



## Concentrator and Cold Trap

The CentriVap Mobile Console rapidly separates solutes from biological or analytical samples by using centrifugal force combined with vacuum. The concentrator is mounted on hard rubber casters and can be moved easily from one work location to the next. The concentrator will accommodate either a single or double deck rotor and has a 300-W heater that speeds evaporation rates by warming samples to 40°C before centrifugation, when heat is desired. The cold trap features a 1/4-HP compressor that lowers temperature to -60°C in less than 30 min. **Labconco Corp. Circle 139.**

## Technical Computing Software

MATLAB Version 4.0 for MicroSoft Windows version 3.1 is technical computing software with new functions, including 256 color, three-dimensional object-oriented visualization capabilities, sparse matrix support, sound output, and customizable user interface controls. Users can paste MATLAB graphics into any other Windows application, either as static bit-mapped images or editable Windows metafiles. **The MathWorks. Circle 140.**

## DNA Purification Kit

The Elu-Quik DNA Purification Kit offers speed and simplicity for isolating DNA from 500 bp to 250 kb. DNA can be obtained in less than 1 hour. DNA less than 50 kb in size can be purified from a variety of sources, such as agarose gel slices, plasmid minipreps, nick-translation reactions, whole blood, and yeast and viral cells. Purified DNA can be used immediately for enzyme reactions, cloning, or sequencing, without the need for phenol-chloroform extractions or ethanol precipitations. **Schleicher & Schuell. Circle 141.**

## DNA Sequencing Software

GENERation is a software program for large-scale DNA sequence assembly and management that features a multiple sequence alignment algorithm developed for fragment assembly. The algorithm provides sensitive merges and eliminates degradation of the sequence or "consensus rot," which occurs in many other sequence assembly packages. GENERation runs on Sun SPARCstations. **IntelliGenetics. Circle 142.**

## Protein Cleavage System

The diverse nature of expressed proteins makes it difficult to predict what strategy will work reliably for cleavage of the purification tag from the protein of interest. The Clip Fusion Protein Cleavage System provides three proteases with different cleavage specificities, a positive control protein, and a protocol to assist in the development of a strategy to cleave a fusion protein from its purification tag under non-denaturing conditions. The three

proteases included are factor Xa, trypsin, and clostripain. **Promega. Circle 143.**

## RNA Labeling Kit

RPN 3100 is a new kit for the generation of radiolabeled, single-stranded RNA probes for hybridization applications that contains both SP6 and T7 RNA polymerases for the production of asymmetric probes. The kit is compatible with the manufacturer's high specific activity, high concentration, <sup>35</sup>S-UTP S nucleotide (SJ603) and can be used to produce high-sensitivity RNA probes for in situ hybridization. The kit is also designed to incorporate all standard radiolabeled nucleotides and can be used for membrane-based hybridizations. **Amersham International. Circle 144.**

## Amino Acid Analysis System

The AccQ•Tag Amino Acid Analysis System combines an optimized high-performance liquid chromatography column and eluents and comprehensive method documentation to provide highly accurate analysis of hydrolysate amino acids. The sys-



tem is based on the AccQ-Fluor Reagent, which reacts with all primary and secondary amino acids and forms extremely stable derivatives. The reagent is also highly tolerant of sample matri-

ces. The system overcomes deficiencies of current systems by offering enhanced ease of use, reduced labor requirements, improved sensitivity of detection, and great lab-to-lab reproducibility, according to the manufacturer. **Millipore. Circle 145.**

## Literature

*Separation of Large DNA Fragments by Dynamic Sieving Capillary Electrophoresis* is an application note on a method that is both an alternative and complementary method to cross-linked polyacrylamide gel capillary electrophoresis. **J & W Scientific. Circle 146.**

*Soxtherm Solids Extractor* describes an automated instrument that process up to six samples in parallel and *KD Solvent Recovery System* describes an instrument capable of eliminating 95% of hazardous high-volume organic solvent emissions. **ABC Laboratories. Circle 147.**

The current issue of *Amplifications: A Forum for PCR Users* features an article on understanding polymerase chain reaction (PCR) limitations through the "plateau effect." Other articles include "PCR reamplification of small target cDNAs from high-resolution polyacrylamide gels" and "Detection and characterization of various marine species' metallothionein mRNAs." **Perkin-Elmer. Circle 148.**

*T Cell Diagnostics, Inc.: 1993 Research Products Catalog* highlights the company's comprehensive cell surface marker and cytokine enzyme immunoassay test kits and T cell receptor, adhesion, and activation monoclonal antibodies. **T Cell Diagnostics. Circle 149.**

*MCI GEL: Technical Data for Chromatography Applications* is a catalog on a line of packed columns for analytical and preparative chromatography. **Mitsubishi Kasei. Circle 150.**

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

# SCIENCE

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## POSITIONS OPEN

### BRANDEIS UNIVERSITY ASSISTANT PROFESSOR, NEUROBIOLOGY

The Center for Complex Systems and the Department of Biology seek a tenure-track Assistant Professor in neurobiology. Exceptional candidates at the rank of associate professor will also be considered. We are especially interested in identifying persons with research interests in the functional analysis of the central nervous system using electrophysiological, biophysical, and/or computational methods. Interested candidates should send curriculum vitae, a statement of research interests and arrange for three letters of recommendation to be sent to: **Dr. Eve Marder, Neurobiology Search Committee, Biology Department, Brandeis University, Waltham, MA 02254-9110.** The deadline for receipt of application is October 25, 1993. Further information can be obtained from: **Drs. Eve Marder, Chair Search Committee or Irwin Levitan, Director, Center for Complex System.** *Women and minorities are encouraged to apply. Brandeis University is an Affirmative Action/Equal Opportunity Employer.*

### BRANDEIS UNIVERSITY ASSISTANT PROFESSOR, MAMMALIAN MOLECULAR GENETICS

The Department of Biology and the Rosenstiel Basic Medical Sciences Research Center, aided by a grant from the Howard Hughes Medical Institute, seek a tenure-track Assistant Professor interested in mammalian molecular genetics. We are especially interested in, but not restricted to, candidates with a strong research background in the following areas: genetics and molecular biology of human diseases or their mouse models; regulation of mammalian development and differentiation; molecular virology. Candidates should submit curriculum vitae including a description of research interests and arrange for three letters of recommendation to be sent to: **Drs. Ranjan Sen, Michael Rosbash, Pieter Wensink or Neil Simister, Mammalian Genetics Search Committee, Rosenstiel Center, Brandeis University, Waltham, MA 02254-9110.** The deadline for receipt of application is October 31, 1993. *Women and minorities are encouraged to apply. Brandeis University is an Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR NEUROBIOLOGY

The Department of Anatomy and Neurobiology, University of Kentucky, invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level. The candidates should hold a Ph.D. and/or M.D. degree with appropriate postdoctoral experience and publications. One position is for a developmental neurobiologist with a strong background in molecular biology. The second position is for a neurobiologist using cellular and/or molecular approaches to investigate regeneration and functional recovery in the CNS. The candidates will be expected to develop strong research programs and contribute to the departmental teaching responsibilities in medical and graduate education. Salary and start-up funds are extremely competitive. The Department offers a stimulating environment that is committed to high quality research and teaching. Application deadline is October 15, 1993. Interested candidates should submit curriculum vitae, description of current and future research goals, and names and addresses of three references to: **Dr. Don M. Gash, Chair, Department of Anatomy & Neurobiology, University of Kentucky, Chandler Medical Center, MN 224, Lexington, KY 40536-0084.** *University of Kentucky is an Affirmative Action/Equal Opportunity Employer.*

### HARVARD UNIVERSITY DEPARTMENT OF CHEMISTRY ASSISTANT PROFESSOR OF CHEMISTRY

Applications are invited for an assistant professorship in any area of chemistry including inorganic, organic, physical and interdisciplinary fields. Applicants should arrange to have three letters of recommendation sent independently and should provide curriculum vitae and brief descriptions of their future research plans. *Harvard University is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority group members are encouraged.* Applications and supporting materials should be sent no later than 1 November 1993 to: **Professor Roy G. Gordon, Chairman, Department of Chemistry, Harvard University, 12 Oxford Street, Cambridge, MA 02138-2902.**

