in a newly constructed building are available. Send curriculum vitae and the names of three references by November 1, 1993, to: **Jack A. Hinson, Ph.D., Division of Toxicology, Slot 638, University of Arkansas for Medical Sciences, Little Rock, AR 72205**. *UAMS is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT OR ASSOCIATE PROFESSOR

The Department of Biochemistry, Eastern Virginia Medical School, invites applications for a 12-month-salaried tenure-track position. The individual will be expected to develop an independent research program in an area of modern biochemistry or molecular biology complementary to ongoing programs related to heart disease, inflammation, cancer, muscular disease, reproduction, and aging. The individual will also be expected to actively participate in teaching both medical and graduate students. Please send curriculum vitae, bibliography, description of research, and the names of three references to: **Dr. Karl A. Schellenberg, Department of Biochemistry, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501**. *Eastern Virginia Medical School is an Equal Opportunity/Affirmative Action Institution.*

MOLECULAR AND CELLULAR NEUROBIOLOGISTS MONTREAL NEUROLOGICAL INSTITUTE MCGILL UNIVERSITY

The Montreal Neurological Institute (MNI) has established a new research group of molecular and/or cellular neurobiologists to study mechanisms of neuronal survival. Ongoing research within the group is focused on neurogenesis, neuronal growth, and neurotrophic factors. The group is seeking to hire two new members with related research interests who will be appointed at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** within McGill University's Faculty of Medicine. The group is currently housed in newly developed laboratory space and provided with ample set-up funds. The academic environment and collaborative potential for neuroscience at the MNI, at McGill and in Montreal are excellent. Montreal is a cosmopolitan, bilingual city known for its high quality of life.

Applications should be sent to: **Dr. Freda D. Miller, Coordinator, Centre for Neuronal Survival, Montreal Neurological Institute, 3801 University Street, Montreal, Quebec, Canada, H3A 2B4**. The deadline for receipt of applications is November 30, 1993.

McGill University is committed to Equity in Employment.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR Mammalian Signal Transduction and Cell Regulation

The Department of Biochemistry and Molecular Biology at Indiana University School of Medicine is seeking applicants for a full-time, tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Applicants should have a Ph.D., M.D. or equivalent degree and postdoctoral experience. It is expected that the new faculty member will develop independent research programs and participate in the teaching of medical and graduate students. Competitive space and start-up funds are available. The Department is seeking an individual with interest in the molecular basis of signal transduction in mammals, including such areas as receptor function, second messenger generation, regulatory protein-protein interactions, protein phosphorylation, and mechanisms for the control of intracellular target proteins and genes. The Department seeks to strengthen existing ties with the School's Diabetes and Cancer Centers. Applicants should submit curriculum vitae, a description of research plans, and the names of three references to: **Dr. Peter J. Roach, Search Committee Chair, Department of Biochemistry and Molecular Biology, Indiana University School of Medicine, Indianapolis, IN 46202-5122**.

Indiana University is an Equal Opportunity/Affirmative Action Employer, Employer and Contractor.

ANIMAL BEHAVIOR

ASSISTANT PROFESSOR, Psychology—University of Nebraska at Omaha. The Psychology Department and Nebraska Behavioral Biology Group invites applications for a tenure-track Assistant Professor position with emphasis on the mechanisms of behavior. Research area in physiological, neuroendocrine, or molecular basis of reproductive behavior is strongly preferred, although candidates in all areas are encouraged to apply. The successful candidate will teach courses in the department's degree programs (B.A., M.A., and Ph.D.). Scientists with a Ph.D. and postdoctoral experience may apply by sending letter of application, curriculum vitae, and names of three references to: **Dr. Jeffrey A. French, Nebraska Behavioral Biology Group, Department of Psychology, University of Nebraska at Omaha, Omaha, NE 68182-0274**. Applications received by 1 December 1993 will receive full review, and the position will remain open until a suitable candidate is hired. *The University of Nebraska at Omaha is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity.*

RESEARCH ASSISTANT PROFESSOR: Position available to study steroid/retinoid modulation of gene function in breast carcinoma. Experience required in gene transfections, DNA sequencing, and retinoid function in breast cancer. *Candidate must have legal authority to work in the United States.* Please send curriculum vitae to: **University of Maryland Cancer Center, 22 South Greene Street, Baltimore, MD 21201**. Attention: **Ms. Carol Legg McNamara**. *The University of Maryland at Baltimore is an Affirmative Action/Equal Opportunity Employer, M/F/H/V.*

BIOCHEMISTRY FACULTY POSITION LOUISIANA STATE UNIVERSITY MEDICAL CENTER (LSUMC)

The Department of Biochemistry and Molecular Biology invites applications for a tenure-track position at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. The successful candidate is expected to develop and sustain an independent research program. Interest and excellence in teaching and research are expected. The medical center includes the Schools of Dentistry, Medicine, Nursing, and Graduate Studies and a Biotechnology Support Unit. Interested individuals should send curriculum vitae with bibliography, short (three-page) summary of planned research, and the name and addresses of three references to the following:

Robert Roskoski, Jr.

Head, Department of Biochemistry and Molecular Biology

**Louisiana State University Medical Center
1100 Florida Avenue
New Orleans, LA 70119-2799**

LSUMC is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR, GENETIC/MOLECULAR MECHANISMS OF DISEASE. The Department of Comparative Medicine, Schools of Medicine and Dentistry, University of Alabama at Birmingham, invites applications for a tenure-track position at the rank of Assistant Professor. We seek an independent investigator of genetic and molecular mechanisms in disease pathogenesis, with a strong commitment to development and use of animal models of human diseases. Investigators using innovative approaches to gene transfer, expression or knockout; development of new gene delivery or embryonic stem cell systems (e.g., rat or rabbit); or other innovations in animal modeling are encouraged to apply. Strong background in mouse genetics desirable. Teaching responsibilities are modest and primarily at the graduate level. The Department of Comparative Medicine cosponsors with the Department of Pathology the Graduate Program in Molecular and Cellular Pathology, and has an NIH-funded training program. Send curriculum vitae to: **Philip A. Wood, Chair of Search Committee, Department of Comparative Medicine, Schools of Medicine and Dentistry, UAB, Birmingham, AL 35294-0019**. *UAB is an Equal Opportunity/Affirmative Action Employer.*

SCIENTIFIC FACULTY UNIVERSITY OF MINNESOTA

The University of Minnesota, Department of Pediatrics is seeking a full-time **ASSISTANT or ASSOCIATE PROFESSOR**, cellular or molecular biologist for the Division of Pulmonary and Critical Care Medicine. The position is non-tenured and annually renewable. The Division currently has ten faculty and two active fellowship programs. There are vigorous programs within the Division focused in lung biology and clinical research.

The successful candidate will engage in laboratory-based research on the cellular or molecular biology of the developing lung. Close interrelationships with research programs of other Division faculty are anticipated. The candidate is expected to participate in the teaching of fellows and postdoctoral students.

Essential qualifications: Ph.D. in a basic life science with at least three years of experience. Rank will be commensurate with training, experience, and research accomplishments. Candidates for Assistant Professor must have demonstrated involvement in original research through publication in peer-reviewed journals. Candidates for Associate Professor must have demonstrated professional distinction in research and writing and demonstrated effectiveness in teaching and advising. Final appointment and rank is subject to the approval of the Promotions Committees of the Department of Pediatrics and the Medical School.

Last date for receipt of applications is October 31, 1993. Position will start as soon as possible.

Correspondence: **Thomas P. Green, M.D., Professor and Director, Pediatric Pulmonary and Critical Care Medicine, University of Minnesota, Box 737 UMHC, 420 Delaware Street SE, Minneapolis, MN 55455**. Telephone: (612) 626-2916.

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

NEUROSCIENCE FACULTY POSITION UNIVERSITY OF COLORADO SCHOOL OF MEDICINE

The Neuroscience Center invites applications for a new tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Newly constructed research space and start-up funds are available. We are particularly interested in individuals studying neural (motor or sensory) systems development; however, outstanding candidates in any area of neuroscience will be considered. The Neuroscience Center has a strong research faculty with interest in cellular, molecular and developmental neurobiology, sensory systems, neuro-receptor pharmacology and neural transplantation. Other active interdisciplinary programs in molecular biology and immunology enhance the research environment. Successful candidates will be expected to conduct a vigorous independent research program and to participate in graduate teaching.

Applicants should send curriculum vitae, a brief description of their research interests, and the names of three references by November 19, 1993, to: **Dr. Nicholas W. Seeds, Director of Neuroscience Center, B-138, University of Colorado Medical School, 4200 East Ninth Avenue, Denver, CO 80262**.

UCHSC is committed to Equal Employment Opportunity and Affirmative Action.

Department Chairperson/Geoscientist/Oregon State University. Position as Professor and Chairperson available September 1994 in Geosciences Department with strengths in petrology, structure, sedimentology/paleontology, surficial processes, physical and resource geography, and spatial analysis. The department has 19 tenured faculty, 90 graduate students, and 135 undergraduate majors. Long-term department goals are in earth and environmental geosciences. Geosciences, housed with other basic sciences in the College of Science, has strong collaborative ties with the Colleges of Forestry, Agricultural Sciences, and Oceanic and Atmospheric Sciences, the Center for Analysis of Environmental Change, the U.S. Forest Service Research Lab, the U.S. Geological Survey, and the U.S. EPA Environmental Research Laboratory located on or near the OSU campus. Oregon State University is a Land Grant, Sea Grant, Space Grant, and Carnegie Class I Research University.

Candidates must have a Ph.D. or equivalent in the physical geosciences and a distinguished record of academic achievement commensurate with full-professorial appointment.

Send resume including evidence of administrative, research, and teaching experience; publications; external recognition awards; and names of three references to **Professor A. Jon Kimerling, Chairman, Geosciences Search Committee, Department of Geosciences, Oregon State University, Corvallis, OR 97331-5506.** Candidates should also submit a statement on their views of the future of geosciences teaching and research. Candidates will be notified before letters of reference are requested. Applications will be reviewed starting January 1, 1994, until the position is filled.

Oregon State University is an Affirmative Action/Equal Opportunity Employer and complies with Section 504 of the Rehabilitation Act of 1973. OSU has a policy of being responsive to the needs of dual-career couples.

ROCHE

ASSOCIATE SCIENTISTS

Hoffmann-La Roche's scientists are renowned for their many breakthroughs in medicine. Our commitment to research and development has created an immediate need for accomplished professionals who share our vision of exploring and conquering the unknown.

BIOCHEMISTRY

We have 2 openings in our Oncology Department to work as part of a major project on the *ras* oncogene, performing either protein purification and structural characterization or enzyme purification and assay (spectrometric, radiometric). Techniques utilized include column chromatography, SDS-PAGE, western blotting, UV-VIS spectrophotometry and HPLC. A BS/MS in Biochemistry or related discipline and at least 2 years experience in protein or enzyme purification is required. Knowledge of molecular biological techniques would be helpful.

MOLECULAR BIOLOGY

Joining the Roche Institute of Molecular Biology, you will be part of a team studying regulation of the eukaryotic cell cycle. Applicants are expected to have a strong background in DNA subcloning, sequencing, PCR, analysis of mRNA and protein levels. A BS/MS in Biology, Chemistry or Biochemistry (or equivalent) and at least 2 years molecular biology experience is required. Experience with mammalian tissue culture or protein biochemistry would be advantageous although not essential.

For consideration, please send resume with salary history/requirements, indicating position of interest, to: **Ms. Joanna Harrington, Staffing Department JH163SM, Hoffmann-La Roche Inc., Nutley, New Jersey 07110-1199.** We are an equal opportunity employer.

ROCHE

Hoffmann-La Roche

THE NEUROSCIENCES INSTITUTE

La Jolla, California

THE NEUROSCIENCES INSTITUTE LA JOLLA, CALIFORNIA INSTITUTE MEMBER, NEUROPHARMACOLOGY

The Neurosciences Institute (NSI) invites applications for a senior position as **Institute Member** from candidates with research interests in *neuropharmacology* or *cellular neurophysiology*. Applicants should have research experience equivalent to that expected of a tenure-track professorial appointment and should have demonstrated scientific excellence and the ability to lead innovative research.

The NSI is an international center for distinguished visiting neuroscientists as well as the home of the Neurosciences Research Program. An independent organization, the NSI is located on the campus of The Scripps Research Institute in La Jolla, California. New laboratory facilities will be completed in the autumn of 1994.

The NSI is beginning an in-house research program in experimental neurobiology designed to increase understanding of brain processes at several organizational levels from the molecular to the cognitive. Laboratory research will be carried out in areas such as molecular biology, cellular neurobiology, neuropharmacology, neuroanatomy, functional brain imaging, and psychophysics. The experimental program will complement the in-house program in theoretical neurobiology, which has been aimed at developing biologically based, experimentally testable models of neural systems.

Institute Members will be provided with adequate financial support to equip laboratories and to maintain ongoing independent research programs. They will have opportunities for scientific interactions with Senior and Junior Fellows in Experimental Neurobiology as well as with Fellows in Theoretical Neurobiology.

Applications containing a statement of research interests, a curriculum vitae, and the names of three references should be sent to **Dr. Gerald Edelman, Director, The Neurosciences Institute, 3377 North Torrey Pines Court, La Jolla, California 92037.**

U. S. DEPARTMENT OF ENERGY

POSTGRADUATE RESEARCH PROGRAMS

Human Genome	Global Change
Toxicology	Engineering
Fossil Energy	Physical Sciences
Hazardous Wastes	Environmental Sciences
Fusion Energy	Life Sciences
Computer Sciences	Risk Analysis

- Research at national laboratories
- Stipends \$22,200 - \$55,000 depending on degree, program, research area
- Recent graduate degree
- U.S. citizenship or PRA status may be required

Information and applications:

Postgraduate Research Programs
Science/Engineering Education Division
Oak Ridge Institute for Science and Education
P.O. Box 117
Oak Ridge, TN 37831-0117
(615) 576-7385

POSITIONS OPEN

UNIVERSITY OF UTAH Department of Biochemistry

A tenure-track position is available for autumn 1994, in the area of physical biochemistry. We are looking for strength and originality in the determination of structures of macromolecules (particularly proteins), elucidation of their mechanism of action, and characterization of reaction energetics. Individuals expert in NMR, optical methods, thermodynamics, or kinetics are particularly encouraged to apply. Applicants should hold a doctoral degree and have a strong record of original research. Preference will be given to applicants at the level of **ASSISTANT PROFESSOR**, but candidates at more senior ranks may also be considered. Successful candidates will join an interactive and diverse faculty and participate in vital campus-wide graduate programs. Send curriculum vitae, a statement of research background and interests, and three letters of recommendation to: **Dana Carroll, Faculty Search Committee, Department of Biochemistry, University of Utah School of Medicine, Salt Lake City, UT 84132.** Deadline for applications is December 1, 1993; late applications will be considered if an opening is still available. *The University is an Equal Opportunity/Affirmative Action Employer, and seeks to provide equal access to its programs, services and activities to people with disabilities.*

TENURE-TRACK FACULTY POSITION DEPARTMENT OF PHARMACOLOGY, LOYOLA UNIVERSITY CHICAGO, STRITCH SCHOOL OF MEDICINE

The Department of Pharmacology, Loyola University Chicago, Stritch School 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. degree, postdoctoral experience, and a strong commitment to excellence in research and teaching. Evidence of originality, scientific accomplishment, and promise of ability to develop a productive, independent research program, are essential.

Salary is competitive, and based on experience and qualifications. Start-up support will be provided for early development. Candidates should send curriculum vitae, three letters of recommendation, representative reprints, and a synopsis of their current and future research interests to: **Dr. Israel Hanin, Chairman, Department of Pharmacology, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153.** Telephone: 708-216-3261.

ASSISTANT/ASSOCIATE PROFESSOR (Research) to join active research group and to develop/maintain independent research in the areas of macrophage metabolism and function, cytokines, free radicals, endotoxin-induced and alcoholic liver injury. Preference given to individuals with background in metabolism, immunology, molecular biology and alcohol research. Position available immediately. Send curriculum vitae to: **John J. Spitzer, M.D., Boyd Professor and Head, Department of Physiology, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112.** *LSUMC is an Affirmative Action/Equal Opportunity Employer.*

RUTGERS

THE STATE UNIVERSITY OF NEW JERSEY, DEPARTMENT OF BIOLOGICAL SCIENCES anticipates the availability of **tenure-track** positions at the **ASSISTANT PROFESSOR** level. Candidates should be broadly trained and highly motivated with a strong background in research and interested in maintaining an externally funded program while participating in graduate and undergraduate teaching. The positions are: **PLANT SYSTEMATIST**, who will oversee the Chrysler Herbarium and organize a curriculum in plant systematics; **VIROLOGIST/MICROBIOLOGIST** with a research program in virus/mammalian cell interactions or pathogenic microbiology; **MOLECULAR CELL BIOLOGIST** studying the regulation of mammalian gene expression, possibly using transgenic mice. Send before December 31, 1993, detailed curriculum vitae and supporting material including name, address and telephone number of three references and a statement of current and future research interests to: **Dr. David Denhardt, Chair, Nelson Biological Laboratories, P.O. Box 1059, Piscataway, NJ 08855.** *Rutgers, the State University, is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS IN CELLULAR AND MOLECULAR PHYSIOLOGY

The Department of Cellular and Molecular Physiology of the Pennsylvania State University College of Medicine invites applications for tenure-track faculty positions at the **ASSISTANT/ASSOCIATE PROFESSOR** rank to begin during the 1993-94 academic year. The Department presently has fifteen full-time, well-funded faculty who are working in the general area of cellular and molecular physiology. We are seeking candidates with substantial research experience at the postdoctoral level or above, who are applying molecular biology and recombinant DNA techniques to one or more of the following areas: metabolic regulation, mechanisms of hormone action, membrane receptors, signal transduction mechanisms, and regulation of expression of eukaryotic genes. Significant research accomplishment and ability to obtain independent funding are essential. Excellent opportunities exist for research collaboration, teaching in a medical school curriculum, and participation in one or more graduate programs.

Applicants should submit, prior to December 1, 1993, curriculum vitae, reprints, statement of current and planned research interests, and letters from at least three references to: **Dr. Leonard S. Jefferson, Chairman, Department of Cellular and Molecular Physiology, College of Medicine, The Pennsylvania State University, P.O. Box 850, Hershey, PA 17033.** *We are an Equal Opportunity/Affirmative Action Employer and encourage minority and female applicants to apply.*

MICROBIOLOGIST SOUGHT FOR STANFORD ENVIRONMENTAL ENGINEERING AND SCIENCE FACULTY

The Department of Civil Engineering at Stanford University is seeking a microbiologist to fill a tenure-line **ASSISTANT PROFESSOR** position with the Environmental Engineering and Science (EES) program. Applicants are sought with interests in environmental microbiology; microbial ecology; contaminant movement, fate, and biodegradation; reaction kinetics and thermodynamics; and/or environmental biotechnology. Applicants having experience with modern molecular biology procedures are especially welcome. The faculty member would conduct research and teach undergraduate and graduate courses, and is expected to have close collaboration with the seven faculty members of the EES program, representing disciplines of chemistry, engineering, and microbiology, as well as with the Biology Department. The position will be available as early as March 31, 1994. Applicants should send a résumé, undergraduate and graduate transcripts, a description of teaching and research interests, and a list of potential references by October 31, 1993, to: **Prof. Perry L. McCarty, Faculty Search Committee, Department of Civil Engineering, Stanford University, Stanford, CA 94305-4020.** *Stanford is an Equal Opportunity/Affirmative Action Employer.*

CELL BIOLOGISTS—The Division of Biological Sciences at the University of Missouri—Columbia invites applications for **TWO TENURE-TRACK FACULTY POSITIONS** to be filled at the **ASSISTANT PROFESSOR** level with individuals using molecular methods to investigate basic problems in cell biology, including but not limited to protein trafficking and secretion, neurotransmission, cytoskeletal organization, cell motility, organelle biogenesis, signal transduction and cell cycle control. Individuals using yeast as an experimental organism and those studying problems of neurobiology (vertebrate or invertebrate) are of particular interest to complement existing programs, although other areas will be considered.

The Division offers highly competitive salaries, generous start-up packages, modern research laboratories and support facilities, an active graduate program with institutional support for students and postdoctoral associates, and an interactive faculty. *We are firmly committed to fostering diversity on our faculty and strongly encourage applications from women and members of minority groups.* Send curriculum vitae, reprints, statement of teaching and research interests, and three letters of reference to: **Dr. John David, Chair, Division of Biological Sciences, University of Missouri, Columbia, MO 65211.** Complete applications should be received by November 15, 1993. *The University of Missouri is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT RESEARCH PROFESSOR— PLANT TRANSFORMATION Plant and Soil Science Department Montana State University

Twelve-month, non-tenure-track position available 1 April 1994 for up to five years to provide research support and develop a competitive grant program in plant transformation/gene expression. Required qualifications: Ph.D. in plant genetics, plant biochemistry or related discipline; previous experience in transformation activities including microprojectile bombardment and plant regeneration; demonstrated ability to design, conduct, and publish research. Before applying, candidates must request a full position description from: **Dr. William E. Dyer, Plant & Soil Science, Montana State University, Bozeman, MT 59717-0312.** Telephone: 406-994-5063, FAX: 406-994-3933. Application review begins 15 November 1993. *ADA/Equal Opportunity/Affirmative Action/Veterans Preference.*

The Graduate Institute of Immunology, College of Medicine at Taiwan National University, invites candidates for tenure-track positions at the **ASSOCIATE** or **FULL PROFESSOR** level. The applicant should have a Ph.D. degree and at least two years of postdoctoral experience. Duties include research and teaching at graduate level. Candidate with a record of achievement or experience in using modern approaches to immunobiology and/or protein chemistry is highly desirable. Salaries are commensurate with qualifications and experience. Applicants should submit curriculum vitae, letter of application stating research interests and a list of publications to: **Professor Fung-Win Shen, Graduate Institute of Immunology, College of Medicine, National Taiwan University, No. 1, Jen Ai Road, 1st section, Taipei, Taiwan 100, R.O.C.**

ASSISTANT PROFESSOR OF PHYSIOLOGY

The Department of Physiology at the University of Texas Health Science Center at San Antonio is seeking applicants for a full-time tenure-track position at the Assistant Professor level. Applicants should have a doctoral degree in Physiology or related discipline and at least three years of postdoctoral experience. The department is especially interested in persons with expertise in cellular and/or molecular physiology who can apply such expertise toward gaining an understanding of the mechanisms of vascular function. Areas of interest may include but are not limited to the physiology or receptors, transduction mechanisms, second messengers, growth regulation and/or transgenic approaches. Interested applicants should send a letter of application and detailed curriculum vitae and have three letters of recommendation sent by January 1, 1994, to: **John M. Johnson, Ph.D., Faculty Search Committee, Department of Physiology, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756.** *The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.*

SUNY HEALTH SCIENCE CENTER AT SYRACUSE FACULTY POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

We invite applications for two tenure-track positions. While we expect to make appointments at the **ASSISTANT PROFESSOR** level, candidates at higher levels also will be considered. Outstanding candidates in all areas of biochemistry and molecular biology are encouraged to apply. Applicants must have a Ph.D., M.D. or equivalent degree, postdoctoral experience, demonstrated research productivity and a commitment to excellence in teaching medical and graduate students. Send letter of application (with curriculum vitae and summary of research plans) and have three letters of reference forwarded to: **Dr. Harvey S. Penefsky, Chair, Search Committee, Department of Biochemistry and Molecular Biology, State University of New York Health Science Center at Syracuse, 750 East Adams Street, Syracuse, NY 13210.** Review of applications will begin November 1, 1993, and continue until the positions are filled.

An Affirmative Action/Equal Employment Opportunity/ADA Employer.

Tri-Institutional Program prepares physician-scientists to investigate, as well as treat disease.