## POSITIONS OPEN

**CHEMISTRY DEPARTMENT—UNIVERSITY OF UTAH.** Applications are invited for a tenure-track position in organic chemistry. Preference will be given, but not limited to, individuals whose interests are in physical organic, computational, or bioorganic chemistry. Candidates are expected to have the ability and motivation to develop an outstanding research program and to excel in teaching. A Ph.D. degree is required and postdoctoral experience is desirable. Applications at the **ASSISTANT PROFESSOR** level are preferred but established scientists with outstanding records of achievement will be considered. Reply to: **Organic Faculty Search Committee, Department of Chemistry, 2040 Henry Eyring Building, University of Utah, Salt Lake City, UT 84112.** Initial correspondence should include detailed curriculum vitae, including a list of references, and a statement of research interests. Junior-level applicants should have three recommendation letters sent directly to the committee. Deadline for receipt of applications is October 15, 1993, or until suitable candidates are identified. *The University of Utah is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.*

### UNIVERSITY OF PENNSYLVANIA DEPARTMENT OF CHEMISTRY

As part of a continuing development program, the Department of Chemistry at the University of Pennsylvania expects to make an appointment in Physical Chemistry. The appointment will be at the **ASSISTANT PROFESSOR** (tenure probationary) level with an area of research interest in **Theoretical Physical Chemistry.** Applicants for this position should send curriculum vitae, list of publications, and a description of research to: **Amos B. Smith, III, Chairman, Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6323, by October 15, 1993.** Applicants should also arrange 3 letters of reference to be sent to the same address. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITION IN METABOLIC REGULATION MICHIGAN STATE UNIVERSITY DEPARTMENT OF PHYSIOLOGY

The Department of Physiology invites applications for a tenure-track appointment at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The successful candidate will be expected to develop an independent research program in the area of regulation of lipid and carbohydrate metabolism in liver, muscle and/or white adipose tissue. Preference will be given to those individuals using modern molecular approaches to understand normal and disease processes associated with disorders of metabolism, e.g., diabetes. Candidates must hold a Ph.D. or equivalent doctoral degree, have postdoctoral experience, and demonstrate potential for developing a vigorous externally funded research program and outstanding teaching in the department's teaching program. Interested individuals should provide complete curriculum vitae, a brief statement of research interests and bibliography, and copies of key publications or reprints. Applicants should arrange for at least three (3) letters of recommendation from scientists who can evaluate their accomplishments and future potential for research and teaching. Applications should be sent to: **William Spielman, Chairperson, Department of Physiology, Michigan State University, East Lansing, MI 48824-1101.** Application deadline: October 1, 1993.

### MICROBIOLOGIST

The Department of Civil Engineering at Stanford University is seeking a microbiologist for a tenure-line **ASSISTANT PROFESSOR** position with the Environmental Engineering and Science (EES) program. Applicants with interests in environmental microbiology; microbial ecology; contaminant movement, fate, and biodegradation; reaction kinetics and thermodynamics; and/or environmental biotechnology; and having experience with modern molecular biology procedures are especially welcome. 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, Department of Civil Engineering, Stanford University, Stanford, CA 94305-4020.** *Stanford is an Equal Opportunity/Affirmative Action Employer.*



**SEQUANA**  
THERAPEUTICS

## NEW FRONTIERS IN THERAPEUTICS: THE HUMAN GENOME

**SEQUANA THERAPEUTICS INC.** invites you to join an international research & development company utilizing the rapid advances in human genome research to develop therapeutics for common genetic diseases. Sequana integrates molecular genetics research, human genome technologies, cell biology, laboratory automation and informatics to create a new approach to biopharmaceutical development.

### GENETICS/GENOMICS

#### *Principal Investigators*

Several positions exist for scientists with at least 3 years of postdoctoral experience in genetic mapping, physical mapping and large scale DNA sequencing. The ideal candidates will have experience in high throughput mapping technologies, have published genome data and demonstrated ability to develop an independent research program. Individuals must have good communication skills. Experience in computational analyses would be an advantage.

#### *Post-doctoral Fellows*

Several positions exist for post-doctoral fellows with a Ph.D. in genetics. The successful candidates will be proficient in molecular biology and genetics, have published relevant papers and be willing to implement high-volume approaches to genome science. Experience in yeast or mouse genetics would be of significant value.

#### *Associate Scientists*

Several positions exist for individuals with a B.S. and at least 2 years of research experience or an M.S. Candidates should have genome mapping or molecular biology experience with yeast, mouse or human genetics in an industrial environment. Positions also exist for individuals with experience using fluorescent DNA analyzers, robots and PCR.

### PROTEIN EXPRESSION AND ANALYSIS

#### *Principal Scientists and Post-doctoral Fellows*

Several positions exist for persons with experience in mammalian, baculovirus, or *E. coli* expression systems and protein purification. Principal scientists must have the equivalent of 3 years of post-doctoral experience. Positions also exist for scientists with a Ph.D. and experience in enzymology and receptor-binding interactions.

#### *Associate Scientists*

Several positions exist for persons with experience in mammalian and/or baculovirus expression systems, protein purification, and general protein assay systems. Candidates must possess a B.S. and several years of experience, or an M.S. with 1-2 years of experience.

### GENETIC EPIDEMIOLOGIST

Individuals with experience in facilitating the selection of target populations and interfacing with physicians and researchers to coordinate the collection of human DNA samples. Candidates must have good communication skills and an M.S. or M.P.H. with at least 3 years experience or a Ph.D. or M.D. with relevant training. Experience in molecular biology and/or computer science would be an advantage.

### BIOINFORMATICS

#### *Information Systems Engineer*

Several positions exist to develop end-user applications and to provide engineering support for hardware and software systems integration of the laboratory information system. Candidates should have experience in both UNIX and Macintosh commercial software development as well as Object-Oriented Design, User Interface design, rapid prototyping and developing applications using relational database management systems. Positions also exist for database design and LIMS development.

#### *Biocomputational Scientist*

Several positions exist to work in collaboration with other scientists to develop and integrate innovative algorithms and end-user systems for analyzing experimental and public data related to genome mapping, genetic analysis and DNA sequencing. Candidates should have extensive experience in DNA and protein sequence analysis, genetic databases, genetic data analysis and related genome technologies. Analysis and software development will be done on both Macintosh and UNIX.

#### *Mechanical Systems Engineer*

A position exists to integrate and develop automation technologies for the molecular biology laboratory. Candidates should have experience with the integration of laboratory instruments and LIMS and in developing innovative uses for off-the-shelf and custom robotics systems. Candidates should have at least an M.S. in Engineering and 5+ years of related commercial experience.

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S E Q U A N A  
T H E R A P E U T I C S



## RESEARCH ASSOCIATE Animal Health Discovery Research

The Upjohn Company is seeking a Research Associate for a position in our Animal Health Discovery Research Program.

This position will involve the application of molecular biological techniques in the development of novel animal vaccines. Requirements include a BS/MS in Biochemistry, Molecular Biology or related field with laboratory experience in molecular biology, biochemistry and tissue culture techniques. Duties will include design and construction of recombinant viruses (baculovirus, herpesvirus, poxvirus) and analysis of expression.

The Upjohn Company provides an excellent salary and benefits program as well as a stimulating, multi-disciplinary research environment. For consideration, please forward your resume to: **The Upjohn Company, Position Code # 173, 7000**  
**Portage Road,**  
**Kalamazoo MI 49001.**  
Equal Opportunity Employer, M/F/D/V.



## PRINCIPAL SCIENTIST NUTRITIONAL RESEARCH

Wyeth-Ayerst Research, a major division of Fortune 100 American Home Products Corporation, currently has an opportunity available at our research facility in Radnor, Pennsylvania.

The successful candidate will participate in a broad program of research regarding new developments in infant formula. Responsibilities will include preclinical assessment of mineral bio-availability (both macro and trace minerals). In addition, general interest in the area of gastrointestinal function is essential. Requirements include a Ph.D. in Nutrition and a minimum of 5 years related experience.

Please send your resume with salary requirements to: **Wyeth-Ayerst Research, Position #S-87-S, P.O. Box 8299, Philadelphia, PA 19101.** Equal Opportunity Employer, M/F/D/V.



*Leading The Way for a Healthier World*



## Professorship of Zoology

Applications are invited for a Professorship of Zoology in the Department of Pure & Applied Zoology, School of Animal and Microbial Sciences. This will be a second established Chair in the Department.

Candidates should have an established international reputation for research and will be expected to provide intellectual and academic leadership in both research and teaching in the Department of Pure & Applied Zoology and the School of Animal and Microbial Sciences. As well as stimulating research in his or her own field, the successful candidate will be encouraged to initiate collaborative work with other members of the School and with colleagues elsewhere in the Faculty of Science and across the University as a whole.

Applications from candidates with research expertise in any areas of Zoology will be welcome, particularly those that build on or consolidate work already carried out in the Department and can be accommodated within the range of facilities.

A Research Fellowship for a fixed term of five years will be assigned to the Professorship.

Further information may be obtained from the Registrar, Room 213, Whiteknights House, PO Box 217, The University, Whiteknights, Reading RG6 2AH. Tel (0734) 318114. Fax: (0734) 874722.

The closing date for applications is 15 October 1993.

## MOLECULAR IMMUNOLOGISTS/ CELL BIOLOGISTS

**Gwen Knapp Center for Lupus and  
Immunology Research  
The University of Chicago**

The Gwen Knapp Center for Lupus and Immunology Research of the University of Chicago is seeking applicants at the Assistant and Associate Professor levels to join the newly formed Center. The Center is committed to developing a strong program in molecular immunology. We are seeking outstanding individuals who are using the approaches of molecular biology and cell physiology to examine basic immune mechanisms and/or disorders such as signal transduction, gene regulation, and antigen processing. Existing immunology programs at the University of Chicago include: lymphocyte development, B and T cell activation, antigen presentation, tumor immunology, transplantation, and autoimmunity. Candidates should have sufficient research experience to demonstrate both significant accomplishment and outstanding promise. Faculty appointments will be tenure-track in the most appropriate academic department where the candidate will be expected to exercise full membership. New state-of-the-art laboratory space will be located within the Institute for Molecular Medicine which is now being formed. This Institute will also house programs in molecular oncology, vascular biology, human genetics, and neurobiology. Letters of application including curriculum vitae, bibliography, a brief statement indicating research interest, and the names of 3 references should be sent to: Dr. Craig B. Thompson, Director, Gwen Knapp Center for Lupus and Immunology Research.



**THE UNIVERSITY OF CHICAGO**  
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# Postdoctoral Opportunities In The Biomedical Sciences.

Listed below are a few of the outstanding opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

## **Genetic Epidemiology and Linkage** **Lynn R. Goldin, PhD**

Studies in genetic epidemiology and molecular genetics of major psychiatric disorders are being pursued, including a systematic genomic mapping study of bipolar affective disorder. An opportunity exists for an investigator to pursue their own individual area of research and to interact with other investigators in the branch. Clinical Neurogenetics Branch (OE-37), NIMH, Building 10, Room 3N218.

## **Molecular Biology and Genetics** **Stephen Marx, MD**

Two positions are available to study the fibroblast growth factor gene family and/or the causes of sporadic or hereditary dysfunction of the parathyroids and other endocrine glands. The rate-limiting genes in these processes are likely to be central in growth and calcium signaling in many tissues and their function will be studied using innovative molecular biology and genetics techniques. Metabolic Diseases Branch (OE-37), NIDDK, Building 10, Room 9C101.

## **Molecular Biology and Pharmacology of Receptors** **Jürgen Wess, PhD**

Two positions are available to study the molecular mechanisms governing the function, regulation, and intracellular trafficking of muscarinic acetylcholine and other G protein-coupled receptors. Background in molecular biology, cell biology, biochemistry, or molecular modeling is desirable and applicants must have less than five years of postdoctoral experience. Laboratory of Bioorganic Chemistry (OE-37), NIDDK, Building 8A, Room B1A09.

## **Molecular Genetics of HIV Replication** **Sundararajan Venkatesan, MD**

HIV-1 is being used to study post-transcriptional mechanisms of mRNA processing, transport, and translation and the role of cellular RNA binding proteins in modulating HIV gene expression. Other studies pertain to the HIV replication cycle and address basic mechanisms of retroviral DNA integration, viral mRNA encapsidation, particle formation, and the effects of the Nef protein on T lymphocyte receptors. Laboratory of Molecular Microbiology (OE-37), NIAID, Building 10, Room 6A05.

## **Molecular Neurobiology** **J.S. Hong, PhD**

The regulation of neuropeptides and neurotransmitters in neural systems is being studied with emphasis on understanding the molecular mechanisms regulating the expression of genes encoding opioid peptides and catecholamine synthesizing enzymes. Applicants should have strong experience in neuropharmacology, neurochemistry or molecular biology and less than five years of postdoctoral

experience. Laboratory of Integrative Biology (OE-37), NIEHS, P.O. Box 12233, Building 101, Room E144, Research Triangle Park, NC 27709.

## **Signal Transduction** **Juan Rivera, PhD**

The signaling pathway leading to mast cell effector function is being studied to identify the molecular components involved. Current emphasis is on characterizing these molecules using molecular genetic and biochemical techniques and identifying their role in signal transduction. Applicants must have less than five years of postdoctoral experience. Arthritis and Rheumatism Branch (OE-37), NIAMS, Building 10, Room 9N228.

## **Viral Molecular Biology** **Roland A. Owens, PhD**

The role of Rep proteins in the replication of adeno-associated virus (AAV) is being studied utilizing functional analysis of wild-type and mutant Rep proteins. Collaborative projects focus on targeted integration of AAV DNA and the inhibition of HIV-1 replication by Rep proteins. Applicants must have less than five years of postdoctoral experience. Laboratory of Molecular and Cellular Biology (OE-37), NIDDK, Building 8, Room 309.

## **Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference by Internet ([cu.nih.gov](http://cu.nih.gov)) or via modem (1,301-402-2221 or 1,800-358-2221). The settings for modem access are "7,Even,1". When connected to NIH, type in ",vt100" at the connect message, "F5E" at initial, and "AJL1" at account.

The Postdoctoral Research Fellowship Opportunities catalog may be requested from the address below. An electronic version of the catalog may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "[boombbox.micro.umn.edu](http://boombbox.micro.umn.edu)") must be running on your computer and configured to point to "gopher.nih.gov", port "70". Select *Information for Researchers* to reveal the *NIH Office of Education* directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

## **To Apply**

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (e.g., MD, DO, DDS, or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



# National Institutes Of Health

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## POSITIONS OPEN

The Department of Chemistry of the University of Chicago invites applications from outstanding individuals for the position of **ASSISTANT PROFESSOR**. Applications from people with interests in any area of physical or inorganic chemistry will be considered. Postdoctoral experience is preferred. Applicants should submit curriculum vitae, a list of publications, and a succinct outline of their research plans. Candidates should arrange for three letters of recommendation to be sent directly to: **Jeremy Burdett, Chairman, Department of Chemistry, The University of Chicago, 5735 South Ellis Avenue, Chicago, IL 60637. An Equal Opportunity/Affirmative Action Employer.**

### ASSISTANT PROFESSOR OF GENETICS

The Biology Department at Boston University is seeking an Assistant Professor, tenure-track, with interests in modern problems in genetics and molecular biology (e.g., neurodevelopment, yeast cell cycle, etc.). The successful candidate should have at least two years of postdoctoral experience and will be expected to initiate an active, externally funded research program. He or she will also teach undergraduate genetics and an upper-level course in his or her area of specialization. Salary and start-up costs are competitive for the initiation of a first-rate program. The Biology Department at Boston University has 30 faculty members in all areas of biology, including cell, molecular, and developmental biology, as well as neurobiology and biochemistry. Please send a letter of interest (with past research experience and future research plans), curriculum vitae, three reference letters, and reprints of important published works by November 15, 1993, to: **Dr. Edward Loehler, Chair, Genetics Search Committee, Biology Department, Boston University, 5 Cunningham Street, Boston, MA 02215. Women and minorities are strongly encouraged to apply. Boston University is an Equal Opportunity/Affirmative Action Employer.**