The Tri-Institutional MD-PhD Program enables a select group of highly qualified students to combine medical training at Cornell University Medical College with the extraordinary biomedical research and educational opportunities available at the **Cornell University Graduate School of Medical Sciences, The Rockefeller University, and the Sloan-Kettering Institute** ■

Research training is offered in biochemistry, biophysics, cell biology, genetics, immunology, molecular biology, neurosciences, pharmacology, physiology, and virology ■ Because of the increasing diversity of the United States population, the national need for physician-investigators who are members of under-represented minority groups is acute ■ The Tri-Institutional MD-PhD Program is actively seeking to increase applications from under-represented minority students ■

For further information, please contact:

Tri-Institutional MD-PhD Program

Cornell University Medical College

1300 York Avenue, New York, NY 10021

Telephone: (212) 746-6023

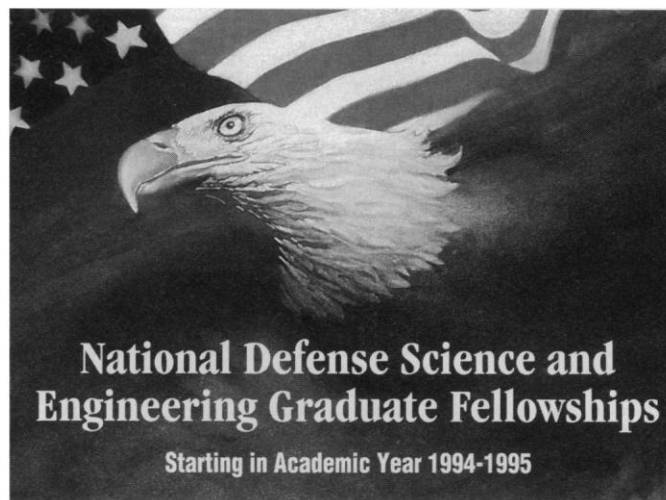
DIRECTOR Center for Molecular and Cellular Neurobiology

The Division of the Biological Sciences of the University of Chicago is soliciting nominations and applications for the position of Director for the **Center for Molecular and Cellular Neurobiology**, one of five biomedical research centers to be located in the Institute for Molecular Medicine, housed within the new Jules F. Knapp Research Building. The other research centers will be devoted to the study of human genetics, molecular cardiology, immunology, and molecular oncology. The Center is committed to molecular and cellular biological research with the ultimate goal of understanding fundamental biology of the nervous system and neurological diseases. The Center will have 10,000 net square feet of newly constructed research space which has been planned to house six investigators. The Director will be responsible for the development of this program and for recruiting the five additional Center faculty members who will have primary academic appointments in an appropriate department. Funding is available for the establishment and initial support of this major new research program. The activities of the Center will complement ongoing programs in neurobiology at the University of Chicago. Please send (by January 1, 1994) nominations or applications, accompanied by a current curriculum vitae, to: **Dr. Jeffrey A. Bluestone, Acting Associate Dean of Basic Sciences and Chair, Neurobiology Center Director Search Committee, c/o D. Torgeson, University of Chicago, 5841 S. Maryland Ave., MC 1000, Chicago, IL 60637.**



**THE UNIVERSITY
OF CHICAGO**

The University of Chicago is
An Affirmative Action Equal Opportunity Employer



As a means of increasing the number of U.S. citizens trained in disciplines of science and engineering of military importance, the Department of Defense plans to award approximately 90 new three-year graduate fellowships in April 1994. National Defense Science and Engineering Graduate Fellowships will be awarded for study and research leading to doctoral degrees in, or closely related to, the following disciplines:

AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

BIOSCIENCES (includes Toxicology)

CHEMICAL ENGINEERING

CHEMISTRY

COGNITIVE, NEURAL, AND BEHAVIORAL SCIENCE

COMPUTER SCIENCE

ELECTRICAL ENGINEERING

GEOSCIENCES (includes terrain, water, and air)

MANUFACTURING SCIENCES AND ENGINEERING (includes Industrial Engineering)

MATERIALS SCIENCE AND ENGINEERING

MATHEMATICS

MECHANICAL ENGINEERING

NAVAL ARCHITECTURE AND OCEAN ENGINEERING

OCEANOGRAPHY

PHYSICS (includes Optics)

National Defense Science and Engineering Graduate Fellows selected in 1994 will receive a stipend in addition to full tuition and required fees. The amount of the stipend is \$16,000 for 1994-1995; \$17,000 for 1995-1996; 18,000 for 1996-1997. Also, the fellow's graduate academic department will receive \$2,000 per year.

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

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

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

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

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

Completed applications must be received by Battelle by **January 19, 1994.**



POSITIONS OPEN

FACULTY POSITION AVAILABLE

Bacterial Pathogenesis: The Department of Microbiology at Washington State University (WSU) invites applications for a 9-month, tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Preference will be given to individuals with research interests and experience in the molecular basis of bacterial pathogenesis. Applicants must have postdoctoral training. The successful candidate will be expected to establish an active, externally funded research program and participate in graduate and undergraduate teaching in the areas of general and pathogenic microbiology. Send curriculum vitae, statement of research interests and professional objectives, and at least three letters of reference to: **Dr. Kemet D. Spence, Search Committee Chairman, Department of Microbiology, Washington State University, Pullman, WA 99164-4233**. Review of applications begins November 15, 1993, and continues until the position is filled. *WSU is an Equal Opportunity/Affirmative Action Educator and Employer. Protected group members are encouraged to apply.*

ASSISTANT PROFESSOR POSITION in Molecular Biology. The University of Texas (UT) M.D. Anderson Cancer Center, Science Park-Research Division in Smithville, Texas, is expanding into new laboratories and invites applications for a tenure-track position at the Assistant Professor level. Research at Science Park encompasses programs in mechanisms of multistage carcinogenesis, retrovirology, DNA damage and repair, and genetics. Successful applicants will be expected to establish high-quality, independent research programs. Preference will be given to applicants working in the area of molecular biology of cancer, emphasizing tumor suppressor genes, oncogenes, and/or cancer genetics. Consideration will also be given to strong applicants in other areas of molecular biology. Submit curriculum vitae, two representative publications, brief outline of current and future research plans, and three letters of reference by December 1, 1993, to: **Dr. M. C. MacLeod, U.T. M.D. Anderson Cancer Center, Science Park-Research Division, P.O. Box 389, Smithville, TX 78957**. *Equal Opportunity/Affirmative Action Employer.*

TWO TENURE-TRACK ASSISTANT PROFESSOR POSITIONS IN DEVELOPMENTAL NEUROBIOLOGY

Department of Anatomy
University of Utah School of Medicine

Ph.D., M.D. or equivalent degree and postdoctoral research experience and must be able to develop a strong independent research program. Demonstrated research expertise in any aspect of nervous system development will be considered. Strong commitment to teaching both medical and graduate students; prior teaching experience in a medical school basic science curriculum is preferred. These positions will not require teaching of human (gross) anatomy. Send curriculum vitae (including a bibliography and list of grant support), a statement of research interests, and the names and addresses of three references.

Send applications to: **T. N. Parks, Chair, Department of Anatomy, University of Utah School of Medicine, Salt Lake City, UT 84132**. Deadline for applications and nominations is February 1, 1994, or until position is filled. *The University of Utah is an Affirmative Action/Equal Opportunity Employer.*

CHEMICAL OCEANOGRAPHY. The School of the Environment of Duke University invites applicants for a tenure-track faculty position at the level of **FULL PROFESSOR** in chemical oceanography. The School seeks applicants with experience in organizing and implementing ocean research projects. In particular, applicants with research interests in large scale carbon and nitrogen cycles are encouraged to apply. The new faculty member will be resident at the Marine Laboratory in Beaufort, North Carolina, and will be expected to be a leader in Duke's developing curriculum and research effort in the ocean sciences.

Send curriculum vitae, names of three referees, and letter of research and teaching interests to: **Professor Richard T. Barber, Chairman, Oceanography Search Committee, Duke University, School of the Environment, Marine Laboratory, Pivers Island, Beaufort, NC 28516-9721** by October 14, 1993.

Duke University is 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 Medicine, 2160 South First Avenue, Maywood, IL 60153**. *Loyola University is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR

Department of Molecular and Cellular Engineering
University of Pennsylvania Medical Center
Hospital of the University of Pennsylvania

This large academic institution with established teaching and research programs is seeking Ph.D.; M.D.; and M.D./Ph.D. investigators at the Assistant Professor level in the tenure track to participate in research emphasizing basic biology of human disease. This new basic science department will develop programs aimed at defining molecular pathogenesis of human diseases and developing novel approaches to therapy. Successful applicants will be appointed in the Department of Molecular and Cellular Engineering. Competitive salary and benefit packages. Send a letter, curriculum vitae, research interests, and the names of three references to: **James M. Wilson, M.D., Ph.D., Chairman, Department of Molecular and Cellular Engineering, Director, Institute for Human Gene Therapy, University of Pennsylvania, 6 Maloney, 3400 Spruce Street, Philadelphia, PA 19104-4283**.

An Equal Opportunity/Affirmative Action Employer. We encourage minority and women candidates.

NEUROBIOLOGIST

The Department of Biological Sciences at the University of Illinois at Chicago (UIC) invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek a neurobiologist interested in understanding integration in neural systems using cellular or computational approaches. Interests may include, but are not limited to, sensorimotor integration in invertebrates or vertebrates, and modulation of synaptic function relevant to behavior. Review of applications will begin September 15, 1993, and will continue until the position is filled. Send curriculum vitae, a brief statement of research plans, and three letters of reference to:

Neurobiology Search Committee
c/o Dr. Sidney B. Simpson, Jr., Head
Department of Biological Sciences
University of Illinois at Chicago
845 West Taylor Street
Chicago, IL 60607

UIC is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR OF PATHOLOGY. Zoological Society of San Diego has immediate opening for a senior zoo veterinary pathologist to serve as director of its Pathology Department. Excellent salary/benefits. D.V.M. or equivalent degree from an accredited institution required. ACVP Board certification required. Ph.D. desirable. The department's work is primarily diagnostic pathology service for the combined collection of the San Diego Zoo and Wild Animal Park. Research and training are also a part of the program goals. Send curriculum vitae, three professional references, statement of availability, and career goals to: **San Diego Zoo, Pathology Department, Box 551, San Diego, CA 92112-0551**. Deadline for applications is October 1, 1993, or until a suitable candidate is found.

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF PSYCHOLOGY BRANDEIS UNIVERSITY

The Department of Psychology at Brandeis University invites applications for a tenure-track assistant professorship to begin in September 1994. We seek candidates in cognition or cognitive neuroscience with research interests in the areas of memory and/or attentional systems, cognitive aging, motor control, or language processing. We welcome candidates in these areas with any number of approaches, including the use of diverse populations (e.g., normal elderly or neurological populations) or experimental environments (e.g., artificial gravitational environments). The position includes a joint appointment in the Vollen National Center for Complex Systems. Candidates should have completed a Ph.D., and preferably have some postdoctoral experience.

The deadline for receipt of materials is January 1, 1994. Materials should include curriculum vitae, recent reprints, and three letters of recommendation.

Send all materials to: **Dr. Malcolm Watson, Chair, Department of Psychology, Brandeis University, Waltham, MA 02254**.

We particularly encourage applications from women and minorities. Brandeis University is an Equal Opportunity/Affirmative Action Employer.

PROFESSOR/ASSOCIATE PROFESSOR, Michigan State University (MSU), Department of Pathology. The department serves the College of Veterinary Medicine and the Colleges of Medicine. The position is to provide leadership for the Department's graduate program and overall research efforts in pathotoxicology, environmental pathology and related areas. MSU currently has strong interdisciplinary programs involving pathotoxicology; this position is seen as an integral component of these campus-wide activities. Applicants must have demonstrated the ability to lead and support a superior research program in pathotoxicology or environmental pathology. Applicants should possess a professional degree (D.V.M./M.D. or equivalent degree) and/or a Ph.D. Appropriate board certification is preferred. Salary is negotiable. Date available is August 1, 1993, and the preferred application deadline is October 15, 1993, or until a suitable candidate is identified. For further information, contact: **Dr. Thomas Bell, Professor and Search Chairman, Telephone: (517) 353-5275, Department of Pathology, Michigan State University, East Lansing, MI 48824-1316**. Refer to #VM253.

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

FRESHMAN LABORATORY COORDINATOR. A non-tenure-track, full-time position starting January 3, 1994. Seeking individual to assume full responsibility for all aspects of a two-semester majors' sequence emphasizing cell biology (fall) and genetics (spring). Minimum qualifications: M.S. in biology and laboratory teaching experience. Within three weeks after ad appears, please send letter of application, résumé, copies of all transcripts, name and telephone number of three references to: **Dr. James Watrous, Chairman, Biology Department, Saint Joseph's University, 5600 City Avenue, Philadelphia, PA 19131**. *Equal Opportunity/Affirmative Action Employer.*

PROFESSOR AND HEAD, DEPARTMENT OF FOOD SCIENCE. The College of Agriculture and Life Sciences of North Carolina State University is searching for an outstanding individual to administer the teaching, research and extension programs of the Department of Food Science. Applicants must have earned the Ph.D. degree in Food Science or a closely related discipline, have a record of outstanding professional achievement and leadership in the field with a working knowledge of current developments. Administrative experience or demonstrated leadership potential in teaching, research and extension is preferred. Applications should include a résumé with publication list, names and addresses of at least three references and a brief statement of career goals. Screening of applications will begin November 1, 1993, and continue until a suitable candidate is found. Address applications to: **Dr. Thomas J. Monaco, Chair, Search Committee; Department of Horticultural Science, Box 7609; North Carolina State University, Raleigh, NC 27695-7609**. *North Carolina State University is an Equal Opportunity/Affirmative Action Employer.*

MOLECULAR BIOLOGY

QIAGEN INC. is a fast growing biotechnology company, committed to excellence in the development and marketing of innovative products for molecular biology research. We are seeking highly motivated and talented individuals to join our team. All of the following positions except the Technical Sales Representative positions are based in our Los Angeles headquarters.



Sequencing Specialist

Responsible for the support of our genome sequencing customers. Applicants must possess a thorough working knowledge of sequencing techniques, especially automated fluorescent sequencing. BS/MS/Ph.D degree in molecular biology with 2+ years of laboratory experience is considered important. Traveling is expected.

Technical Service Specialist

Responsible for answering technical inquiries related to our product lines, assisting customers with product applications, customer and sales force training and technical writing. Applicants must have a thorough practical experience of all current molecular biology techniques and good verbal and written communications skills. BS/MS degree in molecular biology or related disciplines with 2+ years of laboratory experience in molecular biology is desirable.

Technical Writer

Responsible for writing technical articles, applications notes, protocol manuals and product information sheets. Applicants should have proven technical writing skills and the ability to work independently. BS/MS/Ph.D degree in molecular biology with 2+ years of molecular biology laboratory experience is desirable.

Product Manager

Responsibilities include marketing strategy and analysis, product introduction, and working with the sales force. Traveling (30%) is expected. Applicants should have good communication skills, proven technical writing skills and the ability to work independently. Prior product management experience is a must. BS/MS/Ph.D degree in molecular biology with 2+ years of molecular biology laboratory experience is desirable.

Technical Sales Representatives

Applicants should have a BS/MS degree in molecular biology or related fields and 2+ years of lab experience in molecular biology. Prior sales experience is preferred, but not necessary. Please state on your resumé which geographical area you would like to sell in and if you are open to relocation.

We offer competitive salaries, benefits including relocation assistance and a challenging, high growth environment. For immediate consideration, please send a resumé, salary history and reference names to:

QIAGEN INC., Human resources, 9600 De Soto Avenue, Chatsworth, CA 91311 • Phone: 800-426-8157 • Fax: 818-718-2056

FACULTY POSITION IN MOLECULAR BIOLOGY

The Center for Advanced Biotechnology and Medicine (CABM) and the Department of Molecular Biology and Biochemistry at Rutgers University are seeking applicants for a tenure-track faculty position. Applicants should have a strong record of publication in the processes of transcriptional control mechanisms, RNA splicing, DNA replication, macromolecular structure and recognition, receptors, or signal transduction. The successful candidate will occupy new laboratory space in the CABM building and join a growing and highly productive life-sciences community on the Busch campus where there are opportunities for research collaboration and participation in several university graduate programs. The position is highly competitive with regard to start-up funds, laboratory space, salary and benefits. Please send a CV, publications, and summary of research activities and plans, along with names and addresses of 3 references to: **Drs. Aaron J. Shatkin and Robert M. Krug, CABM/MBB Search Committee (2), 679 Hoes Lane, Piscataway, NJ 08854-5638.**

Rutgers University is an Equal Opportunity/Affirmative Action Employer. m/t/h/v

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS



C A B M

THE ROCKEFELLER UNIVERSITY

seeks applications for positions in

MEDICAL SCIENCES

A number of new appointments will be made in medical sciences as independent heads of laboratory at the Assistant or Associate Professor level. Initial institutional support from the Markey Charitable Trust Program in Molecular Medicine is available. To be competitive, candidates must have an M.D. or M.D./Ph.D. degree and a strong interest and background in working at the interface of human disease and basic science. Please address written replies to:



Chairperson of the
Medical Sciences
Search Committee
**ROCKEFELLER
UNIVERSITY**
Box 80, 1230 York Ave
NY, NY 10021-6399

The Rockefeller University is an Equal Opportunity/Affirmative Action Employer.

Postdoctoral Research at The Wistar Institute



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

peutics, 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, 36th & Spruce Streets, Philadelphia, PA 19104.** Interested Postdoctoral applicants are requested to send a Curriculum Vitae and the names of three (3) references. An Equal Opportunity Employer.

Research Scientist, Ph.D. Computational Chemistry

The Upjohn Company is seeking a Ph.D. Research Scientist to join our Computational Chemistry Department. In this position, you will assist with the implementation of computational methods in molecular modeling, chemical and bioinformatics and biocomputation to support the discovery of new drugs. In addition, you will establish a research program which applies novel computational methods to at least one of the following disciplines: chemistry, biochemistry, biophysics, bioengineering, molecular biology, or biostatistics.

Candidates should hold a Ph.D. in Chemistry, Biochemistry, Biophysics, Bioengineering, Molecular Biology, Biostatistics or a related discipline and have substantial programming experience. Individuals with a Ph.D. in Computer Science and demonstrated experience in one of the above scientific areas will also be considered. Substantial experience with UNIX, C and FORTRAN is required. A knowledge of networking, X-Windows, DBMS and graphics would be an asset.

For confidential consideration, send your CV to: **The Upjohn Company, Corporate Recruiting, Position #179, 7000 Portage Road, Kalamazoo, MI 49001.** Equal Opportunity Employer, M/F/D/V.



Postdoctoral Positions at the University of Pittsburgh

Postdoctoral positions are available for excellent candidates to study within a variety of systems in molecular, cellular, and developmental biology within the Department of Biological Sciences at the University of Pittsburgh. These positions are fully funded and will be awarded on a competitive basis. The contributing faculty and their research interests are:

Scott Baird: Developmental genetics of peripheral sense organs in *C. elegans*.
David Burgess: Regulation of cytoskeleton during cellular differentiation.
Richard Carthew: Molecular mechanisms of signal transduction in regulating cell differentiation.
Albert Chung: Regulation of the biosynthesis and assembly of basement membrane glycoproteins.
Donald DeFranco: Steroid hormone regulation of gene expression.
Todd Evans: Tissue-specific gene regulation during *Xenopus* development.
Paula Grabowski: Mechanisms of alternative pre-mRNA splicing.
Graham Hatfull: Mycobacterial genetics: site-specific recombination.
Roger Hendrix: Virus structure and mechanisms of virus assembly.
Lewis Jacobson: Neural control of muscle protein catabolism.
Linda Jen-Jacobson: Molecular determinants of sequence specificity in protein/DNA interactions.
Michael Kuziora: Homeotic gene function: *Drosophila* developmental genetics.
Eileen Lafer: Molecular biology of the synapse; structure/function of T7 RNA polymerase.
Craig Peebles: Structure and function of self-splicing group II introns.
James Pipas: Molecular mechanisms of oncogenesis.
John Rosenberg: X-ray crystallographic and molecular dynamic studies of DNA/protein interactions.
Charles Walsh: Molecular organization of nucleoli, the cytoskeleton, basal bodies, and flagella.

Send curriculum vitae, the names of three references, and an indication of those faculty whose programs are of primary interest to:

MCDB Postdoc
Department of Biological Sciences
234 Langley Hall
University of Pittsburgh
Pittsburgh, PA 15260

SENIOR SCIENTIST

Supragen, Inc., an emerging Denver-based biotechnology company, is seeking an MD with laboratory experience to study immunological abnormalities in patients with autoimmune disease. The Company has a group of well established immunologists, biochemists and virologists with whom the successful candidate will interact.

Supragen requests applicants with MDs, with or without PhDs, who have clinical experience in treating autoimmune diseases and at least two years of research laboratory experience in molecular biological techniques. Candidates with experience studying rheumatoid arthritis as well as other autoimmune diseases will be given preference.

Supragen offers competitive salaries and benefits as well as the opportunity to work in a dynamic, highly motivating and interactive scientific environment. For consideration, please submit your curriculum vitae to: **The Recruitment Committee, Supragen, Inc., 1670 Pierce Street, Lakewood, CO 80214.**



PROJECT DIRECTOR International Gemini Project

The Gemini Project is seeking a Director to lead this \$176 million international effort to build two 8-meter telescopes on Mauna Kea (Hawaii) and Cerro Pachon (Chile) to be completed in 1998 and 2000, respectively.

The original partners in the Gemini Project (the United States, United Kingdom, and Canada) have been joined by Chile, Argentina, and Brazil. They have established a Gemini Board as the Primary forum for interaction and decisions among the partners. The National Science Foundation (NSF), with a 50% share in the project on behalf of the U.S. astronomical community, has been designated Executive Agency, acting on behalf of the other partners. NSF has appointed the Association of Universities for Research in Astronomy, Inc. (AURA) the Managing Organization. The Director will be appointed by AURA acting on behalf of the Gemini Board.

The Director is responsible for the overall conduct of the Gemini Project, and must provide clear scientific and technical leadership. The Director is charged with completing the telescopes on time and to budget, with commissioning them and the first phase of instrumentation, and with establishing a long-term strategy to ensure the effective scientific exploitation of the two telescopes and their sites. The Director is the primary spokesperson for the Gemini Project.

The successful candidate should be a recognized scientist with a proven record in the management of large projects in astronomy or related areas of science. Experience in managing international projects would be an advantage but is not essential. While the post clearly demands the full-time attention of the Director, it is expected that the Director would conduct personal research. Salary and benefits are competitive and negotiable.

The Search Committee will begin evaluating nominations and applications in October 1993. Applications will be accepted until the position is filled. Send letters of nomination and applications with evidence of experience, relevant accomplishments, a resume, and at least three references to:

Chairman
Gemini Director Search Committee
c/o AURA, Inc. - Suite 701
1625 Massachusetts Avenue, N.W.
Washington, D.C. 20036

AURA is an EOE/AA/F/H/V employer

BROOKHAVEN NATIONAL LABORATORY

ASSOCIATE DIRECTOR BASIC ENERGY SCIENCES

Brookhaven National Laboratory (BNL) is a multidisciplinary laboratory engaged in a diverse program of basic and applied research. The Laboratory is managed by Associated Universities, Inc., under contract with the U.S. Department of Energy (DOE). We seek an Associate Director for Basic Energy Sciences.

The successful candidate will serve as a member of the Laboratory Directorate, which has executive responsibility for all activities of the Laboratory. S/he will have general oversight and planning responsibility for the research programs supported by the DOE Office of Basic Energy Sciences and carried out within the three BNL departments of Applied Science, Chemistry and Physics; and for research at two major BNL facilities, the National Synchrotron Light Source and the High Flux Beam Reactor. In addition, the successful candidate will have line responsibility for the Chemistry and National Synchrotron Light Source Departments.

We seek candidates with an international reputation in one or more of the relevant fields of research and with substantial experience in administering research programs.

Brookhaven is situated on 5,000 acres on Eastern Long Island, New York, in the heart of a region with a strong base in university and industrial research. Applications and nominations should be sent by December 1, 1993 to Dr. Victor J. Emery, Chair, Search Committee, Building 510A, Brookhaven National Laboratory, Associated Universities, Inc., P.O. Box 5000, Upton, NY 11973-5000. Equal Opportunity Employer M/F/D/V.



BROOKHAVEN
NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
on the frontier of science and technology

FACULTY MEMBER SOUGHT FOR ATMOSPHERIC TRANSPORT PROCESSES POSITION IN THE ENVIRONMENTAL AND WATER STUDIES PROGRAM AT STANFORD UNIVERSITY

At Stanford University, the Program in Environmental Water Studies, Department of Civil Engineering, seeks a person interested in the modeling of the coupled atmospheric transport processes which fit logically in the context of understanding weather, climate and hydrologic systems. The tenure-track appointment at the assistant professor level would include, as well, an appointment in the Environmental Fluid Mechanics Laboratory. Applicants are sought with strong basic background in fluid mechanics, applied mathematics, computational mechanics, and numerical simulation. Applicants should have depth in one or more of the following areas: large-scale hydrologic systems, atmosphere modeling, regional or global climate/weather change, or land/atmosphere/ocean interactions. Interest and/or background in environmental chemistry or biology would be useful. In addition to conducting sponsored research, this faculty member will teach courses at the graduate level that reflect her/his research interests and will contribute to the undergraduate program in the environmental and water studies track of Civil Engineering. She/he is expected to have close collaborations with her/his laboratory partners, with the faculty in the Program in Environmental and Water Studies, and with faculty in Mechanical engineering, Earth Sciences, Biology, and the Institute for International Studies who share an interest in the environment and global change. The position is to be filled for the Autumn of 1994 and applications must be received by 1 November 1993. Applicants should send a detailed resume, undergraduate and graduate transcripts for all University-level schooling, a description of research and teaching interests, and a list of at least three potential references to **Professor Robert L. Street, Chair, Faculty Search Committee [ATP], Department of Civil Engineering, Stanford University, Stanford, CA 94305-4020.** Stanford is an equal opportunity, affirmative action employer.

SCIENTIST



Tularik

Tularik is a rapidly growing biopharmaceutical company dedicated to the discovery and development of novel therapeutic products that regulate gene expression.

We are currently assembling a multidisciplinary team and have an immediate opening for the following position.

We are seeking a scientist with a solid background in Biochemistry or Biochemical Pharmacology. This individual will play a key role in discovering lead compounds in a variety of therapeutic areas. As a member of the Pharmaceutical Screening group, the successful candidate will work closely with molecular biologists, chemists and assay development scientists to develop assays and evaluate candidate inhibitors and activators. Experience in enzymology, familiarity with various assay detection systems, as well as an interest in studying protein/protein and protein/DNA interactions are required. A personal commitment to high quality drug discovery and strong interpersonal skills are necessary to function as part of a highly interactive team. Ph.D. and 2 years' postdoctoral experience are required.

Tularik offers productive and experienced leadership, equity participation, competitive salary and benefits, and a very exciting research environment. For consideration, please submit cv to: **L. Medin, Tularik Inc., 270 East Grand Avenue, South San Francisco, CA 94080.** EOE.



ASSOCIATE VICE PRESIDENT FOR RESEARCH

ASSOCIATE VICE PRESIDENT FOR RESEARCH is a new position in the recently established Office of the Vice President for Research, with broad responsibilities for research and creative activity throughout the University at Buffalo (UB).