### FACULTY POSITIONS

**Albert Einstein College of Medicine  
Department of Molecular Pharmacology**

The Department of Molecular Pharmacology is expanding and will recruit new faculty members during the period of July 1993 to December 1994. Candidates are invited to apply for positions at all academic levels (**ASSISTANT, ASSOCIATE AND FULL PROFESSOR**). All positions offer the opportunity for tenure. We are seeking individuals with a record of excellence in research who will apply skills in biochemistry, molecular biology, genetics and cell biology to solve problems relevant to molecular pharmacology. Essential requirements are: an innovative research program that complements programs within the Department and the Medical School; and a commitment to the training of Fellows and graduate students. Research areas of interest to the Department include: mechanisms of hormone, oncogene, growth factor and neurotransmitter actions; regulation of gene expression and differentiation; structure, function and regulation of receptors, channels and transporters; signal transduction, second messengers and protein phosphorylation; post-translational modification and intracellular targeting. Substantial packages will be provided to start up and sustain the laboratories of successful candidates. Submit curriculum vitae, a statement of research interests, plans and names of three references to: **Ms. Anna Cioffi, Administrator, Department of Molecular Pharmacology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.**

Department of Physiology at Southeastern University of the Health Sciences invites applications for full-time **ASSISTANT PROFESSOR** position. Must have doctoral degree; teaching experience highly desirable. Please send curriculum vitae and list of three references by November 15, 1993, to: **H. Jay Lyons, Ph.D., Department of Physiology, Southeastern University of the Health Sciences, 1750 N.E. 167th Street, North Miami Beach, FL 33162.**

## POSITIONS OPEN

### BIOMEDICAL ENGINEERING: BIOMECHANICS ASSISTANT PROFESSOR

Immediate opening for a full-time tenure-eligible Assistant Professor. Individual must have a strong background in the study of the biomechanics of the musculoskeletal system, especially musculoskeletal soft tissues such as cartilage and ligaments. Ph.D. or equivalent degree in biomedical engineering and at least two (2) years of postdoctoral training are also required. The successful candidate will be expected to have had some experience in both graduate training and training of orthopedic residents/fellows and to have or have promise for development of a nationally recognized and an independently funded research program. Selection will be based on (1) a demonstrated interest in developing theoretical results to find solutions to applied problems, (2) excellence in oral and written communication skills, (3) evidence of strong teaching and collaborative research potential.

Deadline for applications is September 30, 1993; anticipated start date is October 15, 1993. Please send curriculum vitae and the names of three (3) references to: **Karen Murphy, Search Committee: Biomechanics, Virginia Commonwealth University, Biomedical Engineering, MCV Station Box 694, Richmond, VA 23298-0694.**

*Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities are encouraged to apply.*

**FACULTY POSITION: MICROBIOLOGY.** **TENURE-TRACK** position at the **ASSISTANT PROFESSOR** level. Must have Ph.D. with strong background in microbiology (bacteriology) and be qualified to teach microbiology, cell biology, virology, immunology and introductory biology courses. Must participate in graduate program and establish a modest research program. Salary commensurate with training and experience. Review of applicants will begin immediately, with a deadline of October 15, 1993, or until position is filled. Applicants should submit application form, curriculum vitae, transcripts, three letters of recommendation and a statement of teaching philosophy and career objectives to: **Dr. Don A. Hay, Chairman, Department of Biology, Box 13003, Stephen F. Austin State University, Nacogdoches, TX 75962. Telephone: (409) 568-3601. Equal Opportunity/Affirmative Action Employer. Applications subject to disclosure under Texas Open Records Act.**

**ASSOCIATE/FULL PROFESSOR OF PHARMACOLOGY**—Established scientist with interest in neuroscience and/or molecular mechanisms of drug action is sought for a tenure-track position. Send nominations/applications including curriculum vitae, a statement of research goals and teaching interest and names of three references to: **Search Committee, Department of Pharmacology, University of North Texas Health Science Center at Fort Worth, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107. Affirmative Action/Equal Opportunity Employer and Educator.**

### ESTUARINE ECOLOGIST

The Department of Biology invites applications for a tenure-track faculty position at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**, for an estuarine ecologist with an interest in salt marsh systems, to commence September 1994. Successful applicants shall have a Ph.D. The candidate we are seeking will exhibit a strong commitment to undergraduate teaching and is expected to conduct his/her own experimental research. Initial responsibilities will consist of teaching a required Biology majors' Ecology course with field laboratories. Experience should include: land use planning and assessment, applied ecology, and habitat restoration. Developing courses in the candidate's specialty, participating in the introductory biology course, student advising and career guidance are also required. Demonstration or promise of successful grant writing expected.

Send letter of application, curriculum vitae, three letters of reference and a statement of teaching and research goals by 1 November 1993 to: **Search Committee Chairman, Biology Department, Fairfield University, Fairfield, CT 06430.** Fairfield University is located on Long Island Sound, 25 miles from New Haven and 50 miles from New York City, and is an **Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

### MOLECULAR NEUROBIOLOGIST

The Section of Neurobiology and Behavior, Division of Biological Sciences, Cornell University, invites applications for a tenure-track position in molecular neurobiology at the **ASSISTANT PROFESSOR** or beginning **ASSOCIATE PROFESSOR** level, available July 1994.

We seek a neurobiologist studying the molecular mechanisms of signal transduction in the nervous system. Possible research interests include molecular mechanisms of transmitter release, structure/function studies of channels and receptors, second messenger pathways, and other functional aspects of synaptic transmission and its modulation.

Applicants should send curriculum vitae, selected reprints or preprints, and statements of research and teaching interests, and arrange to have three letters of recommendation sent to: **Search Committee, Section of Neurobiology and Behavior, Cornell University, Seeley G. Mudd Hall, Ithaca, NY 14853.**

*Cornell University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are urged to apply.*

### VETERINARY PHARMACOLOGIST

The Department of Anatomy and Physiology in the College of Veterinary Medicine invites applications for a tenure-track faculty position at the **ASSISTANT/ASSOCIATE/FULL PROFESSOR** level (rank depends upon qualifications); appointment begins 1 July 1994. Candidates should have a strong interest in professional and graduate instruction and should have an established research program with considerable potential for securing extramural funding. Teaching responsibilities include serving as course director for a team-taught pharmacology course for veterinary students. Additionally, opportunities exist to develop elective courses for D.V.M. students and courses for graduate students. Research themes within the department include cardiopulmonary physiology, immunophysiology and neuroscience. Excellent opportunities also exist for interaction and collaboration with other faculty within the College and University. Preference will be given to candidates with a Ph.D., advanced training in pharmacology, board certification in clinical pharmacology and postdoctoral research experience. D.V.M. required.

Applications should include a letter of application, current curriculum vitae, a statement of research and teaching interest, reprints of three representative publications, and the names and addresses of three (3) references. Applications will be received until October 15, 1993, or until a suitable candidate is found. Send applications to:

**Jon D. Dunn, Ph.D.  
Professor & Department Head  
Department of Anatomy & Physiology  
Veterinary Medical Sciences Building  
1600 Denison Avenue  
Kansas State University  
Manhattan, KS 66506-5602**

*Kansas State University is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from women and minorities.*

### FACULTY POSITIONS IN PHARMACOLOGY

Two faculty positions at the **ASSOCIATE** and/or **FULL PROFESSOR LEVEL** are available in the Department of Pharmacology, with starting dates in spring of 1994. The positions require Ph.D. degrees, preferably in pharmacology, with proven accomplishments in modern areas of molecular pharmacology or gene regulation. Research topics of special interest are receptor structure and function, nucleic acid metabolism, signal transduction, and gene expression.

A clear capability for generating extramural research support and for working as an independent investigator are critical in the selection process. Start-up funds are available and salaries are competitive. The successful applicants will participate in teaching pharmacology to graduate and medical students.

Please send curriculum vitae, three representative reprints, and the names and addresses of three references to: **Dr. Elliot S. Vesell, Department of Pharmacology, Pennsylvania State University College of Medicine, Hershey, PA 17033.** Deadline for receipt of applications is December 15, 1993.

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



**Yale** UNIVERSITY

## Organismal Biology

The Department of Biology, in collaboration with the Peabody Museum of Natural History, is continuing its search to fill several positions in **Organismal Biology**. Rank is open. While outstanding scholars/teachers working with any taxa will be considered, we are particularly interested in the fields of entomology, invertebrate and vertebrate zoology.

We seek individuals compatible with Yale University's existing strengths in molecular ecology, phylogeny, earth history and conservation biology. Successful candidates will be expected to teach in the organismal diversity component of the interdepartmental Organismal Biology Program and to oversee an appropriate division of the Peabody Museum of Natural History.

Please send 3 relevant reprints, 3 letters of recommendation, curriculum vitae, and a short statement by November 15, 1993 to:

Chair, Organismal Biology Search  
Department of Biology  
Osborn Memorial Laboratory, Room 201  
Yale University  
P.O. Box 6666  
New Haven, CT 06511-8155

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

## DIVISION DIRECTOR, EDUCATIONAL PROGRAMS ARGONNE NATIONAL LABORATORY

Candidates are sought for the position of Division Director, Educational Programs at Argonne National Laboratory, one of the nation's leading multi-discipline research and development laboratories, located 25 miles southwest of Chicago. The selected individual will plan, direct and manage the activities and programs of the Division of Educational Programs with a staff of approximately 30, including program administrators and technical personnel.

The Division of Educational Programs is responsible for promoting, developing and facilitating educational and research interactions between Argonne National Laboratory and the academic community. Major thrusts of the Division include a wide variety of educational programs for the next generation of scientists and engineers. For example, the Division's activities include pre-college, undergraduate, and graduate programs; an instructional laboratory with extensive scientific instrumentation; educational outreach activities; the design and implementation of faculty workshops; and international training programs for professionals from developing countries. The Division plays an active role in developing programs for minorities, females, and disadvantaged persons.

The ideal candidate will have a PhD or equivalent and 10+ years of administrative experience in an academic or research environment. The successful candidate must have outstanding leadership qualities. Experience with federal agencies, including the Department of Energy and the Department of State, and demonstrated success in developing new programs and securing funding for them are highly desirable.

Applicants should submit resume with salary history and the names of at least three references to: Rosalie L. Bottino, Argonne National Laboratory, 9700 S. Cass Ave., Argonne, IL 60439. Deadline for receipt of resumes is October 31, 1993. Telecommunications Device for the Deaf equipped - (708) 252-7722. Argonne is an Equal Opportunity/Affirmative Action Employer.



### FACULTY POSITIONS IN DEVELOPMENTAL NEUROBIOLOGY AND AGING

The Department of Neurobiology and Anatomy at the University of Rochester Medical School invites applications for two tenure-track positions. One appointment will be at the Assistant Professor level for applicants with an interest in cellular and molecular developmental neurobiology. The second position will be at the Assistant or Associate Professor level for candidates interested in CNS aging and Alzheimer's disease. Applicants must have a Ph.D. and/or M.D., at least two years of postdoctoral experience, outstanding potential to develop and maintain an independent research program, and a commitment to participate in medical and graduate education. At the Assistant Professor level we seek candidates who will establish an extramurally funded research program that uses cellular and molecular approaches to study developmental neurobiology. Research that focuses on the relationship of developmental mechanisms to processes relevant to plasticity, regeneration and aging of the nervous system is preferred. For the Associate Professor position, we seek candidates that have significant extramural funding and a record of research and teaching accomplishments consonant with an advanced appointment. We are especially interested in candidates who can bring cellular, biochemical and molecular approaches to the study of the aging brain, with a specific interest in Alzheimer's disease. An active community of more than 80 neuroscience research labs offers unique opportunities for productive, collegial interactions. Candidates should send their curriculum vitae, a description of current and future research interests, and the names of three references to: **Dr. John T. Hansen, Chair, Department of Neurobiology and Anatomy, Box 603, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, NY 14642.** The University of Rochester is an Affirmative Action/Equal Opportunity Employer committed to a smoke-free environment.



### UNIVERSITY COLLEGE LONDON Department of Anatomy & Developmental Biology

The Department of Anatomy & Developmental Biology at University College London is one of the largest and most successful biomedical research departments in the UK. It has been given the highest rating in all the Research Assessment Exercises and attracted income from the Research Councils and the major medical research charities in excess of \$4 million in the last financial year. There are superb teaching and research facilities and a distinguished staff which includes 21 Professors, 6 of them Fellows of the Royal Society, 20 Readers, Senior Lecturers and Lecturers, more than 50 technical and clerical staff and over 70 postgraduate students.

Applications are now invited for two positions:

### The SA Courtauld Chair of Anatomy and Senior Lecturer/Reader

We expect that at least one of these new staff members will have a strong commitment to the teaching of Human Topographical Anatomy and to take a leading role in the teaching of preclinical anatomy for medical students, anatomy for undergraduate science students and advanced courses for third-year undergraduates and postgraduate clinicians.

Applications are also invited from candidates with a strong research commitment; the main interests of the department are Neuroscience, Developmental Biology, Mineralised Tissue Biology, Human and Vertebrate Palaeontology, Cell Biology, History of Medicine, and Medical Education. A suitably qualified candidate for the Senior Lecturer post may be considered for appointment to a Readership, subject to the usual College procedures.

Applications, including a full *curriculum vitae* (10 copies for UK candidates, 1 copy for overseas candidates), details of research and teaching experience, and the names and addresses of 4 referees to Professor G. Burnstock DSc, FAA, MRCP (Hon.) FRS, Department of Anatomy and Developmental Biology, University College London, Gower street, London WC1E 6BT, stating in the covering letter which post(s) you wish to be considered for. Deadline for receipt of applications **Friday October 15th 1993.**

*Working toward equal opportunities.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR OF PHYSIOLOGY

#### UNIVERSITY OF FLORIDA

The Department of Physiology seeks an outstanding individual to become a tenure-track faculty member at the level of Assistant Professor. Applicants must have a doctoral degree and postdoctoral experience, and should be prepared to develop a high-quality, independent research program with extramural support, related to **hypertension**. We are seeking individuals with expertise in either molecular, cellular, genetic, electrophysiologic or MRI approaches to this research area. The primary appointment will be in the Department of Physiology with potential for interaction with the many multidisciplinary centers within this institution. Current research within the department and the University of Florida Hypertension Center emphasizes the study of hypertension from humans to cell culture, neonatal physiology and neuroendocrinology. Candidates must also be willing and able to contribute to the teaching activities of the department. Applicants should send curriculum vitae, a statement of research plans and names of three references to: **Dr. Colin Sumners, Chairman of Search Committee, Department of Physiology, JHMHC Box 100274, College of Medicine, University of Florida, Gainesville, FL 32610-0274.** Salary is negotiable. Deadline for receipt of application is October 15, 1993. The position is to start in July 1994.