The OFFICE OF THE VICE PRESIDENT FOR RESEARCH is responsible for: research policy and planning; administration of organized research units; administration of externally funded research, training, and public service grants and contracts; the Office of Technology Transfer Services; industrial relations; human subjects review boards and committees responsible for oversight of various other compliance areas; the University's technology business incubator facility; and the Buffalo Materials Research Center. In addition, this office shares responsibility for economic development and federal relations.

The **ASSOCIATE VICE PRESIDENT** will be a key participant in policy formulation and in setting future directions for research at UB. Working with faculty, deans, other senior administrators and the UB Foundation, the successful candidate will provide leadership in developing and organizing collaborative and consortial research initiatives, assist in identifying and securing funding for such initiative, and help advance research and public service programs that enhance the region's and the state's economic development and quality of life. Other responsibilities include administration of organized research units, institutional grants programs, and administration of core research and research support facilities.

QUALIFIED CANDIDATES will have experience at a university or research organization as an independent investigator, a record of research accomplishment, demonstrated success in securing research funding, strong administrative and leadership abilities, experience with and knowledge of relevant government funding agencies, high ethical standards and a commitment to excellence.

THE UNIVERSITY AT BUFFALO, a member of the Association of American Universities, is a major public research university with more than 25,000 students, more than 100 post-baccalaureate degree programs, approximately 6,000 faculty and staff, and an annual volume of externally sponsored research and training exceeding \$120 million. Located in Western New York, Buffalo is a dynamic community with affordable housing, excellent schools, and a rich cultural climate.

APPLICATIONS and nominations will be assured full consideration if received prior to November 15, 1993, by: Chair, Search Committee for Associate Vice President for Research, University at Buffalo, 516 Capen Hall, Box 601611, Buffalo, NY 14260-1611.

THE UNIVERSITY AT BUFFALO is an Equal Opportunity, Affirmative Action Employer. Applications from members of minority groups and women are encouraged.

UNIVERSITY AT BUFFALO

State University of New York

POSITIONS OPEN

EVOLUTIONARY BIOLOGY

As part of its continuing development of an ecology/evolution group the Department of Biological Sciences, State University of New York at Buffalo, invites applications for a tenure-track position at the level of **ASSISTANT PROFESSOR** starting in fall 1994. We seek an individual working in the area of population/evolutionary ecology. The department has strengths in plant biology and aquatic ecology (marine and freshwater). We are developing a program that addresses evolutionary and ecological questions by integrating ecological, physiological and molecular levels of analysis, and we seek an individual who can work at multiple levels of analysis and interact with these groups. The successful candidate will be expected to develop an active, externally funded research program, develop a graduate course in either evolutionary processes or ecological genetics, and contribute to the Department's undergraduate program. Candidates should have two years of postdoctoral or equivalent experience. Applications, including curriculum vitae, statement of research and teaching interests, and three letters of recommendation should be submitted before December 1, 1993, to: **Dr. Howard Lasker, Evolutionary Biology Search Committee, Department of Biological Sciences, SUNY at Buffalo, Buffalo, NY 14260-1300.** *The State University of New York is an Equal Opportunity/Affirmative Action Employer.*

DIRECTOR OF GENE THERAPY VECTOR CORE

The University of Iowa College of Medicine, Department of Internal Medicine, is seeking a Director of the Gene Therapy Vector Core. The main goal of the Vector Core is to further the interest in and facilitate the development of gene transfer as a therapeutic modality for treating human disease. The Director will pursue this goal in several ways. Person will be encouraged to develop collaborations with investigators in basic and clinical departments throughout the College. Collaboration may involve the production of a number of gene transfer vectors as well as assistance and direction in the development of appropriate protocols for testing hypotheses relevant to gene transfer to treat disease. The director would be encouraged to develop new vectors for gene transfer that might have either specific or broad applications. The Director would collaborate and consult on the design and development in *in vitro* and *in vivo* preclinical studies focused on assessing safety and efficacy of gene transfer. The training of investigators in the use and development of new vectors would also be an important aspect of the position. Requires a Ph.D. or the equivalent combination of education and experience as well as several years of independent research work. This work will be evidenced by publications, inventions and the like which have had considerable impact and value to the person's field or discipline. Experience in animal virology, previous development of vectors for gene transfer and experience in the area of gene therapy is desirable. *The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Send résumé to: **Personnel, Internal Medicine, SE 315 GH, University of Iowa, Iowa City, IA 52242.**

EDITOR-IN-CHIEF—ANNUAL REVIEWS INC.

Located in modern publishing offices in Palo Alto, California, this long-established not-for-profit publisher of annual reviews in a wide number of scientific disciplines seeks a full-time Editor-in-Chief and invites applications from experienced, well-qualified candidates. The Editor-in-Chief should be dedicated to scientific publishing, enjoy interacting with the scientific community, represent integrity and fairness, and bring a vision of how Annual Reviews Inc. can maintain its leadership as the publishing world evolves. The Editor-in-Chief reports to the Board of Directors and serves as liaison among Editors and Editorial Committees for the different review series, to maintain the quality of its existing publications and to develop new projects designed to enhance the organization's service to science and scholarship. Local residence is required; salary is commensurate with qualifications and responsibilities. Deadline for application is December 1, 1993. Résumés and references should be sent to: **Prof. Richard N. Zare, Vice-Chair, Board of Directors of Annual Reviews Inc., Department of Chemistry, Stanford University, Stanford, CA 94305-5080.**

POSITIONS OPEN

CURATORIAL ASSOCIATE Department of Entomology

The Museum of Comparative Zoology at Harvard University invites applications for a Curatorial Associate position in Entomology. The successful candidate will be responsible for the administration of the collections, including personnel management and collection maintenance. He/she will work with the curators on planning and implementing long-term goals for the collections, particularly in the development of databases to make the collections accessible to the scientific community for research and information purposes. The position will also entail daily supervision of collection staff, and preparation of budgets and grant proposals related to the collections.

Qualifications we seek include: M.Sc. or equivalent experience in systematic entomology, knowledge of current curatorial methods, solid understanding of organization and implementation of computerized database systems and their applications to museum collections, previous curatorial experience, and demonstrated competence in an administrative position.

Cover letter, résumé, and three letters of reference should be sent to: **Professor N.E. Pierce, Museum of Comparative Zoology, Harvard University, 26 Oxford Street, Cambridge, MA 02138.** Application deadline November 15, 1993.

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

SUPERVISORY OCEANOGRAPHER, OR SUPERVISORY RESEARCH FISHERY BIOLOGIST. The U.S. National Marine Fisheries Service announces a permanent interdisciplinary position. Serves as Director, Honolulu Laboratory, Honolulu, Hawaii, and is responsible for planning, directing, and coordinating fisheries research. Studies are directed toward management and conservation of living marine resources and for habitat and ecological research related to the preservation and enhancement of protected and endangered species. U.S. representative at national and international meetings directed toward development and formulation of U.S. policy on certain fisheries matters. May conduct self-directed research projects. Ability to provide scientific and managerial leadership for a large research laboratory is mandatory. Salary range: GM-15, \$66,609 to \$86,589 yearly plus 22.5% cost of living allowance. Some moving expenses may be paid. For application procedures contact: **Mr. Pete Macias, 206-526-6048, FAX: 206-526-6673** and reference announcement **#W/FSC93-650PM**, status applicants or **#FH-3-62**, nonstatus applicants. The application deadline is October 15, 1993. *Equal Opportunity Employer.*

STAFF OFFICER Polar Sciences

The Polar Research Board of the **NATIONAL RESEARCH COUNCIL** is seeking a Staff Officer. Responsibilities include staffing committees; preparing background documents, agendas, minutes, proposals, and reports; collecting and analyzing data; and planning and coordinating dissemination of reports. Requirements include a Ph.D. or equivalent in oceanography or a related field and at least two years of related experience; experience with polar science programs and public policy work highly desirable. Must also demonstrate ability to review and analyze technical literature and effective communication skills. Please send résumé to: **NRC/PRB, HA 454, 2101 Constitution Avenue, N.W., Washington, DC 20418.** *Equal Opportunity Employer.*

DIRECTOR, BONE MARROW TRANSPLANT LABORATORY

EXPERIMENTAL HEMATOPOIESIS. The University of Louisville Department of Medicine is seeking an **INSTRUCTOR/ASSISTANT PROFESSOR** of Medicine. Successful candidate will have a Ph.D. in biochemistry, biology, immunology or related field. He or she should have experience in the basic science of hematopoiesis and marrow transplantation. He or she will be responsible for the development of a research program in conjunction with an active clinical BMT program, in such areas as stem cell expansion and gene therapy. Respond with reference to **PCN 01387** by sending a letter of interest and curriculum vitae to: **Don A. Stevens, M.D., Director, Adult BMT Program, Department of Medicine, University of Louisville, Louisville, KY 40292.** *The University of Louisville is an Equal Employment Opportunity/Affirmative Action Institution.*

POSITIONS OPEN

VICE PRESIDENT OF RESEARCH

The Chicago Botanic Garden, located 30 miles north of the city of Chicago, seeks an individual to provide leadership in the innovation, planning, development, promotion, evaluation and administration of research programs in the plant sciences. This senior research administrator, with a national and/or international reputation, must hold a Ph.D. in the plant sciences, or genetic research applicable to plant breeding and evaluation; knowledge of conservation of plant communities and endangered horticultural or native plants desirable. In addition, the individual must possess a proven record of academic excellence in plant science research as evidenced by published record and successful development of grant-funded research programs. A qualified candidate must submit curriculum vitae including evidence of published record and success in grant-funded programs as well as salary history to: **Carol Chaney, Chicago Botanic Garden, P.O. Box 400, Glencoe, IL 60022.** Deadline for submission is December 31, 1993. Position to commence in early 1994. *The Chicago Botanic Garden is an Equal Opportunity Employer.*

SEARCH CONTINUED CHAIRPERSON, DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY, DUQUESNE UNIVERSITY

The Department of Chemistry and Biochemistry at Duquesne University invites applications and nominations for the position of Chairperson. Duquesne University is a private Catholic institution located in Pittsburgh, Pennsylvania, with a total enrollment of 8500 students. The Department, which consists of 12 full-time faculty and approximately 35 graduate students, offers the B.S., M.S., and Ph.D. degrees in Chemistry and Biochemistry. We are seeking an individual with nationally recognized research accomplishments and a commitment to undergraduate and graduate education. The successful candidate will demonstrate the ability to provide leadership and vision in a growing Department's research and educational programs. The area of expertise, rank, and salary are open. Applications should consist of a cover letter, curriculum vitae, and names and addresses of four references. Review of applications will begin November 1, 1993. Direct inquiries and applications to: **Search Committee, c/o Dr. J. W. Hausser, Interim Chair, Department of Chemistry and Biochemistry, Duquesne University, Pittsburgh, PA 15282.** *Equal Opportunity/Affirmative Action Employer.*

CHAIR

Department of Genetics and Developmental Biology University of Connecticut School of Medicine

Applications are requested for the Chair of a newly created basic science department. The ideal candidate will be actively engaged in a research program in genetics or developmental genetics, and have the academic background required to ensure vigorous departmental growth. It is intended that the department should have a significant focus in mammalian, including human, genetics, but also substantial research on other organisms. Applications should include complete curriculum vitae and should be submitted by October 1, 1993, to: **Chair, Genetics and Developmental Search Committee, Medical Dean's Office, University of Connecticut School of Medicine, 263 Farmington Avenue, Farmington, CT 06030.**

AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER, M/F/D/V.

CLINICAL CHIROPRACTIC FACULTY

New York Chiropractic College (NYCC) invites applicants for full-time and part-time teaching positions in: Technique/Biomechanics, General Diagnosis and NMS Diagnosis.

Applicants should possess or be eligible to sit for New York State licensing examination. A minimum of five years of practice or teaching experience is required, or completion of an approved residency program.

NYCC is located in the beautiful Finger Lakes Region of New York State. Send curriculum vitae to: **Bill Kaminski, Director Human Resources, Box 800, Seneca Falls, NY 13148.**

ROCHE

ROCHE INSTITUTE OF MOLECULAR BIOLOGY GRADUATE FELLOWSHIPS

Applications are invited for graduate fellowships in a program sponsored jointly by the Roche Institute of Molecular Biology and the Department of Biological Sciences at Columbia University. Selected students will complete their thesis research at the Roche Institute while academic requirements will be fulfilled in the Department of Biological Sciences at Columbia. This program is limited in size and highly competitive. Upon completion of the program, students will receive a Ph.D. degree from Columbia University. Persons holding a doctoral degree earned at any time and in any field are not eligible to apply. The Predoctoral Fellowships are intended for students who are at or near the beginning of their graduate study.

The Roche Institute of Molecular Biology, founded in 1967, is dedicated to basic research in emerging areas of molecular biology. Staff members enjoy complete independence in their choice and pursuit of research problems. The Institute is located in suburban New Jersey, approximately 10 miles west of Manhattan, making it readily accessible for lectures and courses at Columbia University and other educational centers in New York City.

Fellowships include stipend, paid tuition, scientific meeting travel support and additional benefits. GRE and TOEFL scores are required. Applications must be received by January 1, 1994 to be considered for the 1994-95 academic year.

For further information and application forms contact: **Administrative Office - Graduate Program, (201) 235-2783. Roche Institute of Molecular Biology, Nutley, New Jersey 07110.** We are an equal opportunity employer.

ROCHE**Roche Institute of Molecular Biology**

Hoffmann-La Roche Inc.



Director, Institute on Aging

The University of Pennsylvania seeks outstanding candidates for the position of Director of the Institute on Aging. The successful applicant will hold a primary appointment in the Department of Medicine.

The qualified individual should have an established reputation as a biomedical investigator with a strong research background in cell and molecular biology as well as a proven track record in training and developing physician-scientists and biomedical investigators.

The ideal candidate will have a background of clinical experience that provides appropriate insight for development of clinical aging research, education and patient care. Given the relative youth of this specialty, candidates from disciplines other than geriatric medicine will be considered if they exhibit excellent research and leadership qualifications, as well as an interest in the biology of aging.

The University of Pennsylvania is an equal opportunity, affirmative action employer. Women, minority and international candidates are encouraged to apply. Letters of interest, CV, and names of references should be sent to:



Edward Holmes, M.D.
Chairman, Institute on Aging Search Committee
Chairman, Department of Medicine
University of Pennsylvania
100 Centrex
3400 Spruce Street
Philadelphia, PA 19104-4283.

Dean, College of Natural and Agricultural Sciences

University of California, Riverside

The University of California, Riverside, invites applications and nominations for the position of Dean of the College of Natural and Agricultural Sciences. The faculty of the College have the threefold responsibilities of the Land Grant mandate in teaching, public service and direction of basic and applied as well as mission-oriented research in all aspects of the natural sciences and agriculture. Currently the College has an enrollment of approximately 2,172 undergraduates and 503 graduate students in 17 undergraduate and 20 graduate programs in the following academic departments and research units: Biochemistry, Biomedical Sciences, Biology, Botany and Plant Sciences, Chemistry, Dry Lands Research Institute, Earth Sciences, Entomology, Environmental Toxicology, Institute of Geophysics and Planetary Physics, Mathematics, Nematology, Neuroscience, Physics, Plant Pathology, Soil and Environmental Sciences and Statistics. On academic matters the Dean reports through the Executive Vice Chancellor to the Chancellor. The Dean also is responsible for the campus-based, mission oriented programs of the statewide Division of Agriculture and Natural Resources, including research programs of the Agricultural Experiment Station and public service programs for Cooperative Extension.

The College and the Agricultural Experiment Station hold 630,973 assignable square feet of space and 1,390 acres of agricultural research land; and in addition, administers seven off-campus holdings of the UC Natural Reserve System, comprising 28,159 acres. The College and the Agricultural Experiment Station have approximately 282 ladder-rank FTE, 22 Cooperative Extension and other academic FTE, and 386 non-academic staff FTE. The total college budget is over 34 million dollars. Approximately one-half of the College budget is allocated to the support of faculty and programs in the Agricultural Experiment Station and Cooperative Extension.

UC Riverside, a comprehensive land grant research institution is the most rapidly growing campus of the University of California and is projected to double its current enrollment of 9,000 students within the next decade. The Riverside campus affords major opportunity because of its expanding student enrollment and programs and its location in the most rapidly growing region of California.

The Chancellor and faculty seek candidates with commitment to academic excellence to lead the College. Applicants must have a distinguished record of research, teaching and public service appropriate to an academic appointment at the level of full professor in the College department of the candidate's discipline as well as a record of successful leadership and creative management. Salary will be commensurate with experience and qualifications. The target date for starting the position is **July 1, 1994**. Review of nominations and applications will begin November 15, 1993. Applications will be reviewed every two weeks thereafter until suitable candidates are identified. Nominations and letters of application, including a resume and the names and addresses of five references, should be sent to:



Chair, CNAS Dean Search Committee
Office of the Chancellor
University of California
Riverside, CA 92521

UCR is an Equal Opportunity/Affirmative Action Employer. Applications from, and nominations of, qualified women and minority candidates are particularly encouraged.



**CORNELL UNIVERSITY
GRADUATE SCHOOL OF MEDICAL SCIENCES**

**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 limited 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**



VASCULAR BIOLOGY

Assistant Professor

The Department of Pathology of The University of Chicago is seeking a M.D./Ph.D., Ph.D. or M.D. as Assistant Professor, tenure track, for the Program in Molecular Mechanisms of Vascular Disease.

Candidates (who may be completing Post-doctoral work) should have a solid basic science background that is, or can be, applied to the cardiovascular system. Examples include many aspects of cell and molecular biology, molecular genetics, lipoproteins, cell physiology, growth control, transgenics, etc.

Send a letter of application, curriculum vitae and a statement of research interests to:

**Peter F. Davies, Ph.D.
Chairman, Search Committee
Department of Pathology, MC 6079**



**THE UNIVERSITY
OF CHICAGO
5841 S. Maryland Avenue
Chicago, IL 60637**

*The University of Chicago is
An Affirmative Action Equal Opportunity Employer*

EXECUTIVE DIRECTOR, ECOLOGICAL SOCIETY OF AMERICA

The Ecological Society of America seeks an individual with proven administrative and leadership abilities, a deep understanding of the science of ecology and its relevance to society, and a commitment to advancing the role of ecology in decision making, to serve as Executive Director. The Executive Director will manage the Society's Headquarters in Washington, D.C. and will report directly to the President of the Society. The Executive Director will implement the Society's plans to expand the activities of the Washington office in three primary areas.

1. The Executive Director will be responsible for the business and financial affairs of the Society, including membership and subscription management and management of publication activities and sponsored programs. The Executive Director can expect to hire an Associate Director for Business to help in these matters and may, with approval of the Society, employ other staff or contract with a management company to accomplish some of these activities.
2. The Executive Director will, with guidance from the President, represent the Society to the executive and legislative branches of government, federal agencies, public and private foundations, and the general public. The Executive Director will work with an Associate Director of Public Affairs to expand the visibility and influence of ecology and the Ecological Society of America in the federal and international arena.
3. The Executive Director will seek foundation, corporate, and private support to expand the sponsored programs of the Society and to build the working capital of the Society.

The amount of time given to each of the above activities by the Executive Director will depend on the needs of the Society and directions from the President and the Executive Committee.

Expected Credentials: We seek candidates who are experienced ecologists, with a Ph.D. in Ecology or a closely related discipline and at least ten years of appropriate professional experience. The successful candidate will have had a strong record of research accomplishments and demonstrated success in leading and managing scientific organizations. Preference will be given to candidates familiar with the governmental process, with federal and private research and natural resource organizations, and with demonstrated fund raising experience.

Expression of Interest: The position will be available in early 1994 but will remain open until a suitable appointment has been made. Interested persons should send by December 1, 1993, a letter of interest, curriculum vitae, and names of three references to Dr. Ronald Pulliam, Chair, ESA Search Committee, Institute of Ecology, University of Georgia, Athens, Georgia, 30602, U.S.A. *The Ecological Society of America is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSISTANTS

In an environment which encompasses the best of the medical and academic worlds, Harvard Medical School offers ambitious individuals unique opportunities to gain invaluable experience. An affinity for medical research, plus entry- to intermediate-level lab experience is all you need to explore the advantages of a research position with Harvard Medical School. A number of learning-oriented opportunities are available immediately in a broad range of laboratory settings.

Appropriate candidates are individuals with solid science backgrounds, excellent interpersonal skills and the ability to work well independently. Additional qualifications include BA/BS or equivalent in a related field. Laboratory experience strongly preferred.

**Please send resume to Susan J. Thompson,
HMS Employment Office, 164 Longwood
Avenue, Boston, MA 02115. We will respond to
applicants in a timely manner; no phone calls,
please. Harvard upholds a commitment to
affirmative action and equal opportunity.**

HARVARD MEDICAL SCHOOL



Postdoctoral Research Associates

The Agricultural Research Service, as the principal scientific research agency of USDA, conducts research to solve technical food and agricultural problems of broad scope and high national priority. The agency's work is carried out under six specific research objectives—conservation of soil, water and air, plant productivity, animal productivity, commodity conversion and delivery, human nutrition and well-being, and integration of systems. Overall aim of ARS research is to ensure the continuation of an adequate supply of food and fiber of high quality to meet the needs of American people and for export.

ARS is an Equal Opportunity Employer

ARS is currently recruiting for 50 postdoctoral positions throughout the United States. Opportunities exist in many research areas, including:

- Human Nutrition
- Genetics
- Immunology
- Virology
- Biochemistry
- Chemistry
- Microbiology
- Animal Science
- Entomology
- Plant Physiology
- Plant Pathology
- Agronomy
- Soil Science
- Engineering



Successful candidates will be hired initially for up to 2 years in duration. Salary for these positions \$33,623 to \$40,298 (higher in parts of CA and NY) will be based on qualifications and experience. There are some employment restrictions for non-U.S. citizens.

For written descriptions of positions and application procedures, write to:

J.M. Ruth
Personnel Division (SC)
USDA/ARS
6305 Ivy Lane, Room 129A
Greenbelt, MD 20770-1435
or call:
Julie Cypriano
(301) 344-0101

TENURE-TRACK FACULTY POSITIONS

Department of Bioengineering
University of Utah

Applications are invited for two tenure-track positions in the area of "Biobased Engineering." Candidates must have an earned doctorate and a strong physical science or engineering background, with a specific biological direction to their research. We are specifically seeking candidates with demonstrated expertise in one of the following three areas.

1. **Micro/Nano Fabrication of Inorganic, Organic, and Biomolecular Materials:** use of inorganic materials, compliant biomaterials, or composite inorganic/polymeric materials to fabricate microsensors and microactuators, and the application of these microsystems to problems in the life sciences.
2. **Cellular Bioengineering:** cytoskeletal biomechanics, mechanisms of cell attachment, locomotion, and bioenergetics.
3. **Neural Plasticity and Control:** information processing and plasticity in higher neural centers, neural network architectures, and adaptive and hierarchical control systems.

Appointees will be expected to develop significant research programs, to assist in the development of new teaching laboratories, and to teach graduate classes in their areas of specialization. A complete CV, names of three references, and a brief career goals/objectives statement should be sent to **R. A. Normann, Ph.D., Professor and Chair, Department of Bioengineering, 2480 MEB, University of Utah, Salt Lake City, UT 84112 (phone 801-581-8528, FAX 801-585-5361) by January 15, 1994, or until qualified applicants are identified.**

The University of Utah is an AA/EO employer, encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

Research Opportunity



Professional positions are available in a Bioinformatics Program initiating the development of a new mammalian Gene Expression Resource. These positions entail literature searching, acquiring and analyzing data to be incorporated into the gene expression database, and providing information and database support for users. Successful applicants will be primarily responsible for data acquisition and database maintenance, but will also participate with the Gene Expression Resource group in determining database contents and display methods and with the Mouse Genome Informatics project which is developing genetic and molecular databases. Applicant must be versed in developmental biology/physiology. Molecular biology and genetics knowledge a plus. Other desirable attributes include writing/communication skills and experience using computers. MS degree in life sciences or equivalent experience required.

The Jackson Laboratory, located on the coast of Maine on the fringe of Acadia National Park, is a world renowned center and resource for mammalian biology and genetics.

Please contact: Harold R. Wheeler, Human Resources Manager, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609, (207) 288-3371, Internet hrw@aretha.jax.org.

An Affirmative Action/Equal Opportunity Employer



POSTDOCTORAL POSITION IN IMMUNOLOGY

St. Jude Children's Research Hospital Memphis, Tennessee

Applications are invited for a 3 year postdoctoral fellowship to work on the regulation of differential signal transduction via the T cell receptor/CD3 complex. We have recently shown that many MHC class II-restricted T cells receptors, in the absence of CD4, can only recognize a fraction of naturally processed peptides derived from a particular epitope. As this effect appears to be mediated by the extracellular domains of CD4, these studies will focus on defining the interaction sites between CD4 and the TCR/CD3 complex, and determining how this affects MHC:peptide recognition by the TCR. Further studies in this area may include the production of mutant mice by homologous recombination to study the effect of these interactions *in vivo*, determination of the TCR peptide interaction sites which are affected by CD4, and delineation of signal transduction pathways used during differential signaling.

Candidates should have a Ph.D., a broad knowledge of immunology, cell biology and biochemistry, and experience in mammalian tissue culture. Some prior experience in molecular biology and protein biochemistry is desired but not essential. The post is fully funded and is available in January 1994. Applications should include a C.V., names and FAX numbers of three referees, and an outline of future research and goals. Informal inquiries by phone are welcomed. Please contact **Dr. Dario Vignali, Department of Immunology, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, TN 38105, Tel. 901-522-0470 or FAX 901-522-8470. An affirmative action/equal opportunity employer. We provide a smoke free environment.**



POSITIONS OPEN

DIRECTOR, CENTER FOR PHARMACOLOGY/ PHARMACODYNAMICS RESEARCH

Nemours Children's Clinic, located in Jacksonville, Florida, is seeking an individual having an M.D., Ph.D., or Pharm.D. with equivalent experience in pharmacology, to assume development of the clinical research program. The successful candidate will be responsible for grant writing and overseeing independent investigations in a variety of subspecialty areas.

The position requires a demonstrated ability to develop strong research programs with a minimum of 3 years of relevant experience integrating basic research with clinical application. Applicants must have successful grantmanship abilities for federal and extramural funding. Excellent oral and written communication skills are important. Successful candidates are eligible to request academic appointments at the Mayo Medical School. Nemours Children's Clinic has an Academic Affiliation with the Mayo Foundation.

We offer competitive compensation, comprehensive flexible benefits, investment planning, and the opportunity to join a team of scientists in a unique research environment. The position will remain open until a suitable candidate is found. *Nemours is an Equal Opportunity Employer.*

Interested candidates should submit a letter of interest and curriculum vitae to: Charles Hartzell, Ph.D., Research Manager, The Nemours Foundation, P.O. Box 5720, Jacksonville, FL 32247. Telephone: (904) 390-3621.

CHAIRPERSON

Department of Pharmaceutical Sciences University of Nebraska College of Pharmacy

Applications and nominations are invited for the position of Chairperson of the Department of Pharmaceutical Sciences at the University of Nebraska College of Pharmacy. Candidates should possess a Ph.D. degree in one of the pharmaceutical or related sciences, as well as a demonstrated record of teaching excellence, research productivity, and extramural funding. The successful candidate will be expected to continue a productive research program and provide effective academic and research leadership.

The College is located on a health science campus and offers Pharm.D., M.S. and Ph.D. educational programs. Submit letters of application, including current curriculum vitae and the names and addresses of three references to: Clarence T. Ueda, Ph.D., Dean, College of Pharmacy, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-6000.

The University of Nebraska is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.

FACULTY POSITIONS IN PHYSIOLOGY AND BIOPHYSICS CASE WESTERN RESERVE UNIVERSITY

The Department of Physiology and Biophysics invites applications for several tenure-track junior and senior positions. Candidates with strong credentials in membrane protein structure and function, membrane proteins expression/cloning, electrophysiological and biophysical approaches are especially encouraged to apply; however, outstanding candidates in all areas of cell physiology and biophysics will be given serious consideration.

Terms are highly competitive, and appointments provide excellent opportunities to develop strong, independent research programs in newly built state-of-the-art facilities in a top-ranked, expanding department and medical school.

Submit curriculum vitae, brief statement of interest and proposed research interest, representative reprints and names of four references to: Dr. Antonio Scarpa, Department of Physiology and Biophysics, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4970. *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

MICROBIOLOGY/PSYCHOLOGY FACULTY

The American University of the Caribbean School of Medicine in Montserrat, West Indies, seeks two faculty members, one to teach Microbiology and Immunology, the other to teach Medical Psychology. Send curriculum vitae to: P.O. Box 400; Montserrat, West Indies. FAX: (809) 491-2913.

POSITIONS OPEN

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS

CHAIR, DEPARTMENT OF BIOCHEMISTRY

The University of Texas Southwestern Medical Center at Dallas invites applications and nominations for the position of Chair, Department of Biochemistry. Applicants should have an outstanding record of research accomplishments and demonstrated ability to provide leadership for this excellent department, which includes more than 30 faculty and over 100 fellows and students. Established research programs include major areas of molecular biology, genetics, developmental biology, and structural biology. There is opportunity for significant expansion, and the Chair will be responsible for recruiting, in addition to oversight of the research and the graduate and medical teaching functions of the department. Institutional support is from both state funds and generous endowments. Applications should be submitted by November 1, 1993, although the search will proceed until the position is filled. Send curriculum vitae to: Dr. Alfred G. Gilman, Department of Pharmacology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235. *The University of Texas Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer.*

MANAGER P.E.T. RADIOPHARMACEUTICAL LABORATORY

The Nuclear Medicine Section, Department of Radiology is seeking a radiochemist with a Master's degree to direct radiopharmaceutical manufacture and production for clinical Positron Emission Tomography. The candidate must possess a strong synthetic organic chemistry background, with extensive experience in modern analytical techniques and positron emitters. The candidate must have strong communicative and interactive skills and will have demonstrated leadership qualities.

This position is responsible for the overall proper operation of the laboratory and the supervision of laboratory personnel, including chemists, laboratory technicians, and students, and directs and performs organic synthesis of PET radiopharmaceuticals, including preparation and assuring pharmaceutical purity of the preparations.

For consideration, send your résumé to: Personnel Services, The University of Tennessee Medical Center at Knoxville, 1924 Alcoa Highway, Knoxville, TN 37920. *UTMC is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.*

MAYO CLINIC SCOTTSDALE RESEARCH CORE FACILITY MANAGER

Applications are invited for a research assistant to join the molecular biology core facility at Mayo Clinic Scottsdale. This is a multidimensional facility which currently includes a state-of-the-art fluorescence activated cell scanner, an automated DNA sequencer, and an oligonucleotide synthesizer. The individual we seek will work together with the core facility director and must have strong verbal and written communication skills. This position requires a B.A./B.S. or M.S. in biology, chemistry or related field. In addition, the position also requires strong instrumentation background. Starting date is fall 1993. Attractive compensation package accompanies this position. Applications for employment may be requested by calling collect (602) 301-8200 or contact: Human Resources Department, 13400 East Shea Boulevard, Scottsdale, AZ 85259. *Mayo Clinic Scottsdale is an Affirmative Action Employer and Educator.*

EVOLUTIONARY BIOLOGIST/ EVOLUTION OF AGING FULL PROFESSOR with Tenure Experience in Laboratory Settings

Please send curriculum vitae, statement of research interests and three letters of reference to:

Caleb E. Finch, Ph.D.
University of Southern California
Ethel Percy Andrus Gerontology Center
3715 McClintock Avenue
Los Angeles, CA 90089-0191

POSITIONS OPEN

RICE UNIVERSITY Department of Biochemistry & Cell Biology FACULTY POSITION

Applications are invited for a tenure-track faculty position in biological sciences including but not limited to the areas of biochemistry, cell, developmental, neuro-, or molecular biology. All systems including animals, microorganisms and plants will be considered. Clear evidence of research excellence and teaching potential is essential. Emphasis in recruiting will be at the ASSISTANT PROFESSOR level. Review of applications will commence November 1, 1993, and the position will remain open until filled. Please send curriculum vitae, summary of past research and future research plans, and four letters of reference to:

Faculty Search Committee
Department of Biochemistry and Cell Biology
Rice University
Houston, TX 77251-1892

Rice University is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are encouraged to apply.

UNIVERSITY OF CANTERBURY

NEW ZEALAND UNIVERSITY OF CANTERBURY SENIOR LECTURER OR LECTURER IN MOLECULAR BIOLOGY

Applications are invited for a position, as above, in the Department of Plant and Microbial Sciences. Applicants should have a Ph.D. degree in the field of plant or microbial molecular biology. The appointee will be expected to contribute to the teaching of courses in molecular biology, genetics, microbiology and biochemistry and pursue an active research programme, including the supervision of Honours, M.Sc. and Ph.D. students. Ability to interact with research groups within the Department working on the molecular biology and genetics of *Pseudomonas* spp. would be an advantage.

The salary for Senior Lecturers is on a scale from NZ\$52,000 to NZ\$60,944 (bar) and a range from NZ\$63,232 to NZ\$67,080 per annum, and for Lecturers is on a scale from NZ\$38,000 to NZ\$49,088 per annum.

Applications close on 10 December 1993. Further particulars and Conditions of Appointment may be obtained from the undersigned. Applications, quoting Position No. PL72, must be addressed to: Mr. A. W. Hayward, Registrar, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.

The University has a policy of Equality of Opportunity in Employment.

FACULTY POSITIONS Department of Biology Hong Kong University of Science and Technology

Applications are invited for faculty positions at all ranks in the Department of Biology. Applicants must have a Ph.D. degree, postdoctoral experience, and are expected to establish an independent research program. The successful candidate will have the opportunity to join active research efforts in the areas of molecular genetics, neurobiology, signal transduction, membrane receptors, developmental biology, tumor biology, plant molecular biology, marine biology and environmental science. The Biology Department is well-equipped with traditional and modern facilities. Start-up money is available.

The Hong Kong University of Science and Technology is a publicly funded research university with graduate programs in the sciences and engineering. Generous fringe benefits include medical and dental benefits, annual leave and children's education allowances. Air passages and housing are also provided where applicable.

Applicants should send curriculum vitae, a short statement of research interests, and the names of three references to: Prof. Madeline Wu, Department of Biology, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong. FAX: (852) 358-1559.

A Clear-Cut Advantage.

At CV Therapeutics, a growing biopharmaceutical company focused on cardiovascular diseases, we have a clear-cut advantage in the development of novel drugs. Our proprietary technology and scientific team put our research efforts at the forefront of the industry. We are currently seeking outstanding PhDs and Research Associates to contribute to our research and product development efforts in identifying novel lipid mediators of chronic inflammation.

Staff Scientists Experimental Pharmacologist

You will perform pharmacological assays of novel anti-inflammatory compounds, and evaluate pharmacokinetics and efficacy. You will also participate in chemical modification of inhibitory, anti-inflammatory therapeutic agents. This position will involve working on experimental models of chronic inflammation, including atherosclerosis, nephrosclerosis, and vascular stenosis. Requires a PhD and 3+ years' experience in animal models of experimental pharmacology. Knowledge of pharmacokinetics, experimental models of inflammation, isolation and purification of lipids, and pharmacology of drug development is preferred. Refer to JC: LM/EPHAR.

Experimental Pathologist

You will establish *in vivo* models of chronic inflammation in the rat, involving atherosclerosis, renal inflammation and wound healing. You will also test the efficacy of administration of therapeutic drugs via histology and biochemical assays. Requires a PhD with 3+ years' experimental pathology experience or a BS/MS with 5+ years' experience. Expertise in histology and immunohistochemistry essential. Experience with image analysis and models of chronic inflammation preferred. Refer to JC: LM/EPATH.

Lipid Biochemist

You will be responsible for the extraction, separation and characterization of lipid factors mediating inflammation. You will assist in identifying intermediates in the metabolic cellular pathways underlying factor synthesis. Requires a PhD and 3+ years' experience in analysis of lipid mediators of inflammation and chromatographic techniques (TLC and HPLC) for the separation of

lipids. Knowledge of lipid analytical techniques (mass spectroscopy, NMR, infrared spectroscopy) and experience with bioassays preferred. Refer to JC: LM/LB.

Cell Biologist

You will identify enzymatic pathways underlying the transformation of a lipid precursor into a novel mediator of chronic inflammation targeting the macrophage. This will include establishing cells in tissue culture (epithelial and vascular smooth muscle cells), and characterizing the stimuli inducing the release of this factor. Requires a PhD and 3+ years' experience in cell biology, with particular emphasis on pathways of lipid metabolism and mediators of chronic inflammation. Experience with intracellular oxidation preferred. Refer to JC: LM/CB.

Research Associates Tissue/Cell Culture

You will supervise scale-up techniques for isolation and partial purification of inflammatory factors. Your responsibilities will include establishing short-term cultures of cells derived from rat kidneys, maintaining tissue culture media and special cell stimuli, extracting the medium with organic solvents, and conducting bioassays for macrophage activation. Requires a BS or MS and 2+ years' experience in organ harvesting, tissue culture (particularly primary culture of organ-derived cells), and bioassays. Some background in basic lipid biochemistry is preferred. Refer to JC: GFS/TCC.

Biochemistry

You will assist in the isolation, purification and characterization of lipid inflammatory factors. You will be additionally responsible for the synthesis and organic chemistry of lipid antagonists of this factor. Requires a BS or MS and 4+ years' experience in lipid biochemistry including TLC and HPLC. Some background in mass spectroscopy and organic chemistry is preferred. Refer to JC: GFS/BC.

Learn more about all of the professional and personal advantages we offer our people. Send your CV, indicating the appropriate Dept. #, and the names of three references along with a cover letter to Pat Donchin, CV Therapeutics, Inc., 1615 Plymouth St., Mountain View, CA 94043. EOE.



CTI

CELL THERAPEUTICS, INC.

Cell Therapeutics, Inc., is an innovative biopharmaceutical company focused on the design and development of drugs that influence a variety of significant human diseases. We have numerous opportunities available now and in the near future. All candidates should have a minimum of a BS degree and 3+ years' experience in their area of expertise, excellent communication skills and a demonstrated background in a matrix environment.

FORMULATIONS CHEMIST

You will be key player in the development of a formulations group. To qualify, you must have a degree in Pharmacy or Chemistry and 5+ years' industry experience in formulation and preformulation of small molecules for both *in-vivo* and *in-vitro* applications. Ref. #DP1093.

ANALYTICAL CHEMISTRY RA

Requires a strong background in contemporary analytical technology, experience in method development in a GLP/GMP environment, and a chemistry degree. Ref. #KH1293.

QC ANALYST

You will assist in the analytical release evaluations of our pharmaceutical entities. Requires general chromatographic and wet chemistry analytical skills and expertise in the use of an NMR as either a qualitative or quantitative tool. Ref. #EO1193.

RA MANAGER

Requires a minimum of 5 years' experience interacting with FDA and coordination of activities relating to regulatory applications, including IND, NDA, DMF and others. International regulatory experience an asset. Ref. #JA993.

QA AUDITOR

Organize and coordinate audits in regulatory compliance with GMP, GLP and GCP. Requires 3 years' QA experience in drug pharmaceuticals. Process validation experience an asset. Ref. #JA993.

CTI is located in downtown Seattle with views of Puget Sound and the Olympic Mountains. We offer an attractive compensation and benefits package and an environment where you can make a significant contribution to medical technology. For consideration, send or fax your CV, indicating the appropriate job reference number, to:

Human Resources,
Cell Therapeutics, Inc.
201 Elloit Avenue West, Suite 400
Seattle, WA 98119
Fax: (206)284-6206

Equal Opportunity Employer



NEUROPHARMACEUTICAL RESEARCH



Cambridge NeuroScience, Inc., is an emerging neuropharmaceutical company committed to the discovery and development of unique medicines for the treatment of major disorders of the nervous systems. The company is recognized for expertise in chemistry, biotechnology, and pharmacology, as well as its collaborations with leading academic institutions and experts.

Staff Scientist

Protein Chemistry and Process Development

The successful candidate will be responsible for developing a scalable purification scheme for recombinant proteins. Responsibilities include developing analytical and immunological assays to support purification, characterization of the protein and to verify the identity, purity and consistency of the final product. To qualify, you must have a Ph.D. in biochemistry/ protein chemistry/ process engineering and 2 or more years of relevant experience. A working knowledge of PCs, a keen eye for detail, and strong communication, analysis and multi-tasking skills are essential.

Cambridge NeuroScience, Inc., offers competitive salaries and benefits. For immediate consideration, send your CV to: Cambridge NeuroScience, Inc., Dept. 924SC, One Kendall Square, Building 700, Cambridge, MA 02139.

An Equal Opportunity
Employer



Ribozyme Research

Innovir Laboratories, Inc., is a leading biotechnology company developing ribozyme-based anti-viral and anti-cancer therapeutics. Innovir has openings for postdoctoral and research scientist positions in the following areas:

- RNA processing
- Oligonucleotide chemistry
- Viral vectors
- Liposomes

Qualified candidates for the research scientists' positions should have a PhD or MD with at least two years postdoctoral experience in the relevant field. Postdoctoral candidates should have a PhD in a relevant field.

Innovir Laboratories, Inc., is located in Manhattan near several premier academic institutions. We offer a competitive salary and comprehensive benefits. Qualified individuals should forward their resume to:

Human Resources
Innovir Laboratories Inc.
510 East 73rd Street
New York, N.Y. 10021



RESEARCH FELLOWSHIPS IN GERONTOLOGY AT THE UNIVERSITY OF MICHIGAN

Postdoctoral research fellowships, supported in part by training grants from the National Institute on Aging are available at the University of Michigan Institute of Gerontology. Stipends and related expenses will be provided to qualified applicants. Postdoctoral trainees must have completed a Ph.D., M.D., or equivalent degree. Perspective faculty mentors represent the behavioral, biological, clinical and social sciences, and the humanities as follows:

W. A. Achenbaum, Ph.D.
R. C. Adelman, Ph.D.
N. B. Alexander, M.D.
J. A. Ashton-Miller, Ph.D.
F. L. Bookstein, Ph.D.
S. F. Bradley, M.D.
D. T. Burke, Ph.D.
B. M. Carlson, M.D., Ph.D.
J. A. Faulkner, Ph.D.
D. J. Fink, M.D.
B. E. Fries, Ph.D.
A. Gafni, Ph.D.
S. A. Goldstein, Ph.D.
M. M. Gross, Ph.D.

K. Guan, Ph.D.
J. B. Halter, M.D.
A. R. Herzog, Ph.D.
N. Krause, Ph.D.
J. Liang, Ph.D.
R. A. Miller, M.D., Ph.D.
D. Rosenblatt, M.D., Ph.D.
A. B. Schultz, Ph.D.
D. G. Steel, Ph.D.
M. A. Supiano, M.D.
M. S. Terpenning, M.D.
B. R. Troen, M.D.
L. M. Verbrugge, Ph.D.
W. G. Weissert, Ph.D.

Candidates should forward a letter of interest, identification of a potential mentor, complete curriculum vitae and bibliography, graduate transcript, representative article (if available), and at least three letters of recommendation to: Rae D. Packer, Institute of Gerontology, University of Michigan, 300 North Ingalls, Ann Arbor, Michigan, 48109-2007. The application deadline for Summer and Fall fellowships is March 31, 1994.

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

RESEARCH SCIENTISTS

VIAGENE, INC. is a leader in the development of gene transfer technology. Our first gene transfer products for combating HIV and malignant melanoma are in Phase I clinical trials, and we expect to be one of the first companies to bring such products to market. We are expanding our new and established research programs and are seeking several talented scientists to join us in developing novel gene transfer therapeutics for viral diseases, cancers and genetic disorders.

Qualified candidates will have a Ph.D. or M.D./Ph.D. and at least 2-5 years experience with expertise in one or more of the following areas:

- Molecular Biology
- Stem Cell Biology
- Hematopoiesis
- Assay Development
- Immunology
- Virology
- Cell Biology
- Cancer Biology

Located in San Diego, California, one of America's most attractive centers for biomedical research and education, Viagene offers competitive salaries and an excellent benefits package, including a stock option plan.

Please forward your CV to: Attn: Human Resources,
Viagene, Inc., 11075 Roselle Street, San Diego, CA 92121.



VIAGENE, INC.

New Career Opportunities

The research underway at Creative BioMolecules is among the most exciting and vital anywhere in the world. There's a great deal of excitement here... a sense of discovery and teamwork that includes absolutely everyone. The techniques we're pioneering for the regeneration of hard and soft tissue will have a major effect on human health, alleviating the pain of many diseases and forms of trauma.

Right now, we are entering one of the most exciting phases of our development, the establishment of an integrated manufacturing and product development capability. By year's end, we are committed to having four products in clinical trial. Currently, we are looking for the following candidates:

Drug Delivery Manager
Regulatory Affairs Managers
Biostatistician
Protein Chemist
Analytical Protein Chemist
Cell Biologist
Molecular Biologist

These opportunities require experience in a biotechnology environment. Excellent communication skills along with the ability to thrive in an intense environment are essential.

Creative BioMolecules offers an excellent compensation and benefits package including 3 weeks' vacation along with a company-matched 401(k) plan.

For immediate consideration, please send your resume, indicating position of interest, to: Human Resources, Creative BioMolecules, 45 South Street, Hopkinton, MA 01748. An Equal Opportunity Employer.

**CREATIVE
BIOMOLECULES**

Where the breakthrough is you.

POSITIONS OPEN

TENURE-TRACK POSITION IN X-RAY CRYSTALLOGRAPHY

The School of Biological Sciences at the University of Missouri-Kansas City (UMKC) announces a program of expansion of the structural biology component in its Cell Biology and Biophysics Division. The development of a macromolecular biological structure X-ray facility is the first element of this development. The School welcomes applications for a tenure-track faculty position from individuals with at least 3 years of postdoctoral research experience in the field of X-ray crystallography. Applications from accomplished researchers with teaching experience are preferred. Start-up funds, equipment, renovated laboratory facility and technical assistance available.

The successful applicant is expected to have, or be able to develop, an independent, active research program supported by extramural funding. Responsibilities will include supervision of the X-ray laboratory and at least one research scientist in a non-tenure-track faculty position. Good supervisory and teaching skills are necessary.

Teaching activities will involve participating in the doctoral programs of the School and in modern biological sciences undergraduate and health sciences curricula. Candidates should arrange for three letters of referral and send curriculum vitae and brief summary of professional accomplishment and future research goals. Screening of candidates will begin November 5, 1993, and will remain open until suitable candidates are found. Contact: Crystallography Search Committee c/o Vicki Hagan, School of Biological Sciences, University of Missouri, Kansas City, MO 64110. UMKC is an Affirmative Action/Equal Opportunity Employer.



NEW ZEALAND UNIVERSITY OF CANTERBURY LECTURER IN MICROBIOLOGY

Applications are invited for the above position in the Department of Plant and Microbial Sciences. Applicants should have a Ph.D. in microbiology and have research interests in applied microbiology or microbial ecology. A knowledge of biostatistics and computing would be an advantage. The appointee will be expected to contribute to the teaching of courses in microbiology at all undergraduate levels and pursue an active research programme, including the supervision of Honours, M.Sc. and Ph.D. students.

The salary for Lecturers is on a scale from NZ\$38,000 to NZ\$49,088 per annum.

Applications close on 15 October 1993.

Further particulars and Conditions of Appointment may be obtained from the undersigned. Applications, quoting Position No. PL66, must be addressed to: Mr. A. W. Hayward, Registrar, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.

The University has a policy of Equality of Opportunity in Employment.

MOLECULAR BIOLOGISTS

Two positions are immediately available to study the molecular biology of the sperm antigens. One position is at the level of RESEARCH ASSOCIATE and second is at the JUNIOR FACULTY level. Positions require Ph.D. in molecular biology with demonstrated experience in gene cloning, sequencing, expression in recombinant vectors, and Northern, Southern blot analysis. Send curriculum vitae to: Rajesh K. Naz, Ph.D., Department of Obstetrics and Gynecology, Ullmann #123, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. Telephone: (718) 430-2225.

FACULTY PRE-CLINICAL SCIENCES

The New York Chiropractic College (NYCC) invites applicants for full-time and part-time teaching positions in the Division of Pre-Clinical Science. Anatomy, Neuroanatomy and Neurophysiology. Must have Ph.D. in appropriate discipline or M.D. degree and minimum of two years of teaching experience.

NYCC is located in the beautiful Finger Lakes Region of New York State. Send curriculum vitae and names of three references to: Bill Kaminski, Director Human Resources, Box 800, Seneca Falls, NY 13148.

POSITIONS OPEN

FACULTY POSITIONS PENN STATE CENTER FOR GENE REGULATION

The Department of Molecular and Cell Biology invites applications for tenure-track faculty positions at the level in the newly established Center for Gene Regulation. The Center has a nucleus of investigators studying molecular mechanisms of development and differentiation. We seek independent investigators using biochemical, genetic and cellular approaches to study gene regulation in eukaryotes, prokaryotes and viruses. Liberal start-up funding, space and salary support will be provided. Send curriculum vitae, research interests and names of 3 references by November 1, 1993, to: Dr. Robert A. Schlegel, Head, Department of Molecular & Cell Biology, Box GR-S, 108 Althouse Lab, Penn State, University Park, PA 16802. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

UCSF SCHOOL OF MEDICINE TENURE-TRACK FACULTY POSITION IN THE PROGRAM OF BIOLOGICAL SCIENCES

The Department of Orthopaedic Surgery and the Program in Biological Sciences of the School of Medicine, University of California, San Francisco, seek a molecular cell and/or developmental biologist whose primary interest is in the organization and function of bone and cartilage as tissues. The candidate for this position must have a demonstrated expertise in connective tissue research at the cellular and molecular level with particular interest in bone or cartilage biology, should be able to develop an active and independently funded research program and teach professional and graduate students.

Please submit a letter of application, curriculum vitae and bibliography, narrative description of plans for future research, and the names, addresses and telephone numbers of three references. Deadline for all material: November 1, 1993. To: David S. Bradford, M.D., Professor and Chairman, Department of Orthopaedic Surgery, or Dr. Donald E. Ganem, Professor of Microbiology and Immunology, Search Committee, Room U 471, University of California Medical Center, San Francisco, CA 94143-0728.

(UCSF is an Equal Opportunity Employer.)

POSTDOCTORAL POSITION is available immediately to study the role of heat shock proteins in the regulation of eukaryotic protein synthesis. Preference will be given to applicant with a recent Ph.D. degree in biochemistry or related fields with a strong background in molecular biology or protein chemistry. Send curriculum vitae, a brief statement of research interests, and names and telephone numbers of three references to: Dr. Robert L. Matts, Department of Biochemistry and Molecular Biology, 246 NRC, Oklahoma State University, Stillwater, OK 74078-0454. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION supported by NIH training grant available to study intracellular signaling in B lymphocytes, focusing on relationships between the activity of protein kinases, the function of sequence-specific DNA binding proteins, and the expression of immediate-early growth response genes (e.g., *J. Exp. Med.* 177:857, 177:1215; *J. Immunol.* 151:880). Send curriculum vitae and the names of three references to: Thomas L. Rothstein, M.D., Ph.D.; Room E-501, Boston University Medical Center; 88 East Newton Street; Boston, MA 02118. FAX: 617-638-7065. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available immediately to study the role of protein kinases in cellular growth control. Projects include biochemical and molecular/genetic analysis of the protein kinase C/MAP kinase pathway of *S. cerevisiae*. U.S. citizen or permanent resident preferred. Send curriculum vitae and names of references to: Dr. David E. Levin, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205.