*The University of Florida is an Equal Opportunity/Affirmative Action Employer. Minority and female applicants are encouraged to apply. Applicants must comply with Immigration Reform and Control Act.*

**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.

**ALL RANK OF PROFESSOR AND POSTDOCTORAL FELLOW.** Research positions available in Cardiovascular Research Program. Candidates who are interested or have experience in cardiovascular research at molecular, cellular, tissue, organ, or system level are welcome to apply. Knowledge of Chinese preferred. Applications consisting of curriculum vitae, statement of research plans, selected reprints and names and addresses of three references should be forwarded to: **Ms. Jane Wu, Division of Cardiovascular Research, Institute of Biomedical Sciences, Academia Sinica, Taipei 11529, Taiwan, ROC.**

### MEDICAL PATHOLOGIST

The Division of Anatomic Pathology of the Department of Pathology and Laboratory Medicine of the University of Pennsylvania is recruiting an **ASSISTANT PROFESSOR** (tenure-track) within the Section of Medical Pathology/Center for Neurodegenerative Disease Research. Candidates must have an M.D. or M.D./Ph.D., expertise in molecular biology and a strong commitment to research. An interest in aging/neurodegenerative disease research is highly desirable, and preference will be given to candidates with Board Certification in Pathology. Interested individuals should send curriculum vitae along with the names and addresses of three references to: **Dr. John Q. Trojanowski, Director of Medical Pathology and the Center for Neurodegenerative Disease Research, Department of Pathology and Laboratory Medicine, Hospital of the University of Pennsylvania, Maloney Building Basement A009, Philadelphia, PA 19104.** *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are encouraged to apply.*

## POSITIONS OPEN

### DEVELOPMENTAL BIOLOGY FACULTY POSITIONS

The Department of Cell Biology at the Duke University Medical Center is planning an expansion of its faculty in the field of Developmental Biology. Interactive scientists with a strong research commitment and interests in the cellular and molecular basis of development in vertebrate and invertebrate model systems are encouraged to apply. Focus should be on strategies designed to elucidate the cellular and molecular basis of metazoan development. Appointments will likely be at the level of **ASSISTANT PROFESSOR.** *Minority applicants are encouraged to apply.* Please send curriculum vitae, a brief description of research interests, and arrange for us to receive letters from at least three references by October 15, 1993. Address initial correspondence to: **Michael P. Sheetz, Chairman, Department of Cell Biology, Duke University Medical Center, Box 3709, Durham, NC 27710.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

Texas A&M University Agricultural Research and Extension Center at Weslaco, Texas, a part of the Texas A&M University System, invites applications for full-time **ASSISTANT PROFESSOR** in Plant Pathology and Microbiology. Primary duties and responsibilities will be to incorporate viral-resistant genes into crops important to southern Texas agriculture using recombinant DNA technology. Fundamental responsibility will be to use or develop plant transformation systems which would allow for the transfer of the viral resistance gene(s) into crop(s) relevant to southern Texas. Additional research is to be explored concerning the molecular basis for plant-viral interactions. The incumbent will interact with members of the Texas A&M University's centers for crop biotechnology and crop improvement as well as other research faculty. Incumbent will establish a sound research program with measured success, especially in the areas of refereed publications and extramural competitive research funding. Starting date will be October 1, 1993, or when a suitable candidate is identified. Applicants should submit letter of application with curriculum vitae including selected reprints and request three letters of reference be sent to: **Dr. Jose Amador, Center Director, Texas Agricultural Experiment Station, 2415 East Highway 83, Weslaco, TX 78596.** *The Texas A&M University is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION IN PHARMACOLOGY

The Department of Pharmacology at Louisiana State University Medical School in Shreveport invites applications for a tenure-track faculty position. An M.D. or Ph.D. degree and two years of postdoctoral experience are required. Preference will be given to applicants with expertise in immunopharmacology or neurotoxicology, but exceptional candidates in other areas may be considered. Appointment is anticipated at the **ASSISTANT PROFESSOR** level. The appointee will be expected to establish a strong research program supported by extramural funding, and to participate in the teaching of graduate and medical students. Applications must include curriculum vitae, a list of publications, a brief summary of current and future research plans, and the names of three referees. Send applications to: **Adrian J. Dunn, Ph.D., Department of Pharmacology, LSUMC, P.O. Box 33932, Shreveport, LA 71130-3932.** *An Equal Opportunity/Affirmative Action Employer.*

### CHAIRPERSON

#### DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

The University of Kansas Medical Center seeks an outstanding scientist to provide leadership and direction for the Department of Biochemistry and Molecular Biology. The candidate must be a distinguished scientist with active research in a biomedical field relevant to biochemistry. Please send nominations and applications including curriculum vitae, and names of 3 references, preferably by November 1, 1993, to:

**Dr. Curtis D. Klaassen, Chairman  
Biochemistry and Molecular Biology  
Search Committee  
University of Kansas Medical Center  
Kansas City, KS 66160-7417**

*The University of Kansas is an Equal Opportunity and Affirmative Action Employer.*

## POSITIONS OPEN

### ASSISTANT or ASSOCIATE PROFESSOR OF ANATOMY

Applications are invited for multiple faculty positions currently available at the Assistant or Associate Professor level. Applicants at the Assistant Professor level should have a Ph.D., M.D., or equivalent, postdoctoral experience, an active research program with a high potential for attracting external support, and promise of ability as a teacher. Applicants at the Associate Professor level should have an ongoing externally funded research program, an established record of scholarship supported by substantial publications, teaching experience, and a record of successful direction of doctoral candidates. Research areas are open; however, preference will be given to candidates with expertise in cellular and molecular biology. Applicants should be qualified to teach in medical gross anatomy.

Send curriculum vitae, bibliography, a brief statement of research and teaching experience, plus names of three references to:

**Chair, Faculty Recruitment Committee  
Department of Anatomy  
University of Iowa  
Iowa City, IA 52242**

*The University of Iowa is an Equal Employment Opportunity and Affirmative Action Employer. Women and minorities are encouraged to apply.*

The **DEPARTMENT OF ANATOMICAL SCIENCES** has a tenure-track position in **NEUROSCIENCE** available at the **ASSOCIATE PROFESSOR** level for appointment beginning on or before July 1, 1994. Applications are invited from individuals with a Ph.D., M.D., or equivalent degree and at least two years of postdoctoral training. The successful candidate is expected to have an established independent and funded research program in Neuroscience. Teaching responsibilities will be in Microanatomy to professional and graduate students. Candidates should have sufficient experience in teaching Microanatomy to become the course director within two years. Applicants should submit curriculum vitae, a summary of past and proposed research interests and names of three references to:

**Raymond E. Papka, Ph.D.  
Chairman of Search Committee  
Department of Anatomical Sciences  
University of Oklahoma Health Sciences Center  
Post Office Box 26901  
Oklahoma City, OK 73190**

Review of applicants begins immediately and will continue until the position is filled.  
*Equal Opportunity/Affirmative Action Employer.*

### DEPARTMENT CHAIR

#### Department of Pharmaceutical Sciences University of Colorado, School of Pharmacy

The University of Colorado School of Pharmacy is seeking exceptionally well-qualified candidates for the position of Chair of its Department of Pharmaceutical Sciences. The School recently occupied a new, four-story building on the University's Health Sciences Center campus in Denver. The department currently comprises 15 full-time faculty with well-established, extramurally funded research programs in the areas of biochemical/molecular pharmacology and toxicology; carcinogenesis; and biopharmaceutics.

Candidates should have an outstanding, internationally recognized research program, a strong commitment to excellence in undergraduate and graduate education in the pharmaceutical sciences and demonstrated administrative skills. The chair of the Department of Pharmaceutical Sciences is one of the school's principal administrative officers and is responsible for oversight of teaching programs, budget, planning and the provision of leadership for faculty development. The appointment will be at the rank of Professor. The desired appointment date is July 1, 1994.

Applications and nominations will be accepted through October 15, 1993. Applications, including a description of qualifications, curriculum vitae and the names, addresses and telephone numbers of four references, should be sent to: **Dennis R. Petersen, Ph.D., Chair, Search Committee, School of Pharmacy, Campus Box C-238, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.**

*The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.*





# Leicester University

## PROFESSOR OF ISOTOPE GEOLOGY AND HEAD OF THE NERC ISOTOPE GEOSCIENCES LABORATORY

The University of Leicester and the Natural Environment Research Council (NERC) wish to appoint an experienced and innovative earth scientist with a substantial scientific reputation in isotope geology as Professor of Isotope Geology in the Department of Geology, University of Leicester and Head of the NERC Isotope Geosciences Laboratory (NIGL), Keyworth, near Nottingham.

The Professor will be appointed full time to the staff of the University, and will be seconded for 80% of his or her time to serve as Head of NIGL. In relation to that secondment the appointee, who will be responsible to the NERC Director of Scientific Services, will lead NIGL in providing isotopic data and scientific collaboration with earth scientists and others. The appointee will contribute to the teaching in the University Department of Geology, including the provision of short courses for postgraduate students and staff from UK and overseas universities, and will be expected to develop substantive research interests with fellow researchers in the Leicester Department of Geology and elsewhere.

Salary will be within the Professorial Range. The appointment is for five years from a date to be agreed.

Further particulars may be obtained from the **Staffing Office (Academic Appointments)**, University of Leicester, **University Road, Leicester LE1 7RH**, telephone (0533) 522422, fax number (0533) 522200. UK candidates should submit thirteen copies of their application (overseas candidates may submit one copy).

Closing date for applications is 27 September 1993.

**Towards Equal Opportunities.**



### Biochemistry/Molecular Biology Organic Chemistry Physical Chemistry

The San Diego State University Department of Chemistry anticipates the availability of three tenure track positions with appointments to begin Fall 1994. Applications are sought from qualified individuals with research interests in protein structure and function, cell cycle regulation, organic synthesis, synthetic methodology, and all areas of physical chemistry. Appointments will be considered at any rank depending upon background and qualifications. Postdoctoral experience is essential as the successful candidates will be expected to maintain vigorous research programs that attract external funding. Applicants should also be willing to participate in the department's programs at any level from general chemistry through the Ph.D. program. Appropriate hires will be eligible for appointment to the interdisciplinary Molecular Biology Institute. SDSU's proximity to the University of California at San Diego, the Scripps and Salk Research Institutes, the San Diego Supercomputer Center, and numerous biotechnology companies offers an attractive research environment. Applications should include a cover letter, a complete vitae, a 1-3 page description of research plans with major equipment needs, relevant reprints and preprints, and the names and addresses of three persons who will be sending letters of recommendation. This information should be addressed to Faculty Search Committee Chair, Department of Chemistry, San Diego State University, San Diego, CA 92182-0328. For assurance of consideration, candidates should arrange for completed applications and letters of recommendation to be received by Oct. 15; however, the application period may be extended until suitable candidates are identified. Final appointment is subject to budget considerations.

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### Medical Technology Consultant

**Play an integral role in Aetna's  
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Long before the nation began its discussion regarding health care reform, Aetna had implemented creative and effective managed care programs. Today, Aetna Health Plans is one of the country's largest managed care organizations. As we move into the future, we seek a creative, productive, and analytically-oriented individual to play a key role in evaluating the drugs, devices and procedures used in medicine.

We will rely on your expertise in cost-effectiveness analysis to strengthen our position as the industry leader in technology assessment. The information you provide will be critical to the development of coverage policy, clinical guidelines and utilization management protocols. We seek an MD or PhD in the clinical sciences with a background in technology assessment and formal training in health services research and cost-effectiveness analysis.

If you're a dynamic individual interested in helping to direct the future of health care, forward 2 copies of your resume to:

Beth Bleakney,  
Aetna, MAA3  
Staffing, Dept. 2572,  
1000 Middle Street,  
Middletown, CT 06457.

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Affirmative Action Employer.*



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# GENE THERAPY RESEARCH SCIENTISTS

Genetic Therapy, Inc. is a leading gene therapy company which is collaborating with major academic medical centers including the National Institutes of Health in the research, development and clinical testing of gene therapy vectors. GTI has several positions available immediately for researchers with a Ph.D. or M.D. degree and a minimum of two years research experience.

## VIROLOGY

Applicants should have training and experience in molecular biology and virology and should have worked with retroviruses, adenoviruses or other DNA viruses. Experience with animal models would be an advantage.

## IMMUNOLOGY

This group is seeking a senior level scientist who will join a team engaged in gene transfer preclinical studies directed toward the prevention and treatment of cancer by genetic immunotherapy. Research expertise with *in vivo* tumor biology models is desirable, as well as experience in molecular biology and tissue culture techniques.

## CARDIOVASCULAR BIOLOGY

The successful applicant will join a team responsible for developing and testing novel gene transfer approaches to the management of cardiovascular disease. A research background investigating the molecular basis of atherosclerosis is desirable and experience with relevant *in vivo* disease models would be an advantage.



GTI offers a stimulating and challenging research environment, with competitive salaries and benefits. Please send a resume, along with the names and addresses of two references to:

Human Resources-RS  
GENETIC THERAPY, INC.  
19 Firstfield Road  
Gaithersburg, MD 20878

GTI is an equal opportunity employer

## SCIENTIFIC OFFICERS I AND II

**SCIENTIFIC OFFICER I** – A position for a director of a molecular biology division in a large hospital laboratory is available immediately. Institutional funds are available to provide technical support, equipment and supplies. This individual will be expected to establish his or her own research program, and also to serve as a consultant to the Department of Laboratories.

Applicant should have a Ph.D. or equivalent degree with experience in molecular biology.

## SCIENTIFIC OFFICERS II –

Positions are available for individuals possessing a Ph.D. degree in the biological sciences to serve as director or clinical laboratory sections.

Duties of these positions include monitoring proficiency testing, quality control, supervision of laboratory personnel, training of pathology residents, and financial management of their section.

Send resumes to:

Chairman, Department of Pathology  
and Laboratory Medicine  
Cook County Hospital  
1835 W. Harrison Street  
Chicago, IL 60612  
or fax 312/633-3364



Equal Opportunity Employer



LOYOLA  
UNIVERSITY  
CHICAGO

## POSTDOCTORAL FELLOWSHIPS NEUROSCIENCE AND AGING INSTITUTE Loyola University Stritch School of Medicine

The Neuroscience and Aging Institute of Loyola University Chicago is now recruiting Postdoctoral Fellows. Recent recipients of a Ph.D. and/or M.D. degree seeking further training in Neuroscience are encouraged to apply. Stipends are competitive, and appointments are for two years.

Successful applicants will select a mentor from among the more than 30 members of the Neuroscience and Aging Institute. These members include faculty from the Departments of Cell Biology, Neurobiology and Anatomy, Molecular and Cellular Biochemistry, Neurology, Pharmacology, Physiology and Psychiatry, and also from the Parnly Hearing Institute and the Hines VA Hospital.

The major areas of research focus are:

**NEURODEGENERATIVE DISEASES** *Alzheimer's disease, Parkinson's disease, Substance abuse, Stroke, Epilepsy*

**NEURODEVELOPMENT** *Alcohol, Drugs of abuse, Altered function in aging*

**NEUROENDOCRINOLOGY/NEUROIMMUNOLOGY** *Stress, Sexual differentiation, Growth and reproduction*

**NEUROREGENERATION/NEUROPLASTICITY**

*Spinal cord injury, Neural tissue transplantation, Axoplasmic transport, Neurotrophic factors, Protein expression*

**NEUROTOXICITY** *Alcohol,  $\beta$ -carbolines, MPTP, AF64A*

**NEUROTRANSMITTERS/NEUROPEPTIDES RECEPTOR SYSTEMS**

**SENSORY NEUROSCIENCE** *Electrophysiology and psychophysics of visual and auditory systems in humans and animal models*

A listing of Neuroscience faculty and their particular research interests is available upon request. Candidates should forward a letter of interest, including future research interests and career goals, curriculum vitae, and names, addresses and phone numbers of three references to:

Neuroscience and Aging Institute Fellowships Committee  
c/o Paula Griffin, Building 117, Room 29  
Loyola University Medical Center  
2160 South First Avenue  
Maywood, Illinois 60153  
(708) 216-6755

Information must be received and files complete by October 15, 1993.

Loyola University Chicago employs without regard to race, color, age, sex, national or ethnic origin, or religion, and is an equal opportunity employer. Qualified persons are not subject to discrimination on the basis of handicap.

## HUBBLE FELLOWSHIP PROGRAM OFFICE Space Telescope Science Institute 3700 San Martin Drive Baltimore, MD 21218

NSI/DECnet: 6559::HFELLOWS  
BITNET: HFELLOWS%STSCI.EDU@INTERBIT.BITNET  
INTERNET: HFELLOWS@STSCI.EDU

The Space Telescope Science Institute announces the continuation of the Hubble Fellowship Program in cooperation with astronomical institutions throughout the United States. The main objective of the Program is to provide recent postdoctoral scientists of unusual promise and ability, opportunities for research on problems (largely of their own choosing) that are related to the Hubble Space Telescope science and compatible with the interests of the host institutions. The program is open to scientists of any nationality who have earned their doctorates after January 1, 1991, in astronomy, physics, or related disciplines.