JHU is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study the nucleotide sequence variation in metabolic genes from microorganisms isolated from the deep subsurface. Applicants should have a background in molecular evolution, with an emphasis on phylogenetic analysis, PCR technology and/or DNA sequence analysis. For fullest consideration application should be received by September 22, 1993. Send curriculum vitae and three letters of reference to: Brian P. Nichols, Department of Biological Sciences, M/C 067, University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607-7060. UIC is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available with USDA to study the molecular biology and genetics of blister rust disease in eastern white pine. Candidates must have a Ph.D. and research experience in plant pathology and molecular biology. U.S. citizenship is required. Send résumé, publications, and names of three references to: Dr. Charles Michler or Dr. Craig Echt, USDA Forest Service, POB 898, Rhinelander, WI 54501. Telephone: (715) 362-1112. An Equal Opportunity Employer.

POSTDOCTORAL CHEMIST to conduct multidisciplinary research in the development of new radio-pharmaceuticals for PET and SPECT imaging. Job requires a Ph.D. degree in organic or medicinal chemistry, strong background in synthesis; working knowledge of pharmacology and experience in radioisotope handling helpful but not necessary. Excellent opportunity for chemists to apply synthetic techniques to the *in vivo* diagnostic imaging field. Please send résumé and curriculum vitae to: Dr. Hank F. Kung, Departments of Radiology and Pharmacology, University of Pennsylvania, Room 305, 3700 Market Street, Philadelphia, PA 19104. Equal Opportunity Employer/Affirmative Action/M/F/D/V.

POSTDOCTORAL POSITIONS Vascular Cell and Molecular Biology

Two fully funded positions immediately available at the Rockefeller University for qualified applicants to study the structure, function, and pathophysiologic roles of leukocyte-endothelial cell adhesion molecules *in vitro* and *in vivo*. MOLECULAR BIOLOGIST sought with experience in standard cloning, sequencing, and site-directed mutagenesis techniques. Experience with genomic cloning is an asset. MORPHOLOGIST sought with experience in electron microscopy, particularly immunoelectron microscopy. Experience with light microscope-level immunohistochemistry is an asset. Please send curriculum vitae plus names and telephone numbers of three references to: William A. Muller, M.D., Ph.D., Box 280, The Rockefeller University, 1230 York Avenue, New York, NY 10021. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. A postdoctoral position for a biochemist/cell biologist/tumor biologist is available immediately in the Division of Biomedical Marine Research at Harbor Branch Oceanographic Institution in Fort Pierce, Florida. The focus of the research involves the discovery and biological evaluation of anti-tumor and signal transduction agents from marine sponges as part of an NIH-funded grant. Experience with protein kinase C and/or tyrosine kinase enzyme assays/kinetics, *in vitro* tumor promotion and cytotoxicity assays is desired. Interested candidates should send a letter of application, current curriculum vitae and the names and addresses of three references immediately to: Dr. Ross E. Longley, Division of Biomedical Marine Research, Harbor Branch Oceanographic Institution, Inc., 5600 U.S. Highway 1, North Fort Pierce, FL 34946. Equal Employment Opportunity/Affirmative Action Program.

POSTDOCTORAL POSITIONS AVAILABLE

Immediate openings for Ph.D. molecular biologists/biochemists to study protein structure and function in *E. coli* isocitrate dehydrogenase. Positions available in NIH-funded laboratory for a minimum of 3 years of support. Salary will be commensurate with experience. Please submit curriculum vitae, current research interests and names and addresses of two referees to: Dr. A. M. Dean, Department of Biological Chemistry, The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064-3095. CMS is an Affirmative Action and Equal Opportunity Educator and Employer.

VIRATEK, INC.

Viratek, Inc., a subsidiary of ICN Pharmaceuticals, Inc. is establishing research activities in the area of **ANTISENSE OLIGONUCLEOTIDE THERAPEUTICS AND GENE THERAPY**. The organization will consist of four units in the fields of oligonucleotide chemistry, molecular biology, cell biology, and animal physiology. Research will be directed towards growth factors, receptors, signaling pathways and regulatory genes, with the aim to develop therapeutic drugs against cancers, neurological diseases, and viral and skin disorders.

The activities with the multidisciplinary research team will be located in the stimulating scientific environment of Southern California. We offer competitive salaries and excellent benefit packages.

Several positions at the senior or junior scientist level will be available starting January, 1994, in the following areas:

- Oligonucleotide Chemistry
- Molecular Biology
- Cell Biology
- Animal Physiology

Interested applicants should send a curriculum vitae with a list of publications and research interests and the names of three professional references to:

W.E. Seifert, Ph.D., Research Director
Viratek, Inc.
c/o The Whittier Institute
9894 Genesee Avenue
La Jolla, California 92037
Fax: (619) 450-0846

FACULTY POSITION UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER SCHOOL OF PHARMACY

The Division of Pharmaceutical Sciences at the University of Colorado Health Sciences Center School of Pharmacy is conducting a search for a tenure-track **ASSISTANT PROFESSOR** faculty position in the general area of pharmaceuticals. The school has three-year professional program with an enrollment of 350 students leading to a baccalaureate degree in pharmacy and an established graduate program leading to a Ph.D. degree in either the Pharmaceutical Sciences or Toxicology. The school also has recently implemented a two-year post-baccalaureate Doctor of Pharmacy degree program.

The successful candidate will participate in teaching pharmaceuticals to both undergraduate and graduate students. Candidates with research interests that complement those of current faculty members (molecular pharmacology, toxicology, carcinogenesis, biotechnology, cardiopulmonary disease, drug formulation and drug delivery) will be given preference. The school is seeking a highly motivated individual who intends pursue a vigorous academic career in research and teaching and who will be competitive in extramural grants. The division faculty rates among the top ten pharmacy facilities in the United States in research productivity as measured by publications and federal grant support.

Applicants should submit a curriculum vitae, a brief description of research interests, reprints of most significant recent publications and a list of three references by November 30, 1993, to:

James A. Ruth, Ph.D.
Chair, Faculty Search Committee
University of Colorado Health Sciences Center
School of Pharmacy
Campus Box C-238
4200 East Ninth Avenue
Denver, CO 80262

APPLICATIONS SCIENTIST

Fisons, a worldwide leader in analytical instrumentation, is seeking an Applications Scientist for Fisons Applied Sensor Technology, located in Paramus, N.J. The Applications Scientist will have the unique opportunity to be involved in the U.S. launch of the new IAsys™ Biosensor System, which monitors the binding kinetics of biomolecules in real time.

The ideal candidate will have a Ph.D. and relevant Post-doctoral experience, as well as broad-based knowledge of the biological sciences with emphasis in Protein Chemistry, Molecular Biology, Immunology and/or Pharmacology. Superior presentation, communications, and organization skills are required. An ability to interface with Fisons' UK-based Director of Research as well as the U.S. and International Sales and Marketing teams is a must.

Key responsibilities will include setting up and running a pre- and post-sales customer demonstration/training lab and presenting technical seminars both in the Paramus facility and in the field as direct support to the sales force. Developing new applications and writing applications notes will also be a priority as support to the marketing effort. Computer expertise with graphical programs a +. Travel will be required.

Enthusiastic and creative scientists who believe they can become an integral part of our team should apply to the following address with salary requirements as soon as possible.

FISONS

Applied
Sensor
Technology

Fisons Applied Sensor Technology
53 West Century Road
Paramus, NJ 07652
Equal Opportunity Employer M/F/D/V

1994 SUMMER FELLOWSHIPS MOUNT DESERT ISLAND BIOLOGICAL LABORATORY

The Mount Desert Island Biological Laboratory (MDIBL), an internationally renowned marine facility for biomedical and comparative physiological research, invites applications for fellowships in the following categories:

• **Young Investigator Fellowships**, sponsored by an NSF-EPSCoR grant, a NIEHS toxicology Center grant, and privately donated fellowship funds, are for scientists with a doctorate and evidence of independent research. Fellowship amount is based on individual needs and can include a stipend, laboratory space, housing, and funds for supplies and travel.

• **Undergraduate Student-Faculty Fellowships** supported by Burroughs-Wellcome and the Grass Foundation are available for student/faculty pairs with the following qualifications: 1) undergraduate students with a minimum of 1 year of both biology and chemistry; 2) faculty members with Ph.D. actively teaching biology at the undergraduate level. Individual student or faculty awards may be made. Awardees may work from 1 to 4 months at MDIBL with senior scientists or, in the case of faculty or student/faculty pairs, may choose to work independently. Funding provides for housing, travel, research costs and a stipend: maximum faculty award is \$14,000 with up to \$6,000 stipend; maximum student award is \$7,000 with up to \$2,600 stipend.

Applications may be obtained by calling the office at 207-288-3605 or writing to MDIBL, P.O. Box 35, Salisbury Cove, ME 04672.

Young Investigator applicants write to Department YIF. Deadline for completed applications is 7 January, 1994.

Undergraduate Student-Faculty applicants write to Department USFF. Deadline for completed applications is 7 January, 1994.

ASSISTANT/ASSOCIATE PROFESSOR

The Department of Microbiology and Molecular Genetics of the UMDNJ-New Jersey Medical School is seeking outstanding, highly motivated scientists for tenure-track positions in all aspects of molecular biology and genetics who will develop independent research programs and participate in teaching graduate and medical students. The department is fully equipped for molecular biological research and currently has 16 full-time faculty who carry out research in various aspects of microbiology and molecular genetics, including control of cell growth; cellular aging; transcriptional, post-transcriptional and translational regulation; mutagenesis; DNA replication and recombination; chromosome structure and segregation; and molecular pathogenesis. New Jersey Medical School is part of the medical university of the state of New Jersey and is located in the University Heights section of Newark, NJ, minutes from both pleasant suburbs and downtown New York City. Applicants should send a complete curriculum vitae including future research plans and arrange to have three letters of recommendation sent to: Dr. Lynn S. Ripley, Faculty Search Committee, Department of Microbiology and Molecular Genetics (B), UMDNJ-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103-2714.

UMDNJ is an Affirmative Action Equal Opportunity Employer M/F/H/V and is a member of the University Health System of New Jersey

UMDNJ
NEW JERSEY

New Jersey Medical School

EMPLOYMENT REGISTER OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH (AACR)

An Important Listing of Available Positions and Candidates in All Disciplines of Cancer Research

- Publication of Position and Candidate Advertisements in *Cancer Research* and the *Proceedings of the American Association for Cancer Research*
- Arrangement of Interviews at the AACR Annual Meeting in San Francisco, CA (April 10-13, 1994)

- For forms and information:

Employment Register
American Association for Cancer Research
Public Ledger Building
620 Chestnut Street, Suite 816
Philadelphia, PA 19106-3483
Telephone: (215) 440-9300
FAX: (215) 440-9313



CHAIR, DEPARTMENT OF GENETICS

Applications and nominations are invited for the position of Chair, Department of Genetics, at the Southwest Foundation for Biomedical Research. The department currently has 16 faculty-level members devoted to basic and biomedical research with human subjects and mammalian models. It has strength in population and quantitative genetics, molecular genetics, biochemical genetics, developmental genetics, and cell biology. The institution and the department have a strong postdoctoral training program and a close relationship with the University of Texas Health Science Center at San Antonio, including a role in graduate student training. A broad view of genetics and the ability to provide dynamic leadership to this very strong department are required. The successful candidate will be expected to maintain an active research program supported in part by extramural funding. In addition, the successful candidate will have a Ph.D. or M.D. degree and a strong administrative background. Applications should include a cover letter and a curriculum vitae. Nominations should include a summary of the nominee's research, administrative accomplishments, and other qualifications. Materials should be mailed to:

Dr. John L. VandeBerg
Chair, Genetics Search Committee
c/o Mike Moore, Personnel Mgr (360-A)
Southwest Foundation for Biomedical Research
P.O. Box 28147, San Antonio, Texas 78228-0147

Equal Opportunity Employer M/F

Algal Biologist

Nutrilite Products, an international vitamin and food supplement manufacturer, has an immediate opening for an Algal Biologist to work at our production facility in the Southern California Imperial Valley.

The major responsibilities for this position will include experimentation for process development and improvement, acting as a consultant to the production department on algal biology and training personnel in science/biology.

The successful candidate will have an extensive background in algal biology. Experience in mass culture and an advanced degree are preferred.

We offer a competitive salary and complete benefits package, in addition to opportunities for professional growth. Qualified individuals interested in becoming a part of a dynamic group of workers in this developing area of natural products manufacturing should send a resume and brief statement of their career goals to: Barbara Jones, Human Resources, Nutrilite



We are an equal opportunity employer

Products, 5600
Beach Blvd.,
Buena Park,
CA 90622.

UNIVERSITY OF CONNECTICUT

Animal Science Professor and Department Head

Candidates are sought for the position of Professor and Head of the Department of Animal Science. The position is a 10-month, tenure-track appointment and will be available July 1, 1994. A Ph.D. in Animal Science or a closely related discipline and demonstrated excellence in research, teaching, and/or extension are required. Administrative experience is desirable, and evidence of leadership potential is required. **Responsibilities include:** administrative leadership of the department's research, teaching, and extension faculty, staff and programs, acting as spokesperson for the department, actively promoting collaborative research, teaching, and extension programs within the department and with colleagues in other departments. The individual is expected to work effectively with and represent faculty to university and agency administrators, state and federal agency personnel, and industry clientele. A demonstrated commitment to student relations, academic excellence and extension education programs is required. Prior administrative experience and involvement in the Land Grant College System are desired. Applications received by 11-1-93 will be given preference in the screening process, but all applications will be considered until the position is filled. **To apply, send a letter of interest with a vitae and names and addresses of four references to: Dr. Lynn R. Brown, Chair, Department Head Search Committee, Department of Animal Science, University of Connecticut, 3636 Horsebarn Road Ext., Storrs, CT 06269-4040. We encourage applications from under-represented groups, including minorities, women and people with disabilities (Search #4A6).**



CHAIR OF FOREST ECOLOGY UNIVERSITY OF WINNIPEG (Department of Biology)

The Biology Department invites applications for the position of Chair of Forest Ecology which, subject to budgetary constraints, will commence January 1, 1994. The appointment will be at the Assistant Professor level and, for the initial four years, funding for the position will be provided by both the Manitoba Model Forest and the University of Winnipeg. At the beginning of the fifth year, the position will convert to a regular tenure-track appointment in the Department of Biology.

Applicants must have a Ph.D. (R.P.F. preferred and postdoctoral experience is an asset) and should be experienced in Boreal Forest Ecology. The successful candidate will be expected to develop an externally funded research program based on the Manitoba Model Forest. Also, the appointee will be required to teach in our broadly based undergraduate program and will be expected to develop senior level courses in keeping with her/his expertise.

The appointment will be made in accordance with Canadian Immigration requirements. Priority will be given to Canadian Citizens and permanent residents of Canada. Salary commensurate with qualifications and experience.

Deadline for applications is November 15, 1993. Applicants should send their curriculum vitae, reprints of two representative publications, a short description of their research interests and arrange for three referees to forward their comments to:

Dr. William S. Evans
Chairman, Department of Biology
University of Winnipeg
515 Portage Avenue
Winnipeg, Manitoba
Canada
R3B 2E9

Telephone: (204) 786-9862
Fax: (204) 786-1824

Enzymology/ Biochemistry

Athena Neurosciences, Inc. is a biotechnology-based company committed to the discovery and development of new products to diagnose and treat diseases of the central nervous system. We are currently seeking a biochemist to work in our Alzheimer's Disease Therapeutics program.

Requires graduate or post-doctoral experience in the isolation and characterization of enzymes from cell lines and tissue sources, including the ability to design suitable assays, and in the use of selective purification methods, such as substrate or inhibitor affinity chromatography. The successful candidate will have a broad background in biochemical analytical techniques, and be well-versed in the use of such in biological target discovery. Must have a Ph.D. in Biochemistry, Cell Biology, or a related discipline, 1-2 years of post-doctoral experience, and be interested in being part of a multidisciplinary, interactive, biological drug discovery research group.

Athena offers an innovative and exciting professional, scientific environment in addition to competitive salaries and benefits. Please send resume to: **Athena Neurosciences, Attn: Human Resources - Job# SM924, 800F Gateway Blvd., South San Francisco, CA 94080. EOE.**



MILES 

Pharmaceutical
Division

*Miles Inc., Pharmaceutical Division, is a multi-faceted, continuously expanding campus in West Haven, CT. Our location offers employees beautiful Connecticut countryside and nearby shorelines as well as easy access to the cultural advantages and diversity of New York, Boston and Yale University. As a highly progressive company, we offer exceptional growth and advancement opportunities in an interdisciplinary environment. We currently have two exciting career opportunities in our **Institute for Dementia Research**.*

SENIOR ASSOCIATE RESEARCH SCIENTIST

In this position, you will be largely responsible for the daily operation of the Biochemical Pharmacology laboratory, and will coordinate closely with the laboratory head in experimental design and analysis. In addition to performing experiments including receptor binding, second messenger/effector assays, and HPLC determinations, you will also be involved in the development and evaluation of new experimental protocols.

A BS degree with 4 or more years of proven experience or an MS degree with 2 or more years of proven experience and accomplishments in the field of biochemical pharmacology, preferably related to the study of the CNS, is required. You must have experience with biochemical, pharmacological, and molecular biological techniques, including receptor binding, tissue culture, enzymology, chromatography, and cell transfection.

ASSISTANT RESEARCH SCIENTIST

In this position, you will perform experiments following established laboratory procedures, including receptor binding, second messenger/effector assays, and HPLC determination. You will also be responsible for data analysis and the development of new screening assays as well as general maintenance of the laboratory.

A BS in Biology, Chemistry or related discipline with at least one year of relevant scientific experience, preferably working in the CNS is required. Familiarity with biochemical, pharmacological procedures, including receptor binding, enzymology, tissue culture, and chromatographic techniques is necessary.

We offer a competitive salary and comprehensive benefits package including health and dental insurance, paid holidays and vacation, tuition reimbursement, 401(k), relocation assistance and more. If you'd like to join our team, please send resume to: **Miles Inc., Pharmaceutical Division, Dept. ELCU, 400 Morgan Lane, West Haven, CT 06516.**

An Equal Opportunity Employer M/F/D/V

The Lindsley F. Kimball Research Institute of the New York Blood Center is seeking a **director for its core facility** providing support for 13 research laboratories at the Research Institute. Services include protein sequencing, production of synthetic peptides and oligonucleotides, DNA sequence analysis and the synthesis of nucleic acid probes. The candidate must have a strong background in protein chemistry, peptide structure analysis and have strong technical skills and expertise with the relevant instruments.

Prior experience managing a service laboratory is highly desirable. Depending upon qualifications, resources and time will be made available to the director to pursue independent and collaborative research activities. Minority and women candidates are encouraged to apply. Interested candidates should forward their resume along with the names of 3 references to: **Dr. Jack Goldstein, Chairman, Microchemistry Review Committee, Lindsley F. Kimball Research Institute, 310 East 67 Street, New York, NY 10021.** Equal opportunity employer m/f/d/v.

 **Lindsley F. Kimball Research Institute**

A Division of the New York Blood Center

Where concern for the community comes first.



CANJI, INC., is a rapidly growing biotechnology company based in San Diego, CA. We provide an exciting opportunity to perform cutting edge oncology therapeutics research and development. We are currently seeking applications from Scientists, Research Associates and Postdoctoral Fellows in the following areas:

Tumor Suppressor Gene Therapy and Molecular Biology (refer to C-001)

Efficacy, Safety And Toxicology Of Novel Cancer Therapeutics (refer to C-002)

Process Development Of Recombinant Proteins (refer to C-003)

Canji offers a challenging research environment, competitive salaries, an excellent benefit package and relocation assistance. Please send resume to **Human Resources, 3030 Science Park Road, San Diego, CA 92121. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION available in an NIH-funded program on growth regulation, transformation, and differentiation in human mammary epithelial cells in culture. Design and execute experiments utilizing molecular genetics and biochemistry to understand cell cycle control and the effects of TBF and/or controls on expression of differentiated functions in normal and transformed cells. Ph.D. in molecular biology, biochemistry, immunology, or related field. Experience in molecular genetics, biochemistry, immunology, and cell culture related to mammalian gene expression desirable. Applicants should send curriculum vitae, cover letter summarizing research experience, and two letters of recommendation to: **Dr. Staffa Stampfer, c/o Lawrence Berkeley Laboratory, Material Office, Box #JSC11797, One Cyclotron Road, Building 938A, Berkeley, CA 94720.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately in microbial ecophysiology to study chemolithoautotrophy, mixotrophy, and sulfur metabolism in bacteria. Ph.D. in Microbiology, Biochemistry or related field required. Previous experience in the use of radioisotopes and molecular techniques is desirable but not essential. Position is grant-funded through August 31, 1995. Send curriculum vitae and 3 letters of reference to: **D.A. Bazylinski, Marine Science Center, Northeastern University, East Point, Nahant, MA 01908.** Telephone: 617-581-7370, FAX: 617-581-6076. *North-eastern is an Equal Opportunity/Affirmative Action, Title IX University.*

CELL BIOLOGIST

POSTDOCTORAL POSITION available immediately to study extracellular matrix of venous smooth muscle cells. Experience in biochemistry of extracellular matrix essential. Strong analytical skills required. Send five copies of curriculum vitae with references to: **Ms. Joanna Bale, Center for Experimental Therapeutics, Room 826E, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.** *Baylor College of Medicine is an Equal Opportunity, Equal Access and Affirmative Action Employer.*

TRAINING PROGRAM IN DIABETES RESEARCH AT WASHINGTON UNIVERSITY SCHOOL OF MEDICINE ST. LOUIS, MISSOURI

POSTDOCTORAL POSITIONS are available in the use of modern cellular and molecular techniques to investigate diabetes and related endocrine diseases. Trainees will be offered opportunities in the following areas of diabetes research: cellular mechanisms in insulin secretion from β -cells, lipid-derived mediators and signal transduction processes, insulin action on target cells, islet transplantation, autoimmunity and the role of nitric oxide and cytokines, and vascular and neurological complications. U.S. citizenship or permanent resident status is required. Salary on NIH scale. For information, please contact: **Dr. Michael L. McDaniel, Box 8118, Washington University School of Medicine, Department of Pathology, St. Louis, MO 63110.** Telephone: 314-362-7435, FAX: 314-362-4096. *Washington University is an Equal Opportunity Employer. We are particularly interested in minority applicants.*

POSTDOCTORAL POSITIONS in Brain Tumor Immunology, to begin July 1, 1994. Projects include selective control of leukocyte traffic, 3-D analysis of tumor-leukocyte interactions. Previous training in cellular immunology, molecular biology, neurosurgery, or neuropathology appropriate. Reply to: **Dr. L. Lampson, Center for Neurologic Diseases, Brigham and Women's Hospital, Boston, MA 02115.**

POSTDOCTORAL POSITION

BROWN UNIVERSITY Division of Biology and Medicine

Position available for individual interested in areas of protein structure-function, gene structure and regulation, protein-nucleic acid interactions, or molecular mechanisms of recombination. Previous experience with (or desire to learn) protein chemistry, nucleic acid biochemistry, DNA cloning, genetics or *in vitro* systems. Please send résumé with desired starting date and list of three references to: **Arthur Landy, Box G-J360, Brown University, Providence, RI 02912.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITION available for studies of sphingolipid function in yeast, including roles in proton transport, stress responses, and signal transduction. Experience in membrane biochemistry or molecular biology necessary. Send curriculum vitae and have three letters of reference sent to: **Dr. Robert Dickson or Dr. Robert Lester, Department of Biochemistry, University of Kentucky Medical Center, Lexington, KY 40536-0084.**

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS: Available immediately to study transcriptional regulation of genes during fat synthesis and adipocyte differentiation. Research includes defining cis/trans systems for hormonal and differentiation dependent gene expression and functional analysis of novel regulatory factors in adipogenesis. Send curriculum vitae to: **Dr. Hei Sook Sul, Department of Nutrition, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**

POSTDOCTORAL POSITION available to investigate molecular mechanisms involved in regulation of vacuolar acidification. Work will involve *in vitro* reassembly, site-directed mutagenesis and eukaryotic expression. Experience in protein chemistry, molecular biology or cell biology desirable. Starting date flexible. Send curriculum vitae and names of three references to: **Dr. Michael Forgac, Department of Cellular and Molecular Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.** *Equal Opportunity/Affirmative Action Employer.*



GENELABS
TECHNOLOGIES, INC.

POSTDOCTORAL POSITION

Postdoctoral candidates are sought for our exciting DNA-binding drug program. The postdoctoral research projects will be dedicated to investigating the molecular basis of sequence-specific interactions between DNA-binding molecules and DNA. Candidates should have ample experience in molecular biology, specifically studies directed toward DNA:protein interactions or DNA:small molecule interactions. A background in biochemistry is also desirable. Interested applicants should forward curriculum vitae to: **Genelabs Technologies, Inc., 505 Penobscot Drive, Redwood City, CA 94063.** *We are an Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to carry out isolation of enzymes involved in nucleoside antibiotic biosynthesis in *Streptomyces*. Previous experience with enzyme assays and enzyme purification required; previous experience with *Streptomyces* desirable. Send curriculum vitae and the names and telephone numbers of three references to: **Professor Ronald Parry, Department of Chemistry, Rice University, P.O. Box 1892, Houston, TX 77251.**

POSTDOCTORAL POSITION available to candidates with experience in molecular biology or mouse developmental biology. Studies include the analysis of the actions of retinoic acid during embryonic development and in normal vs. tumorigenic epithelial cells. Send curriculum vitae, names of three references, and a statement of research interests to: **Dr. Lorraine J. Gudas, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** *An Equal Opportunity Employer/Affirmative Action/M/F/V.*

POSTDOCTORAL POSITION available immediately to participate in studies of structure-function relationships in feedback-regulated enzymes of aromatic biosynthesis in bacteria. A recent Ph.D. with training in molecular biology, enzymology and/or structural analysis desired. Send curriculum vitae and three letters of reference to: **Dr. Ronald Bauerle, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, VA 22903.** *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS

Two positions: (1) molecular population/evolutionary genetics; (2) molecular marker analysis of cereal crops. Please send résumé to: **M. A. Saghai Maroof, Department of Crop and Soil Environmental Sciences, VPI & SU, Blacksburg, VA 24061.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

PREDOCTORAL AND POSTDOCTORAL POSITIONS available in the Department of Pharmacology and Toxicology at Virginia Commonwealth University for the study of drug abuse. Areas of specialization include behavior, medicinal chemistry, drug-receptor interactions, second messenger systems, molecular biology, abuse liability evaluation, pain, analgesia and cardiovascular mechanisms, neurochemistry, developmental and immunopharmacology. Positions are supported by NIH research and training grants. Faculty include **Mary Abood, Mario Aceto, Robert Balster, David Compton, William Dewey, Earl Ellis, George Kunos, Louis Harris, Michael Holsapple, Billy Martin, Everett May, Graham Patrick, Susan Robinson, John Rosecrans, Sandra Welch and John Woodward.** Send curriculum vitae and letter of research interests to: **Dr. Billy Martin, Box 613, MCV Station, Richmond, VA 23298-0613.**

POSTDOCTORAL POSITION is available (U.S. citizens/permanent residents) to study molecular biology of ion transporters. The position is funded through an N.I.H. training program. Applicants should have a Ph.D. or equivalent with experience in molecular biology. Send curriculum vitae and three letters of recommendation to: **Dr. Walter F. Boron, Chairman, Department of Cellular and Molecular Physiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510-8026.**

POSTDOCTORAL POSITIONS (Ph.D. or M.D.) available beginning January 1, 1994, or May 1, 1994, respectively, to study interactions between nerve cells expressing the calcium-binding protein parvalbumin, glial cells and the extracellular matrix. Candidates should have experience with molecular biology techniques, tissue culture and morphology.

Send curriculum vitae, short statement of interest, and names of references to:

**Marco R. Celio, M.D.
Institute of Histology
University of Fribourg
Pérolles, CP 100
CH-1705 Fribourg
FAX: +41 37 826 527**

POSTDOCTORAL ASSOCIATE position (100%) available in an NIH-funded electrophysiology laboratory to study ion channels in mammalian skeletal muscles. Individual will utilize patch-clamp techniques to study calcium currents, charge-movement and contractile properties of cultured myotubes. Project goal is to understand the alterations in skeletal muscle excitation-contraction coupling associated with malignant hyperthermia. Ph.D. in Biological Science required. Previous experience in electrophysiology, muscle physiology and/or computer applications is desired. Position to start October 30, 1993, or ASAP thereafter; application deadline is **October 15, 1993.** Position is funded for up to 3 years. Send letter of application, curriculum vitae and names of three references to: **Esther M. Gallant, Veterinary Pathobiology, College of Veterinary Medicine, 1988 Fitch Avenue, St. Paul, MN 55108.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*

TWO POSTDOCTORAL POSITIONS available, one immediately, to study blood cell differentiation, including growth arrest, apoptosis and suppression of leukemia, at the molecular and cellular level. The role and regulation of transcription factors, proto-oncogenes and novel genes is being investigated [MCB 12, 2493 (1992); MCB 13, 841 (1993); Cell 72, 197 (1993); Blood 81, 2257 (1993)]. Send curriculum vitae and names of three references to: **Drs. B. Hoffman and D. Liebermann, Fels Institute for Cancer Research and Molecular Biology, Temple University School of Medicine, 3307 North Broad Street, Philadelphia, PA 19140.** *Temple University is an Affirmative Action/Equal Opportunity Employer, M/F/D/V.*

POSTDOCTORAL POSITION available to study the role of G protein-coupled receptor kinases (e.g. BARK) and arrestins in regulating the function of G protein-coupled receptors. Candidates should have experience in protein biochemistry and molecular biology. Please send curriculum vitae and the names and addresses of three references to: **Dr. Jeffrey Benovic, Department of Pharmacology, Thomas Jefferson University, 233 South 10th Street, Philadelphia, PA 19107.** FAX: (215) 923-1098. *Equal Opportunity Employer. Committed to a smoke-free work environment.*

**WRIGHT STATE UNIVERSITY
CHAIR-DEPARTMENT OF
BIOLOGICAL SCIENCES**

Wright State University College of Science and Mathematics invites applications and nominations for Chair, Department of Biological Sciences. The University is a comprehensive public university with an enrollment of over 17,000. The Biological Sciences Department includes 20 full time faculty, over 400 undergraduate majors and 40 graduate students. It offers bachelor degrees in biological sciences, medical technology and environmental health, and the master of science degree in biological sciences. Many faculty are active participants and several graduate students are enrolled in the interdisciplinary Bio-medical Sciences Ph.D. program.

Candidates must have the capability and desire to provide strong leadership in research and undergraduate/graduate education. We expect candidates to have a record of scholarship commensurate with the rank of full professor and to have a strong record of funded research. Relevant areas include molecular/cellular biology, environmental/organismic biology, medical technology, toxicology and environmental health. Opportunities for collaboration with four other life sciences departments (Anatomy, Biochemistry and Molecular Biology, Microbiology and Immunology, and Physiology and Biophysics) as well as the WSU School of Medicine are available.

A letter of application and a resume including a brief statement of research interests and names of at least 3 references should be submitted to:

**Chair, Search Committee
Department of Biological Sciences
Wright State University
Dayton, OH 45435**

Review of applications will begin November 15, 1993 and continue until the position is filled. *Wright State University is an equal opportunity/affirmative action employer. The Biological Sciences Department is particularly interested in increasing the number of qualified female applicants.*



The World Bank

The World Bank is a leading international institute in the field of economic development for developing countries. We are currently seeking a variety

of environmental professionals to work in a multi-cultural environment at our headquarters in Washington, DC, USA.

All candidates must have an advanced degree in Economics, Engineering or other related environmental science, and at least 8 years experience in developing countries formulating and implementing strategies over a broad range of environmental issues. Excellent communications skills (oral and written) and proficiency in English is essential. Knowledge of French, Spanish, Arabic, Portuguese, Russian or Chinese is preferred. Specific openings include:

- **Environmental Economists**
- **Pollution Specialists**
- **Water Resources Specialists**
- **Ecologists/Biodiversity Specialists**
- **Natural Resource Management Specialists**

In addition to the above qualifications, candidate must have expertise in one or more of the following areas:

- Pollution Management (air & water quality, waste disposal)
- Water Resources Management
- Urban Environmental Planning
- Watershed Management
- Forestry/Natural Resource Management
- Biodiversity Conservation
- Resource Economics & Analysis

Compensation package includes expatriate benefits and is internationally competitive. For consideration, please send a complete resume to: **The World Bank, Attn: ENV Search/SC9, Recruitment Division, Room O-4013, 1818 H Street, N.W., Washington, DC 20433, U.S.A. FAX: 1-202-473-1831.**

Alexion

Pharmaceuticals, Inc.

ALEXION PHARMACEUTICALS, INC. is an innovative, dynamic and rapidly growing biotechnology company engaged in the discovery and development of novel therapeutics for the treatment of cardiovascular, hematologic and immunologic diseases. Because of our rapid progress in product development, we are seeking aggressive and dynamic individuals to fill **two immediate openings:**

DIRECTOR OF PRECLINICAL DEVELOPMENT AND REGULATORY AFFAIRS

• Candidate must have Ph.D. or M.D., a minimum of five years of regulatory background and seven years of postdoctoral experience. Demonstrated proficiency in preparing INDs, NDAs and related documents is required. The breadth of knowledge should encompass preclinical development, manufacturing, clinical trials, and post-approval regulatory conditions. Regulatory or clinical background in immunotherapeutics is desirable. **Send to Bin RA.**

DIRECTOR OF CLINICAL RESEARCH

• Candidate must have Ph.D. or M.D. and a minimum of five years of experience in design and monitoring of clinical trials for investigational new drugs. Candidate should be familiar with Good Clinical Practices as applied to the management of clinical trials. Industrial background strongly preferred. Clinical experience in evaluation of immunotherapeutics and/or treatment of patients with immune disorders is helpful. Background in biostatistics is desired. **Send to Bin CR.**

We offer a competitive salary and benefits package, relocation assistance and a generous stock option plan. We are located in south central Connecticut, 1 hour from New York and 2 hours from Boston, in an area of many attractive and affordable communities, nationally ranked school systems and in close proximity to a major academic medical center, Yale University. **For exciting growth and career development, please send your curriculum vitae, the names of three references and position of interest to:**

Human Resources, Appropriate Bin Name

Alexion Pharmaceuticals, Inc.
25 Science Park, New Haven, Ct 06511
Equal Opportunity Employer

Advancement in Science Begins at Bio-Rad Laboratories

Bio-Rad Laboratories serves the clinical diagnostics market worldwide. Join our winning team and help us introduce new and novel diagnostic systems.

R&D Manager—The successful candidate will have a PhD in chemistry, biochemistry or other life science, as well as supervisory and industrial experience. Demonstrated research experience leading to product introductions and a background in clinical chemistry and HPLC is required; experience with glycosylated hemoglobins a plus.

Regulatory Affairs Specialist—You will participate in the development of new 510(k)'s, PMA's, IND's, PLA/ELA's and international product registration documents. Working with R&D and Engineering you will coordinate activities of instrumentation compliance. We require a BS/MS degree or equivalent and 3+ years regulatory experience.

For consideration, please send your resume to: Bio-Rad Laboratories, 4000 Alfred Nobel Dr., Dept. 231, Hercules, CA 94547. EOE MFDV.

BIO-RAD

Bio-Rad Laboratories

**FACULTY POSITIONS IN
RADIATION ONCOLOGY
EMORY UNIVERSITY
SCHOOL OF MEDICINE**



The newly established Division of Cancer Biology in the Department of Radiation Oncology at the Emory University School of Medicine invites applications for a tenure-track, basic science faculty position at the Assistant Professor level. Areas of research emphasis include, but are not restricted to, studies of the molecular mechanism of cellular response to radiation and other environmental stresses, mutagenesis, and tumor progression and metastasis. The department includes a new state-of-the-art Radiation Therapy Center with significant laboratory space. Collaborations are anticipated with faculty in the basic science and clinical departments, as well as the Winship Cancer Center of Emory University. Faculty members will have the opportunity to participate in the graduate student training and teaching programs of the Emory University Graduate School Division of Biological and Biomedical Sciences. Competitive salaries, start-up funds and core equipment resources have been committed for this position. Candidates should hold a Ph.D. or M.D. degree and have at least two years postdoctoral research experience. Applications will be accepted until Dec. 15, 1993.

Applications together with curriculum vitae, a statement of research interests, and the names of three references should be sent to:

Vicky Stevens, Ph.D.
Division of Cancer Biology
Department of Radiation Oncology
Emory University School of Medicine
Loughlin Radiation Oncology Center
145 Edgewood Avenue, S.E.
Atlanta, Georgia 30335-3801

Emory University is an
Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL
FELLOWSHIPS IN
CANCER BIOLOGY**

**ST. JUDE CHILDREN'S
RESEARCH HOSPITAL**

Two postdoctoral fellowships are available 1 Jan. 94 supported by an NIH/NCI Training Grant in Cancer Biology. Recent M.D., Ph.D., D.V.M. or Pharm.D. fellows train with leading scientists in several basic biomedical research laboratories which include biochemistry, experimental oncology, infectious diseases, immunology, pharmaceutical sciences, molecular pharmacology, tumor cell biology and virology/molecular biology. Only U.S. citizens and permanent residents may apply.

Applicants should provide a curriculum vitae, a brief description of research interests and have three references send letters of reference to:

Charles O. Rock, Ph.D.
Department of
Biochemistry
St. Jude Children's
Research Hospital
P.O. Box 318
Memphis, TN
38101

All information must be received
by 1 Dec. 93.

An Affirmative Action/Equal Opportunity Employer

NYU
Medical
Center

**Asst. Research
Scientist**

MOLECULAR IMMUNOLOGIST

Position available to Ph.D or MD in the laboratory of Dr. Ashok R. Amin, for studies in Molecular Immunology. The project includes studies on the biology of T cells, B cells, neutrophils, knock out and transgenic mice. The lab is focusing on the mechanism of signal transduction and cDNA cloning of receptors, *in situ* hybridization of cytokines and other T/B cell markers, together with *in vivo* studies of autoimmune diseases. The position is available immediately.

Please send c.v. with three letters of references and a salary history to Maha Singh, Human Resources Dept, NYU Medical Center, 550 First Ave., New York, NY 10016 or fax to 212-263-8211. C.V.s must be received by 10/11. EOE, M/F.



Washington
WASHINGTON UNIVERSITY IN ST. LOUIS

**Director of Graduate Recruiting and Admissions
The Division of Biology and Biomedical Sciences
Washington University in St. Louis**

We seek an energetic and enthusiastic individual to coordinate the recruitment and admission of qualified students to our interdepartmental training program leading to the Ph.D. and MD/Ph.D. degrees. The responsibilities of this position include the implementation of an aggressive recruiting program and the management of the admissions and interview process. The person filling this position will participate in the development of policy, will work closely with faculty in implementing the policy, and will direct the Division's admission and recruitment staff. The person we seek should be familiar with the goals and processes of modern graduate training in the biological sciences. While a person who holds the Ph.D. degree and has previous research experience is preferred, we welcome applications from talented individuals with less advanced degrees. Some administrative experience is also desirable. Salary will be competitive and commensurate with experience and qualifications.

The Division of Biology and Biomedical Sciences at Washington University in St. Louis is a unique consortium of basic science and clinical departments dedicated to doctoral education in the School of Medicine and on the Arts and Sciences campus. It includes almost 300 faculty members who are involved in the training of over 400 candidates for the Ph.D. and MD/Ph.D. degrees. Our programs are distinctive in that faculty and students are organized into ten inter-departmental and interdisciplinary programs that cooperate and collaborate with each other in the training of graduate students. Members of the Division work together in the recruiting, admission, teaching, and research training of predoctoral students.

Interested persons should send a CV, a brief (one page) description of career goals, and the names of three persons who can provide a letter of reference to:

Chairman, DBBS Recruiting Committee
Department of Genetics Box 8232
4566 Scott Ave.
St. Louis, MO 63110



Chair

**Department of Pharmacology
Columbia University College of Physicians and Surgeons**

Applications are sought for the position of Professor and Chair of the Department of Pharmacology. We are seeking an individual with a distinguished record of accomplishment within the broadly defined area of pharmacological research who will lead the educational and research efforts of the Department. The Department of Pharmacology has an active research program, and the new Chair will have the opportunity to recruit additional faculty to expand the areas covered by the Department. The Chair will be responsible for the overall direction of an active Ph.D. program as well as the education of medical and dental students.

Applications should include a complete resume and the names and addresses of three references.

Please send replies to:

Dr. Frederick R. Maxfield, Chair
Pharmacology Search Committee
Department of Pathology
Columbia University
630 West 168th Street
New York, NY 10032

Columbia University is an equal opportunity/affirmative action employer. Applications from women and minorities are encouraged.

Ontogen Corporation

Ontogen Corporation is a rapidly growing pharmaceutical company with a vigorous research program for the development of small-molecule therapeutics. Our research facility is located 30 miles north of San Diego in Carlsbad, California. In addition to a strong financial base, Ontogen has established an active corporate partnership with a major pharmaceutical company. We currently have openings for highly qualified individuals in the following areas:

MEDICINAL CHEMISTRY

Principal Scientist

The position requires a Ph.D. in synthetic organic chemistry with 3-6 years of research experience in the independent development of lead compounds to pharmacologically potent structures. Commitment to the challenges of moving new medicinal chemistry programs forward and dedication to team-work are essential.

Research Scientist

The position requires a Ph.D. in synthetic organic chemistry with 2 years of post-doctoral experience preferably in the synthesis of heterocycles, peptidomimetics or lipids. The candidate should have a thorough understanding of organic reaction mechanisms and possess a strong publication record in synthesis. Expertise in solving challenging structural assignments using high field NMR is also required.

Research Associate

The position requires a BS or MS in organic chemistry with 1-3 years of synthetic chemistry experience. Experience with product purification using flash chromatography, HPLC and preparative TLC are required. Compound identification using high field NMR is highly desirable.

Ontogen offers competitive compensation and benefits packages including a stock option plan. Qualified candidates are invited to send resumes to: Human Resources ONTOGEN CORPORATION, 2325 Camino Vida Roble, Box 9961, Carlsbad, CA 92009.

MOLECULAR BIOLOGY

Research Scientist

The position requires a Ph.D. in molecular biology with at least 1 year of industry experience with bacterial and mammalian protein expression systems.

BIOCHEMISTRY

Research Associate

The position requires a BS or MS in biochemistry or molecular biology and at least 2 years experience in protein purification and enzymology. Experience with the purification of membrane proteins is highly desirable.

Research Associate

The position requires a BS or MS in biochemistry or molecular biology with a strong background in tissue culture. Experience in assay development is also highly desirable.

Director

Center for University of Massachusetts - Industry Research on Polymers - CUMIRP



U Mass-Amherst is seeking candidates to fill the position of CUMIRP Director. The Director reports to the CUMIRP Steering Committee and is responsible for managing the activities of the Center. The Director works closely with the Principal Investigators and members of the Industrial Advisory Board. The principal functions of the Director are to grow the Center membership, establish and administer budgets, supervise other Center personnel and Staff, coordinate the research programs of the Center with the assistance of faculty and CUMIRP members, and coordinate technology transfer of Center polymer technology with industry and other University and State economic development functions. This is a 12-month non-tenured position with full benefits.

The successful candidate will have at least 10 years management experience in an industrial research department or an organization involved in industry-university-cooperative programs. A Ph.D. in a technical field related to polymers is preferred but not essential. Strong written and oral communication skills as well as interpersonal skills in dealing with faculty and other university functions are required. Salary will be commensurate with qualifications and experience. Persons wishing to apply for the position should write to: **Professor Richard J. Farris, Chair, CUMIRP Director Search Committee, Polymer Science and Engineering Department, University of Massachusetts, Amherst, MA 01003.**

Applications should include a letter of application, a complete curriculum vitae, and the names and addresses of three references. Review of all applications will be initiated on November 15, 1993 and the position will be available as soon thereafter as the successful candidate is identified. Women and minorities are encouraged to apply.

The University of Massachusetts - Amherst is a Commonwealth of Massachusetts organization and is an Equal Opportunity/Affirmative Action Employer.

Forging New Frontiers...

In New Drug Discovery

That's what we're doing today at Searle, forging new frontiers in research and development. At Searle, our leadership and innovation have made us a premier, worldwide pharmaceutical company.

Research Scientist- Diabetes Research

Our Cardiovascular Diseases Research Department is seeking scientists with a Ph.D. or M.D. degree with experience in Biochemistry/Pharmacology or a related discipline to conduct biomedical studies aimed at discovering novel therapies for the treatment of diabetes and its related vascular complications. Responsibilities include planning and performing experiments using cellular or *in vivo* models of diabetes to identify new approaches to the treatment of this disease. Experience in assessing insulin action in cellular systems or expertise in the use of *in vivo* models of diabetes is preferred.

Successful candidates will desire to work in a fast-paced, team oriented environment. We are located in suburban St. Louis, at a multi-disciplinary research campus which conducts both fundamental and applied research in developing novel human health care products. Searle offers a competitive salary and benefits package and excellent career opportunities.

Please submit current curriculum vitae, including three professional references, to: **RESEARCH SCIENTIST - DIABETES RESEARCH; Searle Human Resources; Mail Zone BB5E; SEARLE c/o Monsanto Company; 700 Chesterfield Parkway; St. Louis, MO 63198.** An Equal Opportunity Employer M/F/D/V.

SEARLE

On track to being on top.

POSITIONS OPEN

Cell and Molecular Biology of Phospholipid Metabolism. POSTDOCTORAL POSITIONS are available examining (1) Regulation of PLA2 and its role in arachidonic acid mobilization, (2) Transport of phospholipids in intact and permeabilized mammalian cells, (3) Genetics and biochemistry of lipid transport in yeast, (4) Regulation of pulmonary surfactant secretion. Contact: **Dennis R. Voelker or Christina C. Leslie, National Jewish Center for Immunology and Respiratory Medicine, 1400 Jackson Street, Denver, CO 80206; Telephone: (303) 398-1214.**

POSTDOCTORAL POSITION: Immediate opening to join a multidisciplinary program to study the regulation of exocrine secretion by salivary gland cells. Research will use molecular biological and other contemporary biochemical and microscopic techniques to identify and determine the role of specific receptors or signal transduction proteins in the stimulus-secretion pathway. Send curriculum vitae and three letters of recommendation to: **David J. Culp, Ph.D., University of Rochester, School of Medicine and Dentistry, Box 611, Rochester, NY 14642.**

The University of Rochester is an Equal Opportunity/Affirmative Action Employer. Due to funding requirements, applicants limited to U.S. citizens/permanent residents.

POSTDOCTORAL POSITIONS—CELLULAR AND MOLECULAR NEUROBIOLOGY: 1 or 2 postdoctoral positions available for researchers interested in any of three projects: (1) cell interactions regulating proliferation and commitment by neuronal precursor cells; (2) role of trophic factors in controlling neuron production and survival; (3) promoter-trap studies of neuron progenitor-specific genes. Lab is focused primarily on approaching these questions using a model system the olfactory epithelium of outbred/transgenic mice. Requires Ph.D. and experience in cellular and molecular neurobiology. Experience using olfactory epithelium of outbred/transgenic mice as model system desirable. Salary starts \$24,000. The University of Iowa and its associated medical school, hospitals and clinics can present excellent opportunities for couples with dual careers in the health sciences or other academic areas. The position(s) are in lab of **Dr. Anne Calof.** Send letter of interest, curriculum vitae and names and addresses of references to: **Personnel Assistant, Department of Biological Sciences, 138 Biology Building, University of Iowa, Iowa City, IA 52242-1324.** *The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

CASE WESTERN RESERVE UNIVERSITY MUSCULOSKELETAL RESEARCH TRAINING PROGRAM

PREDOCTORAL AND POSTDOCTORAL POSITIONS are available in gene regulation, immunogenetics, cell biology and bioengineering related to cartilage, bone and musculoskeletal disorders. The program is highly interactive and multidisciplinary. Specific research areas are:

D. Davy, Ph.D., Biomechanics; **V. M. Goldberg, M.D.,** Cartilage Repair; **E. Greenfield, Ph.D.,** Bone Cytokines; **T. M. Haqqi, Ph.D.,** Autoimmunity; **T. M. Hering, Ph.D.,** Cartilage Molecular Biology; **C. J. Malemud, Ph.D.,** Cartilage Matrix Biosynthesis; **F. Mehraban, Ph.D.,** Cytokines/Cartilage Metalloproteases; **R. W. Moskowitz, M.D.,** Collagen Mutations/Osteoarthritis; **S. Stevenson, D.V.M., Ph.D.,** Bone Repair/Replacement.

*U.S. citizenship or permanent residency required. Submit curriculum vitae, 3 letters of recommendation and a 1-page statement of research interest to: **Roland W. Moskowitz, M.D., Director, Musculoskeletal Training Grant, University Hospitals, 2074 Abington Road, Cleveland, OH 44106.** Equal Opportunity Employer. Women and minorities are encouraged to apply.*

HARVARD/POSTDOCTORAL POSITIONS are immediately available to study molecular mechanisms of atherosclerosis and hypertension with special emphasis on transcriptional regulation of genes important for growth and differentiation of vascular endothelial and smooth muscle cells (e.g., endothelin, HB-EGF, and nitric oxide synthase). Experience with molecular biology or protein chemistry is required. Please send curriculum vitae and names of three references to: **M. E. Lee, M.D., Ph.D., Cardiovascular Biology Laboratory, Building 2, Room 129B, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**

POSITIONS OPEN

POSTDOCTORAL POSITION

Available immediately to study mammalian gene expression/DNA repair induced by DNA damage. Applicants should have a Ph.D. and/or M.D. degree. Experience in molecular biology, protein biochemistry, and/or mammalian tissue culture is preferable. Send curriculum vitae, relevant reprints, and the names and telephone numbers of three references to: **Dr. Kristoffer Valerie, Department of Radiation Oncology, Medical College of Virginia, Virginia Commonwealth University, Box 58, Richmond, VA 23298-0058.**

Virginia Commonwealth University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION—MOLECULAR ENDOCRINOLOGY. Available to study regulation of pituitary glycoprotein hormone transcription by steroids and hypothalamic peptides in a laboratory active in recombinant DNA and transgenic techniques. Send résumé and three references to: **Dr. Margaret A. Shupnik, Box 511 Endocrinology, University of Virginia Medical Center, Charlottesville, VA 22908.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION studying the RAS signalling pathway in the yeast *Saccharomyces cerevisiae*. We are studying how RAS interacts with adenyl cyclase and the cyclase associated protein, CAP. We use approaches including genetics, protein purification, and molecular biology. Applications are encouraged from individuals with experience in these techniques. Please send curriculum vitae and 3 references to: **Dr. Jeffrey Field, Department of Pharmacology, University of Pennsylvania, 67 John Morgan Building, 36th Street and Hamilton Walk, Philadelphia, PA 19104-6084.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Opportunity available to study molecular mechanisms of brain damage caused by HIV and develop strategies for therapeutic intervention. Experience in molecular biology, cell biology, immunology, or neuroscience required. Start date: fall 1993. Send curriculum vitae, brief description of research experience, and names of three references to: **Dr. Dana Gabuzda, Dana-Farber Cancer Institute, JF 711, 44 Binney Street, Boston, MA 02115.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION, NEUROSCIENCE

Position available by March 1, 1994, to study control of emesis and respiration. Candidate must have Ph.D. and/or M.D. degree and experience in mammalian electrophysiology. Send curriculum vitae, summary of research experience, and names and telephone numbers of three references by November 15, 1993, to: **Dr. Alan Miller, The Rockefeller University, 1230 York Avenue, New York, NY 10021.** *FAX: 212-327-8530. An Equal Opportunity Employer/Affirmative Action Employer.*

POSTDOCTORAL POSITION VANDERBILT MEDICAL SCHOOL

A position is available to study class I-dependent antigen presentation and T cell development in mutant mice created by gene targeting. We are studying TAP1 and LMP2 mutant mice. Experience in molecular biology, immunology and biochemistry desired. Please send summary of research experience and curriculum vitae with names and telephone numbers of three references to: **Dr. Luc Van Kaer, Department of Microbiology and Immunology, Vanderbilt University School of Medicine, Nashville, TN 37232.** *Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION IN BIOCHEMICAL NUTRITION (U.S. citizen or permanent resident). Available immediately to study the mechanism and catalysis of (1) vitamin B₁ transport and degradation or (2) a thiamin diphosphate-dependent decarboxylase. Experience in mechanistic enzymology and NMR is preferred. Send curriculum vitae and three references to: **Dr. M. Washabaugh, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205-2179.** (Telephone: 410-955-1994; FAX: 410-955-2926). *Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities.*

POSITIONS OPEN

MOLECULAR GENETICS

POSTDOCTORAL POSITION available immediately to study the molecular genetics of genes responsible for hereditary glaucomas. This project will include the identification and cloning of the genes responsible for these conditions, as well as the characterization of the gene products. Experience in molecular genetics and ideally gene cloning required. Please send or FAX curriculum vitae and three letters of recommendation to: **Janey L. Wiggs, M.D., Ph.D., New England Eye Center, Tufts University School of Medicine, 750 Washington Street, Box 450, Boston, MA 02111; FAX: (617) 956-4215.**

POSTDOCTORAL POSITION available immediately to study the enzymatic mechanisms of DNA recombinases and DNA helicases. The research will include the use of protein engineering to construct mutant enzymes having altered catalytic properties. Experience in mechanistic enzymology, nucleic acid biochemistry, or protein chemistry is desirable. Send curriculum vitae and names of references to: **Dr. F. R. Bryant, Department to Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205.** *JHU is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOWSHIP IN NEUROIMMUNOLOGY

Applications are invited for a Postdoctoral Fellowship in Neuroimmunology with emphasis on studying mechanisms of action of immunomodulating agents in autoimmune disease affecting the nervous system. This position is for two years, and the salary is commensurate with training and experience. Candidates with Ph.D. in Pharmacology, Cell Biology or Immunology. Send curriculum vitae to: **S. Sriram, M.D., Professor of Neurology, Vanderbilt University Medical Center, 2100 Pierce Avenue, Nashville, TN 37212.** *FAX: (615) 936-0223.*

Smithsonian Institution Fellowship Program

GRADUATE STUDENT, PREDOCTORAL, POSTDOCTORAL, AND SENIOR FELLOWSHIPS in animal behavior, ecology, and environmental science; including an emphasis on the tropics; Earth sciences and paleobiology; evolutionary and systematic biology; history of science and technology. Tenable in residence at the Smithsonian facilities. Stipends and tenure vary. **Deadline: January 15 annually.** Contact: **Office of Fellowships and Grants, 955 L'Enfant Plaza, Suite 7000, Desk N, Washington, D.C. 20560.** *Telephone: (202) 287-3271.*

An Equal Opportunity Employer.

POSTDOCTORAL FELLOW/ CELL REGULATION University of Texas Southwestern Medical Center at Dallas

An exciting new area in cell regulation research is developing. Evidence is accumulating that two plasma membrane domains that are specialized for endocytosis (clathrin coated pits and caveolae) are sites where hormonal and mechanical signals are modulated. Our laboratory has mounted a major research effort to determine the different ways that these membrane specializations participate in cell signaling. Postdoctoral positions are now available for individuals who want to receive training in this exciting new research area. If you have either a Ph.D. or M.D. and have experience in molecular and cell biology, please apply. Send curriculum vitae and three letters of recommendation to:

Dr. Richard G.W. Anderson
Department of Cell Biology and Neuroscience
University of Texas Southwestern Medical Center
at Dallas
Dallas, TX 75235-9039
An Equal Opportunity Employer.

MILES

Pharmaceutical
Division

The Miles Research Center (MRC) is an expanding pharmaceutical research facility located in a campus-like setting near Long Island Sound in Southern Connecticut. The newly created Institute for Metabolic Disorders focuses on Type II diabetes and obesity with the long term goal of developing novel therapeutics.

POSTDOCTORAL FELLOWSHIP

A postdoctoral position is available **immediately** in the signal transduction group. The fellow will conduct basic research on G-linked hormone receptors. The studies may include cloning, expression, site-directed mutagenesis and protein analysis of signal transduction proteins, with opportunity to do transgenic and gene knockout experiments. The postdoc will be offered a stimulating intellectual environment, access to state-of-the-art methods and instruments, highly competitive compensation, and training to prepare for an academic or industrial career.

For immediate and confidential consideration, please send your resume to: **Dept. ELHYW, Miles Inc., 400 Morgan Lane, West Haven, CT 06516.**

An Equal Opportunity Employer M/F/D/V

Research Opportunities in Japan

The **National Science Foundation** offers opportunities for U.S. scientists and engineers to conduct research at Japanese universities, national research institutes, and corporate research laboratories.

To provide these opportunities, NSF cooperates with many Japanese organizations, including the Center for Global Partnership, the Science and Technology Agency, the Agency for Industrial Science and Technology, and the Japan Society for the Promotion of Science. More information on potential host institutions under these organizations is available.

Graduate students, postdoctoral researchers and senior investigators are eligible to apply for research stays in Japan ranging from three to 24 months. The next deadline is November 1, 1993. For more details and application materials please see the program announcement, "International Opportunities for Scientists and Engineers," (NSF-93-51).

To order the program announcement, please contact the Publications Office, **National Science Foundation**, Washington, D.C. 20550. Tel: (202) 357-3619. TDD: (202) 357-7492. Email: pubs@nsf.gov (Internet) or pubs@nsf (Bitnet).

The program announcement is also available electronically via the Science and Technology Information System (STIS). Please contact stisfly@nsf.gov (Internet) or stisfly@nsf (Bitnet).

For additional details please contact the Japan Program, Division of International Programs, **National Science Foundation**, Washington, D.C., 20550. Tel: (202) 653-5862. Email: NSFJinfo@nsf.gov (Internet) or NSFJinfo@nsf (Bitnet).

STAFF SCIENTIST OPENINGS

The **Energy Analysis Program** at **Lawrence Berkeley Laboratory** is an interdisciplinary research group focusing on energy and environmental issues at local, national and international levels. Located in the Berkeley hills, the Laboratory has a spectacular view of the entire San Francisco Bay Area, whose rich and diverse culture has much to offer. As a program with extensive experience and leadership in many areas, the program has grown 15% per year for the past 4 years. In a time when energy and environmental issues are becoming a major priority in government and the private sector's planning, we are in a strong position to continue expanding in order to find solutions to increasingly imminent and challenging problems.

The program is currently seeking qualified applicants to fill up to 11 Staff Scientist positions that will lead or conduct research in the following areas:

- Residential and commercial appliances and equipment (B/1507)
- Commercial sector HVAC equipment (B/1505)
- Residential appliance efficiency (B/1504)
- Urban heat islands (B/1656 and B/1729)
- Long-term forecasting of end-use energy consumption (B/1503)
- Energy use and conservation in commercial buildings (B/1655)
- Energy use and efficiency in developing countries (B/1654)
- Energy-related environmental issues (B1629)
- Energy-efficiency policies in the US and/or formulating a national action plan to limit greenhouse gas emissions (B/1534 and B/1566)

The Staff Scientist position is a senior laboratory research position. Staff Scientists participate in the formulation, planning, execution, and evaluation of projects, and are expected to work independently. Many of the positions require experience in managing and carrying out complex projects and supervising others' work. Researchers in the Energy Analysis Program must have excellent written and verbal communication skills and work well in groups. The program's unique and non-traditional working environment encourages creative and innovative approaches to issues which cross many disciplines.

Relevant backgrounds for these positions include: electrical and mechanical engineering, physical sciences, computer science, public policy, energy and environmental studies, and economics. In most cases the successful applicant will have a Ph.D. or considerable research experience.

LBL offers competitive salaries and comprehensive benefits. For detailed descriptions of current job openings please contact (include job number): **Lawrence Berkeley Laboratory, Staffing Office, Box #JSCI, One Cyclotron Road, Bldg. 938A, Berkeley, CA 94720.** Lawrence Berkeley Laboratory is an Equal Opportunity Employer committed to diversity in the workplace.



LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA
U.S. Department of Energy

VICE CHAIRPERSON OF HUMAN GENETICS

Endowed Professorship in Human Genetics

The newly established Department of Human Genetics at the Mount Sinai School of Medicine invites applications for an endowed professorship and the position of Vice Chairperson of Human Genetics. The Department seeks a leader with an outstanding record of clinical and research accomplishments in human genetics and strong administrative skills. As Vice Chairperson, you will be responsible for administering and coordinating the Department's comprehensive clinical genetics program, extensive diagnostic laboratories, and ABMG-accredited training/education activities. You will also be expected to be an excellent teacher and to establish an independent research program. The Department, which includes basic scientists with a broad range of research interests, plans expansion and faculty recruitment in the areas of gene discovery, mammalian genetics and gene therapy. Individuals interested in the application of molecular diagnostics to the development of predictive medicine are encouraged to apply. The successful candidate will hold an endowed professorship and a joint appointment in Human Genetics and Pediatrics.

Mount
Sinai

Candidates for this position must be Board-eligible or certified Pediatricians who are also ABMG certified in Clinical Genetics, Clinical Cytogenetics, Biochemical Genetics and/or Molecular Genetics. Applications, including a curriculum vitae, selected reprints, a statement of research interests, and the names of three references should be sent to: **Dr. R.J. Desnick, Chairman, Department of Human Genetics, Mount Sinai School of Medicine, Box 1203, One Gustave L. Levy Place, New York, NY 10029-6574.** An Equal Opportunity Employer.

The Mount Sinai Medical Center of New York

Space Life Sciences Research Division of Biology Kansas State University

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

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

Research Areas Include:

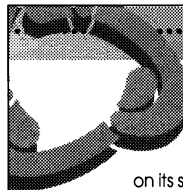
- ☛ Developmental and molecular genetics
- ☛ Organ development and tissue culture
- ☛ Signal transduction mechanisms
- ☛ Cytoskeletal regulation of morphogenesis
- ☛ Extracellular matrix and development
- ☛ Plant and animal model systems

Interested?

Contact:

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

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



Alkermes is an emerging pharmaceutical company focused on the development and commercialization of products based on its sophisticated drug delivery technologies.

Pharmacokinetics & Drug Metabolism Senior Scientist

The successful candidate will design and conduct pharmacokinetic and drug metabolism studies at Alkermes, providing support for our preclinical and clinical drug development programs.

A Ph.D. in pharmacokinetics pharmacology is required and the candidate should have a minimum of 5 years of postdoctoral experience in preclinical or clinical pharmacokinetics. A strong background in drug metabolism and analytical chemistry is desirable.

This position provides the opportunity to participate in a key area in a rapidly growing pharmaceutical company. The appointee will serve as a member of multidisciplinary teams directing the development of CNS drugs and drug delivery systems, and will be responsible for evolving an in-depth drug metabolism perspective on a wide variety of pharmacological agents.

For consideration, please send resume in confidence to: Alkermes, Inc., Box WA, 64 Sidney Street, Cambridge, MA 01239-4136.

An Equal Opportunity Employer



Alkermes, Inc.

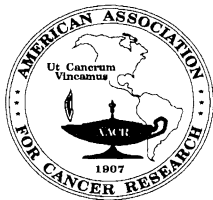
Bringing Breakthrough Research
Into Development

**AMERICAN ASSOCIATION FOR CANCER RESEARCH
85th Annual Meeting**

Karen S. H. Antman, Program Chairperson

Moscone Center, San Francisco, CA

April 10-13, 1994



Titles of Major Sessions

(Confirmed Chairpersons in Parentheses)

PLENARY SESSION

The Biological and Clinical Roles of Genetic Markers (Karen S. H. Antman)

SYMPOSIA

Genetic Basis for Tumor Cell Sensitivity to Radiation (John B. Little)

Recent Advances in Environmental Carcinogenesis

Basic Science Approaches to Breast Cancer (Mina J. Bissell)

Apoptosis

Basic and Clinical Aspects of Prostate Cancer (Donald S. Coffey)

Tumor Suppressor Genes and Cell Cycle Control

Retinoids and Cancer (Lorraine J. Gudas)

Solid Tumor Physiology and Therapeutic Approaches

Potential Applications of Advances in Cell and Molecular Biology to New Therapies for Lung Cancer (John D. Minna)

Hematological Malignancies: Biology and Therapy

Hormonal Carcinogenesis: Epidemiological and Mechanistic Studies (Barbara S. Hulka and Joachim G. Liehr)

Signal Transduction and Cancer

Cell Adhesion in Invasion and Metastasis (Erkki Ruoslahti)

New Approaches to Cancer Immunotherapy (Olivera J. Finn)

Genetic Imprinting and Its Role in Cancer

AIDS-associated Malignancies (Alexandra Levine)

Integration of Cytokines and Radiation: Biological Basis and Preliminary Clinical Trials (Zui Fuks)

Pharmacogenetics: Enzyme Polymorphisms and Drug Metabolism (Frank J. Gonzalez)

Intermediate Endpoints in Cancer Prevention (Gary Kelloff)

Transcriptional Control of Cell Proliferation and Differentiation (Robert Eisenman)

Conducting Cancer Research Among Minority Populations in the United States (Jose Russo)

Topoisomerase I Inhibitors: Molecules to Medicine (Randall Johnson)

New Strategies for Immunological Intervention

Mechanisms and Circumvention of Drug Resistance (Barton A. Kamen)

Nutrition and Cancer: Basic and Epidemiological Research (Walter C. Willett)

Chemoprevention by Antioxidants (Paul Talalay)

WORKSHOPS

Confocal Microscopy and Quantitative Image Analysis

FISH and Flow Cytometry

CONTROVERSIES

Bone Marrow Transplantation

Is Multidrug Resistance an Important Factor in Therapeutic Outcome?

Diet and Cancer

MEET-THE-EXPERT SUNRISE SESSIONS
To Be Announced

Abstract Deadline: October 25, 1993

Further Information: AACR Office • Public Ledger Building • 620 Chestnut Street • Suite 816 • Philadelphia, PA 19106-3483
TELEPHONE (215) 440-9300 • **FAX** (215) 440-9313

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS in CELL CYCLE CONTROL

Department of Pediatrics, University of Michigan

Two positions available to study the biochemical and molecular mechanisms controlling cell cycle in (poly-ploid) leukemic cells. Requirements include a Ph.D. in Biochemistry or Molecular Biology. Successful candidates must have a strong background in cell cycle control or characterization of protein kinase complexes. Experience in molecular cloning and mammalian expression vectors is desired. Salary commensurate with relevant experience. Interested individuals should send a brief statement of research interests, curriculum vitae, and the names, addresses, and telephone numbers of three references to: Michael W. Long, Ph.D., Room 3570B, MSRB-II, Box 0684, University of Michigan, 1150 West Medical Center Drive, Ann Arbor, MI 48109.

CELLULAR/MOLECULAR STUDIES OF HEART DYSFUNCTION FELLOWSHIPS: Inter-departmental postdoctoral program focuses on changes in cardiac cells during ischemia and congestive heart failure using multiple techniques in areas such as imaging of cellular and subcellular ion activities, regulation of gene and ion transport protein expression, roles of growth factors in cellular differentiation, and patch clamp studies of native and recombinant channel activities. Participating departments are Biophysics, Cardiology, Physiology, and Pharmacology, and the faculty includes Drs. W. B. Hood, Jr., R. S. Kass, C.-s. Liang, I. Sarelius, and S. S. Sheu. Candidates must have a doctoral degree, and be U.S. citizens or permanent residents. For information contact: William B. Hood, Jr., M.D., Box 679, University of Rochester, Rochester, NY 14642-8679. *Equal Opportunity/Affirmative Action 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.*

RESEARCH FELLOW: One individual for a 100% annual, renewable position is being sought with the Division of Surgical Sciences of the Department of Surgery at the University of Minnesota. Individual must have an M.D. or equivalent foreign degree and have six years of microsurgical experience as well as experience in teaching, research, and writing presentations and papers for publication.

Individual will be responsible for developing a microsurgery research lab and teaching the principles and techniques of microsurgery. Individual will participate in the design, implementation, and evaluation of research projects as they relate to the microsurgery research lab. Position will participate in preparation and presentation of data, analyze data, and collaborate on reports, conference papers, and publications.

Start date is A.S.A.P.

Please submit curriculum vitae and bibliography by October 15, 1993, to:

Rosalie Cihlar
Executive Secretary
Department of Surgery
University of Minnesota
Box 195 UMHC
Minneapolis, MN 55455

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

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOWSHIPS

The Basic Research Division of the Bassett Research Institute is seeking postdoctoral fellows to begin July 1, 1994. The diverse research interests of staff investigators include molecular biology/immunology of autoimmune diseases, immunology of dendritic cells and flow cytometry, fatty acid transport and metabolism of albumin, gastrointestinal endocrinology, tumor nutrient metabolism and growth *in vivo*, intestinal microbial ecology and pineal/neuroendocrine regulation of cancer growth. The Bassett Research Institute provides a supportive and congenial environment for biomedical research, combining basic, clinical and population studies. Located in scenic upstate New York, Cooperstown offers a rich blend of cultural and outdoor activities. The Mary Imogene Bassett Hospital is an affiliate of Columbia University College of Physicians and Surgeons. Applicants should submit curriculum vitae, names and addresses of three references and a brief description of research interests to: Thomas A. Pearson, M.D., Ph.D., Director, Research Institute, Mary Imogene Bassett Hospital, One Atwell Road, Cooperstown, NY 13326-1394.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS

Postdoctoral/Research Associate positions available immediately for study and training in cellular or molecular biology relating to gene expression. Preference will be given to applicants with Ph.D. and prior experience in microscale protein purification or functional analysis of gene promoters. Send applications to: David Stiles, Molecular and Cellular Section, School of Biological Sciences, Lexington, KY 40506. *An Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW. A position is open immediately for a scientist with a background in biochemistry, molecular virology or molecular biology to investigate newly identified HIV envelope binding proteins (*JBC* 268:15291, 1993) at a private research institute. The selected individual will enjoy a well-equipped, supportive and productive environment with unique opportunities for collaboration. The institute is in close proximity to the Finger Lakes region of New York and numerous recreational resources. Send curriculum vitae with names, addresses and telephone numbers of three references to: Dr. Lee Henderson, Guthrie Research Institute, Sayre, PA 18840. Telephone: 717-882-4656 or FAX: 717-882-5151.

POSTDOCTORAL/RESEARCH ASSOCIATE. Investigation of synaptic integration in mammalian retina using patch-clamp recording from slices. Position open October 1, 1993. Must have previous experience either with retina or with single-cell electrophysiology. Salary \$26,000 plus health. Send curriculum vitae and three references to: Professor Gordon L. Fain, Departments of Ophthalmology and Physiological Science, Jules Stein Eye Institute, UCLA School of Medicine, Los Angeles, CA 90024. FAX: (213) 825-0841.

POSTDOCTORAL RESEARCH ASSOCIATE HARVARD MEDICAL SCHOOL

Two positions available immediately for research on membrane dynamics in human blood cells. Projects investigate molecular interactions controlling protein and lipid mobility and distribution in erythroid and lymphoid cell membranes; roles these control mechanisms play in mediating interactions between cells; and relationships between derangements in these control mechanisms and disease pathophysiology. Research associates learn to operate time-resolved scanning fluorescence microscope photometer and/or nanometer-scale video microscope. Ph.D. in biophysics, cell biology, biochemistry, or physiology required. Experience in membrane protein biophysics, biochemistry, or molecular biology, and laser or video microscopy preferred. Please send curriculum vitae and names of three references to: David E. Golan, M.D., Ph.D., Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, 250 Longwood Avenue, Boston, MA 02115.

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION Washington University School of Medicine

Postdoctoral position is available to study protein targeting and turnover, using mammalian systems with combined cellular biological, biochemical and molecular approaches (see *J. Biol. Chem.* 268, 13002, 1993; *Am. J. Physiol.* 264, C93, 1993). Candidates familiar with cell and molecular biology and with an interest in these areas, send curriculum vitae and names of two references to: Alan L. Schwartz, Ph.D., M.D., Box 8116, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110; (FAX: 314-454-2685).

Washington University is an Equal Opportunity/Affirmative Action Employer, M/F/D/V.

POSTDOCTORAL/RESEARCH ASSOCIATE position in Molecular Virology to study the effects of a recombinant interferon on Ovine Lentivirus replications. Applicants must have a Ph.D. or training in molecular virology/biology. Experience in nucleic acid hybridization, PCR, reverse transcriptase assays, ELISA and/or immunoblotting is preferred. Send curriculum vitae with references to: Dr. Andrés de la Concha, Texas Agricultural Experiment Station, 7887 North Highway 87, San Angelo, TX 76901. *Texas A&M University is an Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH POSITION available immediately to study the roles of growth factors and adhesion molecules in growth/differentiation control of colon cancer. Ph.D. with strong background in molecular biology and biochemistry preferred. Send curriculum vitae with 3 references to: Dr. S. Chakrabarty, The University of Texas M. D. Anderson Cancer Center (Box 73), 1515 Holcombe Boulevard, Houston, TX 77030. *An Equal Opportunity/Affirmative Action and Smoke-free Institution.* FAX: 713/794-1824.

POSTDOCTORAL RESEARCH POSITION Washington University School of Medicine

Postdoctoral position is available to study the developmental biology of the mammalian lung. Projects include characterization of the determinants of gene expression (*JBC* 267:479, 1992) and epithelial cell differentiation (*PNAS* 89:9079, 1992) in the developing lung. Interested candidates with cellular and molecular biology/transgene experience should send curriculum vitae and the names of two references to: Jonathan D. Gitlin, M.D., Box 8116, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110; (FAX: 314-367-3765).

Washington University is an Equal Opportunity/Affirmative Action Employer, M/F/D/V.

RESEARCH ASSOCIATE position available immediately to study the role of glycosphingolipids and glycosyltransferases in atherosclerosis (see *J. Biol. Chem.* 267:7148, 1992 and *B.B.R.C.* 181:554, 1991). Experience in glycoconjugate biology, signal transduction mechanisms and/or molecular biology desirable. Send curriculum vitae and name, telephone number and FAX number of three references to: Dr. Subroto Chatterjee, Department of Pediatrics, Johns Hopkins University, School of Medicine, Baltimore, MD 21287-3654 or FAX: 410-955-1276.

The Department of Psychiatry at the University of Arizona College of Medicine is seeking a **BASIC SCIENTIST** involved in behavioral neuroscientific, psychiatric or substance abuse research for a tenure-track position. Must have M.D. or Ph.D. and proven research record. If physician/clinical psychologist, must be licensed to practice in the United States. Rank open. Salary competitive and commensurate with experience and rank. The University of Arizona provides excellent benefits and the city of Tucson offers a congenial lifestyle with resident theater, symphony, opera and ballet in addition to a climate conducive to year-round outdoor activities. Applicants should submit curriculum vitae, letter of interest, and the names and addresses of three references to: Eric M. Reiman, M.D., Associate Professor and Chairman of the Basic Scientist Search Committee, Department of Psychiatry, Arizona Health Sciences Center, Tucson, AZ 85724. Review of applications will begin on October 15, 1993, and will continue until position is filled. *Women and minority applicants are strongly encouraged to apply. The University of Arizona is an Equal Opportunity Employer.*



Chief Executives

Research Councils

Following the recent Government White Paper: "Realising our Potential", two new Research Councils are to be created to cover Engineering and Physical Sciences and Particle Physics and Astronomy, while the Natural Environment Research Council is to receive a new charter extending its mission.

A Chief Executive for each of the Councils is now sought to work closely with the new Director General of Research Councils in implementing the policies set out in the White Paper.

Engineering and Physical Sciences Research Council

Up to £90,000 p.a.

The largest of the research councils, the EPSRC will promote and support research and post-graduate training in engineering, chemistry, physics and mathematics, with special emphasis on meeting the needs of the users of its research and trained manpower in order to enhance UK competitiveness and the quality of life. Improving the interaction between those funded by the Council and UK industry and commerce will be a high priority.

Particle Physics and Astronomy Research Council

Up to £60,000 p.a.

The PPARC will promote and support research and post-graduate training to improve understanding of those concepts and principles underlying physical phenomena and their consequences. Unlike other Councils it will almost exclusively support basic research, but will be expected to exploit the scope for industrial spin off. Responsibilities will include management of the Royal Greenwich Observatory, the Royal Observatory Edinburgh and other UK capital investments in observatories abroad, and for UK subscriptions to CERN and the European Space Agency Science Programme.

Natural Environment Research Council

Up to £80,000 p.a.

Responsible for promoting and supporting basic research and post-graduate training in the physical and biological sciences, the NERC's mission has been extended to cover earth observation. The NERC's primary aims are to enhance understanding of man's impact on his surroundings and their influence on his activities, so assisting the development of policies for the sustainable exploitation of natural resources.

Based in Swindon, you will be responsible for leading the activities of your Council and for ensuring the highest standards of professional management. This includes putting in place effective systems for financial management and control. Probably in your mid-40's to 50's you must have proven experience in the management of change, preferably gained in a large academic, industrial or Government organisation, and be able to command the confidence of the communities covered by your Council's remit.

These are 4-year appointments in the first instance with the possibility of extension.

An equal opportunities employer.

RAS

For further details and an application form (to be returned by 15th October 1993) write to Recruitment & Assessment Services, Alencon Link, Basingstoke, Hampshire RG21 1JB or telephone Basingstoke (0256) 468551. Please quote reference B/94/1970.

*Recruitment
& Assessment
Services*

POSITIONS OPEN

Private international VENTURE CAPITAL firm managing over \$200 million seeks qualified individual responsible for early-stage biotechnology and life sciences-related investments. M.D./MBA/Industry/Venture Capital Industry experience preferred. Please send all inquiries to: **Box 38, Science Classified Advertising, 1333 H Street N.W., Suite 813, Washington, DC 20005.**

HEALTH SERVICES RESEARCH ANALYST

Memorial Mission Hospital is seeking a Research Scientist to direct its Cardiovascular Research program. The successful candidate should have an established record in clinical cardiovascular research, computer science or database management, as well as administrative experience. This is an excellent professional opportunity for an individual with leadership qualities to work in a new facility and live in a quality community. Candidates should send curriculum vitae, a statement of research interests and three references to: **Elena Donaldson, Professional Recruiter, Memorial Mission Hospital, 509 Biltmore Avenue, Asheville, NC 28801-4690. Mission Hospital is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH TRAINING IN GERONTOLOGY

Positions available in NIA training program directed toward basic research in gerontology with special emphasis on the nutritional manipulation of the aging processes. General areas include metabolism and exercise, endocrinology and neuroendocrinology, free radicals and membrane lipid peroxidation, immunology, cellular calcium and bone metabolism, molecular biology and regulation of gene expression. Send curriculum vitae, description of research interests and the names of three references to: **Dr. Byung P. Yu, Department of Physiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. Only U.S. citizens or individuals with permanent resident status may apply. An Affirmative Action/Equal Opportunity Employer.**

COAGULATION SCIENTIST

Instrumentation Laboratory (IL), a worldwide leader in the research and development of reagent biomedical instrumentation test systems, is currently seeking an individual for its Lexington, Massachusetts, facility. Responsibilities include research and development of blood coagulation controls, reagents and kits to be used on our instrumentation. Incumbent will participate in projects from the concept stage through development and to final market release. Qualified candidate will have a minimum of a B.S. degree in a biological science plus a minimum of three years of related experience in product development, preferably in an industrial environment. High level of independence and ability to meet rigorous deadlines are required.

IL offers an excellent salary and benefits package including 401(k) and tuition reimbursement. Interested candidates should submit résumé and salary history to: **Christopher Hatt, Human Resources, Instrumentation Laboratory, 113 Hartwell Avenue, Lexington, MA 02173-3190. IL is an Equal Opportunity Employer.**

CROP GENOMICS

Opportunities exist for a highly motivated and independent individual to develop and establish an automated genome analysis laboratory in the newly constructed Crop Biotechnology Center at Texas A&M University. This laboratory is intended to facilitate various crop improvement projects from marker-assisted selection to map-based gene cloning. Candidates must have a Ph.D. in plant molecular genetics or a related discipline. Experience in plant breeding and genetics, recombinant DNA techniques including RFLP mapping, RAPD targeting, PCR-based mapping strategies, automated DNA sequencing, Physical mapping, YAC/BAC library construction/screening, and chromosome walking is desirable. Applications should include curriculum vitae, the names and addresses of three references, and copies of recent publications and be sent to: **Dr. Rod A. Wing, Soil & Crop Sciences Department, Crop Biotechnology Center, Texas A&M University, College Station, TX 77843. FAX: 409-862-4790.**

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

POSITIONS OPEN

RESEARCH SCIENTIST GYNECOLOGIC CANCER University of Pennsylvania

The Division of Gynecologic Oncology at the University of Pennsylvania Medical Center, an NCI-designated Comprehensive Cancer Center, seeks an individual (Ph.D. or M.D./Ph.D.) to direct a basic laboratory research program related to gynecologic cancer. Substantial start-up funding and state-of-the-art facilities provided. A broad range of interests can be accommodated. Academic rank and salary commensurate with experience. Please direct inquiries to:

**Stephen C. Rubin, M.D.
Professor and Director
Division of Gynecologic Oncology
University of Pennsylvania Medical Center
3400 Spruce Street
Philadelphia, PA 19104-4283**

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

COMMERCIAL MUSHROOM BREEDING

Sylvan Spawn Laboratory, Inc., the largest producer of commercial mushroom inoculum in the United States, invites applications for a Research Scientist position in our Mushroom Strain Development group. Applicants should have a Ph.D. with training in at least two of the following: mycology, crop breeding, classical and molecular genetics. Responsibilities include the construction and evaluation of new hybrid mushroom strains, development of genetic markers, gene mapping, genetic and phenotypic characterization of strains, and maintenance of a culture collection. Applicants should send curriculum vitae or résumé, references, and a statement of research interests and goals to: **Dr. R. W. Kerrigan, Research Department, Sylvan Spawn Laboratory, Inc., 1163 Winfield Road, Cabot, PA 16023. Equal Opportunity Employer.**

Molecular Biology of Head and Neck Cancer Johns Hopkins University

The Division of Head and Neck Cancer Research is interested in hiring a **MOLECULAR BIOLOGIST** or **CELL BIOLOGIST** to become part of a research team devoted to understanding the genetic alterations of head and neck cancer progression. Candidates must have an M.D. or Ph.D. degree, postdoctoral experience, and strong personal recommendations for this tenure-track or tenured position. Salary and position based on experience. Send curriculum vitae and 3 letters of recommendation to: **Dr. David Sidransky, Director—Head and Neck Cancer Research, Johns Hopkins University, 818 Ross, 720 Rutland Avenue, Baltimore, MD 21205. Telephone: (410) 550-5153. Johns Hopkins University is an Equal Opportunity Employer.**

ASSISTANT RESEARCH SCIENTIST. This position is available immediately to study the role of phosphoinositide-specific phospholipases and GTP binding proteins in signal transduction mechanisms in iris smooth muscle. The applicant must have a Ph.D. in Biochemistry or Pharmacology and some experience in the field of second messengers. Send curriculum vitae and names of three references to: **Dr. Ata Abdel-Latif, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100. An Equal Opportunity/Affirmative Action Employer.**

CANCER RESEARCH TRAINING CASE WESTERN RESERVE UNIVERSITY CANCER CENTER

NIH-funded cancer research training 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 colon cancer	Mutagenesis
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 interests to: **Dr. Clark Distelhorst, School of Medicine (BRB), Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4937. Must be American citizen or permanent resident. Minorities and women are encouraged to apply.**

POSITIONS OPEN

The Human Gene Therapy Research Institute (HGTRI) at Iowa Methodist Medical Center is actively recruiting M.D. and Ph.D. SCIENTISTS of various experience levels with expertise in hematology/oncology, infectious diseases, genetics, molecular biology, surgical oncology and neurosurgery to participate in the development and initiation of human gene therapy clinical trials. The HGTRI was established in 1993 under the direction of **Dr. Kenneth W. Culver** and contains more than 12,400 square feet of laboratories and clinical facilities. Iowa Methodist Medical Center is a 710-bed non-profit tertiary care hospital located in Des Moines, Iowa. Academic affiliates with Iowa State University and the University of Iowa provide an ideal environment for the efficient development of gene therapy as a new treatment modality and clinical discipline. Please forward a copy of your curriculum vitae to: **Dr. Kenneth W. Culver, Human Gene Therapy Research Institute, Iowa Methodist Medical Center, 1415 Woodland Avenue, Des Moines, IA 50309.**

THROMBOSYS, INC.

ThromboSys, Inc., a biotechnology company, seeks qualified SCIENTISTS for basic and applied research in the field of vascular disease to be conducted in a university setting. Candidates should have either an M.D. or Ph.D. degree and a background in cellular and molecular biology and/or protein chemistry with a minimum of 2 years of postdoctoral training. Applicants should contact: **Dr. Eric Aguiar, President, ThromboSys, Inc., c/o Philadelphia Ventures, The Bellevue, 200 South Broad Street, Philadelphia, PA 19102.**

BIOCHEMIST

Novo Nordisk Entotech, Inc. is a research and development company dedicated to the discovery and development of microbial insecticides for use in agriculture, forestry, and public health. Novo Nordisk Entotech is a wholly owned subsidiary of Novo Nordisk A/S, a Danish Biotechnology company.

A new position has opened in our purification area. The successful candidate will have a Ph.D. in biochemistry or related discipline with 3 or more years of industrial experience in the purification and characterization of novel compounds with biological activity. The primary responsibility will be to develop and implement high throughput protocols for the purification of insecticidal leads from microbial fermentations using state-of-the-art chromatographic methods. Knowledge of peptide purification is desirable. The position affords hands-on research as well as interaction with other personnel in a self-directed team effort.

Novo Nordisk Entotech, Inc. offers a creative research environment, competitive compensation, an excellent flexible benefit package, and relocation assistance.

For confidential consideration, please submit a cover letter and résumé describing your research experience and career interests to:

**Dr. Robert L. Starnes
Novo Nordisk Entotech, Inc.
1497 Drew Avenue, Davis, CA 95616
Equal Opportunity Employer.**

ASSISTANT RESEARCH SCIENTIST: MOLECULAR IMMUNOLOGIST

Position available to Ph.D. or M.D., for studies in Molecular Immunology. The project includes studies on the biology of T cells, B cells, neutrophils, knock out and transgenic mice. The laboratory is focusing on the mechanism of signal transduction and cDNA cloning of receptors, *in situ* hybridization of cytokines and other T/B cell markers, together with *in vivo* studies of autoimmune diseases. The position is available immediately. Please send curriculum vitae and make arrangements for three letters of reference together and a salary history to: **Dr. Ashok R. Amin, Department of Pathology, 550 First Avenue, Room 528, New York University Medical Center, New York, NY 10016. FAX: 212-263-8211.**

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.**



MRC

Medical Research Council

**DIRECTOR OF MRC
LABORATORIES
THE GAMBIA**

Applications are invited for the Directorship of the MRC Laboratories in The Gambia, West Africa. The post will become vacant towards the end of 1994 when Dr. Brian Greenwood, the present Director, returns to the UK.

The Laboratories form a major component of the MRC's investment in research relevant to developing societies and the Director will play a key role in the development of the scientific strategy of the Laboratories.

The successful candidate will be a senior scientist of international standing with a proven track record in research relevant to health in developing societies. He/she will also need to demonstrate successful experience of managing a substantial research activity together with highly developed presentational and diplomatic skills.

This will be a full-time appointment. Salary will be for negotiation: the total remuneration will include provision for relocation and overseas allowances as well as family accommodation in Fajara.

For further details and an applications form, please contact Simon Mather at the Medical Research Council, 20 Park Crescent, London W1N 4AL (telephone 071-636 5422, Fax 071-636 3427).

Closing date for applications is 5 November 1993.

The Medical Research Council is an equal opportunities employer.



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Chair in Genetics

The purpose of this new appointment is to provide leadership in Genetics within the School of Biological Sciences. Applications are sought from candidates with a strong research programme in any aspect of genetics. The person appointed will establish a vigorous research programme and be responsible for further developing undergraduate and graduate teaching programmes.

Applications, giving full details of qualifications and experience, and the names of three persons from whom reference may be sought should be sent to the Registrar (Academic Staffing Office), the University, Manchester M13 9PL, from whom further particulars may be obtained (tel. 061 275 2028, Fax. 061 273 5306). Informal enquiries may be made to Professor Maynard Case, Dean of Biological Sciences (tel. 061 275 5569, Fax. 061 275 5586). Closing date October 30th 1993. Please quote ref. 219/93.

The University is committed to an Equal Opportunities Policy.



Roche

Our Department of *Preclinical Research* (Cardiovascular Diseases) in Basel has a strong commitment to research into the mechanisms of smooth-muscle cell proliferation and changes in lipid metabolism involved in atherosclerosis. We have an outstanding opportunity for a

Pathologist/ Pharmacologist

to fill a key position with responsibility for developing animal models for testing and profiling potential new anti-atherosclerotic agents. The successful candidate will join a highly motivated research team which includes biochemists, cell biologists, physiologists, molecular biologists and physicians. We are looking for a scientist who will enjoy working in a multidisciplinary team and has the ability to develop his or her own research interests.

The department provides a dynamic international research environment. Several collaborative research projects with leading academic institutions are currently in progress. Publication of research findings and presentations at scientific meetings are encouraged.

In addition to personal drive and motivation candidates should have

- a strong track record in the field of atherosclerosis research
- a strong interest in and profound knowledge of animal models for the study of atherosclerosis and
- hand-on experience in the histopathologic analysis and quantification of atherosclerotic lesions.

Experience in angiographic techniques and pharmacologic intervention studies would be useful but is not essential.

If you are interested in this position, please include your curriculum vitae, list of publications and the names and addresses of referees with your handwritten letter of application, which should be sent to our Personnel Department, Mrs. M. Wäspe, quoting reference Science 129/93/Wä.

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P.O. Box, Ch-4002 Basel



ICRISAT PRINCIPAL SCIENTIST (PLANT PATHOLOGY)

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a nonprofit, autonomous, scientific, research and training institution receiving support from donors through the Consultative Group for International Agricultural Research (CGIAR).

The position for the Principal Scientist responsible for plant pathology will be located at ICRISAT Center at Patancheru, near Hyderabad in India. Hyderabad is the major city in central southern India, and provides access to a wide diversity of experiences of historical and modern Indian society. It is the location of a number of major national research institutions and universities.

Job description: The major responsibility is to provide leadership in plant pathology, heading an experienced team of pathologists focused on achieving sustained improvements in crop protection of ICRISAT's mandate crops (sorghum, millets, groundnut, chickpea, pigeonpea). The appointee will have opportunities for active research. The research thrust is centered on integrated disease management, and includes active collaboration in crop improvement.

Qualifications: Applicants should have a Ph.D. degree, or equivalent, in plant pathology or a closely related discipline. Evidence of active sustained research and high professional standing and scholarship in plant pathology, and of effective interdisciplinary collaboration, is required. Demonstrated capability in management, and excellence in oral and written communication in English, are essential. Experience in applied crop improvement will be advantageous.

Remuneration: The salary and benefits package, under a negotiated contract which may be renewed, will be competitive with that of other internationally recruited staff at ICRISAT and other CGIAR Centers. ICRISAT is an equal opportunity employer and encourages applications from women.

Applications: Applications should reach Dr. D.E. Byth, Director, Cereals Program ICRISAT, Patancheru, Andhra Pradesh 502 324, India [phone: +91(842)224016; fax: +91(842)241 2391] by 31 December 1993 and should include a statement on special qualifications for this position, a current Curriculum Vitae, names and addresses (including fax/telex/e-mail) of three referees, and the date of availability.



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Battelle is an international technology organization that serves industry and government in generating, applying, and commercializing technology.

Our Research Group in Geneva, Switzerland is expanding its activities and invites applications for a group leader in

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A specific interest in animal models of neuroprotection / ischemia is required.

Applicants must have a PhD degree with several years research experience. A working knowledge of French is desirable. Candidates with experience in the pharmaceutical industry will be welcomed.

Please address application including curriculum vitae, photograph and salary requirements to the Personnel Manager, Battelle, 7 route de Drize, CH-1227 Carouge/Geneve.

A major French Pharmaceutical Laboratory located near Paris has a challenging opportunity in its

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The applicants must possess a PhD in Chemistry and demonstrate excellence in the following areas: computer modelling, computational chemistry and physical organic chemistry.

You will participate in project teams to generate chemical and biological predictive models for medicinal chemistry.

Dynamism and good communication with others groups will be your main qualities. A knowledge of French would be an advantage.

Please submit a CV a photo and a hand written letter to Media System, 6 impasse des Deux Cousins, 75849 Paris Cedex 17, FRANCE quoting ref. 44805 on the envelope.

MEDIA SYSTEM



Universität Heidelberg

The Zentrum für Molekulare Biologie Heidelberg (ZMBH) at the University of Heidelberg (FRG) invites applications from young scientists for a five year

GROUP LEADER POSITION

The successful candidate will have the opportunity to establish an independent research group. It is expected that his research program will contribute to the ZMBH's research activities which focus on molecular aspects of gene regulation and development, neurobiology, cell biology and mechanisms of pathogenicity. The holder of the position is expected to participate in the department's teaching program.

The ZMBH presently houses 16 independent research groups and offers excellent central facilities which include biocomputing, DNA- and peptide synthesis, protein microsequencing, transgenic facility, and centralised administrative services.

Further details may be obtained from Prof. Dr. Heinz Schaller,

telephone 49-6221-566850,
telefax 49-6221-565507.

Applications should be sent to the *Director of the ZMBH, Im Neuenheimer Feld 282 D-69120 Heidelberg/FRG* by 15th October 1993.



DIRECTOR OF THE MRC HUMAN GENETICS UNIT, EDINBURGH

The MRC wishes to appoint a scientist with a distinguished record in basic and/or clinical research to the position of Director at the MRC Human Genetics Unit, Edinburgh, on the retirement of the current Director. The Unit was set up in 1956 and is the largest of the Council's Units. The Director will be responsible for providing leadership and strategic direction to the research being undertaken at this prestigious establishment, as well as directing his or her own research team.

At present the unit's portfolio includes leading-edge research on cell genetics, developmental genetics, molecular genetics, pattern recognition and automation and chromosome biology. This post offers an exciting opportunity to build on the current strengths of the Human Genetics Unit and to create a cohesive programme of research for the future. The successful applicant will be expected to develop links with other national genetics centres.

The Unit is closely linked with the clinical environment in Edinburgh; it is housed on the Western General Hospital site, which will shortly also accommodate a new Molecular Medicine Centre, largely funded by the Wolfson Foundation and the Cancer Research Campaign. The Director of the Human Genetics Unit will be expected not only to spearhead in-house research, but also to develop clinical links with the Molecular Medicine Centre and to extend collaborations with major teams in the University of Edinburgh.

The Council is currently considering the establishment of a Scottish Collaborative

Centre, which would encourage research in partnership with industry.

The new Director will be responsible to the MRC for the allocation of resources, in accordance with Council policies and the outcome of peer review. He or she will also be responsible for the management of MRC core facilities and premises, including the central budget and staff. Effective local administrative support will be provided.

The Unit has been partially refurbished and a dowry set aside for completing the renovations to the new Director's specification.

The salary is negotiable in the range for Council's Special Appointments (equivalent to UK University professorial salaries) or for a candidate for whom a clinical contract is appropriate, at a level equivalent to a clinical professor. In addition, assistance with the costs of relocation will be available.

A job description and other additional information may be obtained from Dr Diane McLaren, MRC Headquarters, 20 Park Crescent, London W1N 4AL (telephone 071 636 5422 ext 6233).

MRC
Medical Research Council

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Applicants should include a brief outline of their plans for the strategic direction of the future work at the Human Genetics Unit and brief proposals for his or her own research team, together with a curriculum vitae, an up-to-date publications list and the names of three referees. These should be sent, no later than 19th November 1993 to Sir D A Rees, Secretary to the Council, at the above address.

MEETING

BIOTECH
RIA '94

'94

BIOTECHNOLOGY AGAINST AIDS From Basic Science to Diagnosis and Therapy 10-13 April 1994 - Florence (Italy), Congress Center

Opening Ceremony

A S. Fauci (USA), R.C. Gallo (USA)

Virus-Host Interactions and Immune Responses

J.A. Levy (USA), H. Gelderblom (Germany),
L. Chicco Bianchi (Italy), F. Manca (Italy),
B. Walker (USA), V. Erfle (Germany)

Gene Expression and Pathogenesis

L. Montagnier (France) - Special Lecture
A.G. Dalgleish (UK), A. Siccardi (Italy),
G. Pantaleo (USA), A. Leigh Brown (UK),
B. Cullen (USA)

Hematopoiesis and New Advances in Diagnosis

M. Clerici (Italy), S. Romagnani (Italy),
F.C. Chermann (France), M. Fenyo (Sweden),
J. Weber (UK), A. Linde (Sweden)

Vaccine Development and Animal Models

D.P. Bolognesi (USA), R. Desrosiers (USA),
P. Verani (Italy), P. Biberfeld (Sweden),
M. Girard (France), R. Kurth (Germany)

Markers for Diseases Staging and Therapy Monitoring

F. Barré-Sinoussi (France), J. Lange (Switzerland),
G. Janossy (UK), G. Shearer (USA),
J.C. Ameisen (France), C. Boucher (The Netherlands)

HIV Specific Therapies and Gene Therapy

G.B. Rossi (Italy), E. Bohnlein (Austria),
C. Bordignon (Italy), F. Dianzani (Italy),
B. Larder (UK), J.A. Martin (UK)

Co-sponsored by

National Institute of Allergy and Infectious Diseases, NIH

Under the Auspices of

International AIDS Society, Commission of the European Communities,
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ANNOUNCEMENTS

RESEARCH INQUIRIES INVITED

The Smokeless Tobacco Research Council, Inc., invites inquiries regarding grant applications.

The council sponsors independent research into questions of smokeless tobacco and health. Research support is through a program of grants-in-aid.

Grant applications are evaluated by the Scientific Advisory Board to the council and will be judged solely on the basis of scientific merit and relevance.

Deadlines for submission of grant applications are 31 December for 1 July funding and 30 June for 1 January funding. Address inquiries or requests for applications to: The Smokeless Tobacco Research Council, Inc., 420 Lexington Avenue, New York, NY 10170. Telephone: 212-697-3485.

FELLOWSHIPS

A limited number of postdoctoral and predoctoral fellowships are available from Sigma Delta Epsilon-Graduate Women in Science, Inc. Applications from women are particularly encouraged. (Deadline is December 1, 1993.) Fellowships are for \$1,000 to \$4,000. A total of \$17,250 is available.

For additional information and application forms:

SDE-GWIS
P.O. Box 19947
San Diego, CA 92120

Requests for Eloise-Gerry Fellowship forms should be made by those in the Biological and Chemical Sciences; all others should request SDE Fellowship forms.

TRAVEL AWARDS

Eli Lilly Travel Awards for women graduate students presenting at national meetings are available through Sigma Delta Epsilon-Graduate Women in Science, Inc. For information write:

Dr. Mary Jane Cunningham
2901 Middlefield Road #12
Palo Alto, CA 94306

FOR D.D.S./D.M.D. GRADUATES:

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University of California, San Francisco

For information, contact Mr. Paul Riofski, Program Administrator, (415) 476-2944 (Telephone); (415) 476-4204 (FAX).

COURSES AND TRAINING

NIMH NATIONAL TRAINING PROGRAM IN COMPLEX SYSTEMS AND BRAIN SCIENCES AT FAU: PRE- AND POSTDOCTORAL FELLOWSHIPS

Individuals with undergraduate degrees in pertinent disciplines are invited to apply for this 5-year training program leading to the Ph.D. degree in Complex Systems and Brain Sciences. The aim of the Program is to blend theoretical concepts and mathematical tools for complex systems with specific experimental research in the cognitive and brain sciences.

Graduate training will consist of a core curriculum in the mathematics of non-linear dynamical systems, neuroscience (including neural networks and cognitive science), and computational science. Postdoctoral candidates should have a strong interdisciplinary interest.

Research areas include: sensorimotor control and coordination, human brain imaging and event-related potentials, brainstem mechanisms of behavior, neural growth and development, speech production and perception, neurolinguistics, learning and memory, visual perception, mathematics of complex systems, nonlinear dynamics, neural networks and robotics.

Applicants should send a letter of interest, GRE scores (graduate fellows only), curriculum vitae and 3 letters of reference to: Dr. Robert Vertes, Associate Director, Program in Complex Systems and Brain Sciences, Center for Complex Systems, Florida Atlantic University, P.O. Box 3091, Boca Raton, FL 33431. Equal Opportunity/Affirmative Action Employer.

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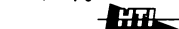


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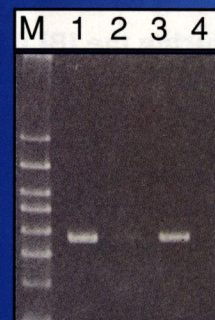
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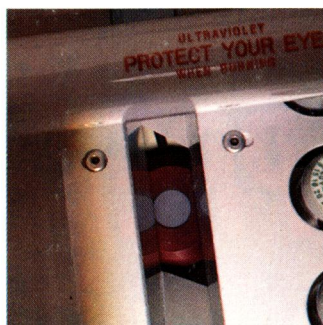
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