The duration of the fellowship is for a total of three years, which includes an initial appointment of two years and an extension to a third year, contingent on a positive mid-term review. Contingent on funding from NASA, up to 15 new Hubble Fellows will be supported this year by grants to United States institutions.

The Announcement of Opportunity, including the application instructions, may be obtained from the above address.

The application deadline is November 19, 1993. The new Hubble Fellow appointments are expected to begin on September 1, 1994. Minorities and women are strongly encouraged to apply.

EE0/AA/M/F/D/N



## **PATHOLOGIST/MOLECULAR BIOLOGIST**

The Laboratory of Experimental Pathology, Division of Cancer Etiology, National Cancer Institute, NIH, is accepting applications for a position of pathologist with extensive research experience in experimental and human pathology, molecular biology and carcinogenesis by crystalline silica. The candidate will be expected to conduct independent original research on the pathogenesis of fibrosis-associated lung cancer, using experimental exposures to silica and other mineral particles, in animal and cellular models. The candidate will investigate the histopathogenesis and molecular basis of silicosis and silica-induced lung cancer, using experimental animal species of different specific susceptibility and related human tissues, in order to identify the localization and role of molecular markers (cytokines, growth factors and specific gene products). He/she will also investigate cellular models and mechanisms for silica uptake, toxicity and neoplastic transformation and will characterize cell lines transformed by silica and/or transfected oncogenes or regulatory genes, as well as cell lines derived from related tumors. Experience is required in: **A)** Human and experimental pathology (including pulmonary pathology), immunohistochemistry, electron microscopy, immunoelectron microscopy and energy-dispersive X-ray spectrometry; **B)** Recombinant DNA methodology, including Northern and Southern analyses, RNA-PCR, single strand conformational polymorphism techniques, sequencing of PCR products and immunoblotting of specified proteins; and **C)** Small animal surgery and necropsy techniques. The candidate is expected to provide consultation and collaboration to the Laboratory's research program in the above-listed areas of expertise. Preference will be given to candidates with the following qualifications: **1)** MD degree and academic pathology experience; substantial track record of research in human and experimental pathology, recombinant DNA technology, immunohistochemistry and electron microscopy; and experience in the field of silicosis research. **2)** Strong interest in the development of a research program for the detection of altered gene expression and molecular markers in cells and tissues, related to respiratory dust diseases. **3)** A strong record of publications in the scientific literature. Salary range: \$75,000 - \$80,000. U.S. citizenship is required. Candidate must communicate fluently and effectively in English, both orally and in writing. Candidates should send CV, bibliography and a resume of research interests, by **September 27, 1993**, to:

**Dr. Umberto Saffiotti, Chief  
Laboratory of  
Experimental Pathology  
Division of Cancer Etiology  
National Cancer Institute  
Bldg. 41, Room C-105  
9000 Rockville Pike  
Bethesda, Maryland 20892-0041  
Fax: 301-402-1829**

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## **PRESIDENT UNIVERSITY OF MARYLAND AT BALTIMORE**

The Board of Regents of the University of Maryland System invites nominations and applications for the position of President of the University of Maryland at Baltimore (UMAB). Established in 1807, UMAB is the founding campus of the eleven degree-granting institutions within the University of Maryland System (UMS). UMAB, a major research institution, is internationally recognized for professional and graduate education in dentistry, law, medicine, nursing, pharmacy, and social work. UMAB has an annual budget in excess of \$300 million, and in fiscal year 1993, generated over \$100 million in sponsored research funding. The campus community includes 1,453 faculty, 3,087 staff, 4,127 graduate and professional students, and 937 undergraduates. Its 94-acre campus in Baltimore's University Center district near the Inner Harbor is also the home of affiliated entities including the University of Maryland Medical System (UMMS) and the Baltimore VA Medical Center. UMAB and the University of Maryland Baltimore County administer the programs of the University of Maryland Graduate School, Baltimore, one of the UMS's two principal centers for research and doctoral training.

The President is the chief executive officer of the institution and is accountable to the Regents and to the Chancellor of the System. Among the qualifications and abilities desired in the successful candidate are:

- substantial experience in senior-level administration in a complex system of higher education or comparable settings;
- a distinguished record of academic achievement;
- outstanding achievement in research and scholarship, public service or business;
- commitment to excellence and innovation in teaching, research and service;
- understanding of the contributions of each of UMAB's constituent schools and of the importance of interdisciplinary efforts on a multidisciplinary campus;
- commitment to the principle of shared governance within the institution;
- demonstrated strategic planning skills and dynamic leadership in complex organizations;
- ability to communicate effectively with internal and external constituencies;
- ability to generate funding from public and private sources and lead major fundraising initiatives;
- demonstrated commitment to equal opportunity and promotion of diversity;
- dedication to the System's goals in serving the needs of the citizens of Maryland;
- commitment to the mission and governance structure of the University of Maryland System; and
- ability to maintain and strengthen the working partnerships among UMAB, UMMS and the VA, and among the various UMS institutions.

To ensure full considerations, nominations and applications should include a resume as well as the names of five references and should be sent to: Professor Mark A. Sargent, UMAB Presidential Search Advisory Committee, c/o Chancellor's Office, University of Maryland System Administration; 3300 Metzger Road; Adelphi, MD 20783-1690. The President Search Advisory Committee will have begun reviewing applications by October 1, 1993.

The University of Maryland System is an EOE/AA/ADA employer.

## **FACULTY POSITION MOLECULAR BIOLOGY**

The Division of Marine Biology and Fisheries of the Rosenstiel School of Marine and Atmospheric Sciences is seeking applications for an assistant to full professor position. Applicants must have a Ph.D. and/or M.D. degree with postdoctoral experience in molecular biology. Interest and/or experience in the molecular biology of marine systems is strongly desired.

The successful candidate will join an enthusiastic multidisciplinary faculty with established program in Systematics, Fisheries, Biological Oceanography, Marine and Freshwater Biomedical Sciences, Coral Reef Biology, Coastal Ecology and Policy, and Marine Biotechnology. Division faculty are encouraged to participate in four environmental science Centers housed on campus. Joint or secondary faculty appointments are possible at the Coral Gables campus or at the School of Medicine.

The successful candidate is expected to develop an independent funded research program related to marine sciences, and will participate in the training of M.S. and Ph.D. students. All areas of molecular biology are open to application, but specific interest in one or more of the program areas mentioned above would be considered advantageous.

Send curriculum vitae, statement of research interests, and the names of three references by 1 November 1993 to: MBF Molecular Biology Search Committee, Division of Marine Biology and Fisheries, RSMAS University of Miami, 4600 Rickenbacker Causeway, Miami, Florida 33149.

*The University of Miami is an Equal Opportunity/Affirmative Action Employer and smoke/drug-free workplace. We do not discriminate on the basis of race, religion, color, sex, age, national origin or disability. We encourage applications from females, veterans, disabled and minority group applicants.*

## **PLANT DEVELOPMENT BIOLOGIST**

The Department of Biology at the University of Northern Iowa invites applications for a tenure-track assistant professor position (Ph.D.), especially from minority, women, Vietnam-era veteran or disabled scientists, effective August 1994. The individual will have primary responsibility for upper division courses in plant developmental biology, anatomy and morphology, and will participate in the general biology and University General Education courses. The department expects effectiveness in both teaching and research. Applicants' research programs, employing modern approaches to important questions in plant developmental biology, should invite participation by graduate (M.A.) and undergraduate students. Teaching and/or postdoctoral research experience is preferred. Salary is competitive and commensurate with experience and qualifications.

Screening of applications will begin November 1, 1993. Please send a curriculum vitae, transcripts, statement of interests and goals in both teaching and research, and three letters of recommendation to:

**Dr. Kay Klier**  
Chair, Search Committee  
Department of Biology  
University of Northern Iowa  
Cedar Falls, IA 50614-0421  
Phone: (319) 273-2218 (Klier);  
(319) 273-2456 (Dept.)  
Fax: (319) 273-2893  
Internet: in%Klier@iscsvax.uni.edu

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FOR AFFIRMATIVE ACTION.**

## POSITIONS OPEN

### 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.*

#### CHAIR,

#### DEPARTMENT OF OPHTHALMOLOGY

THE COLLEGE OF MEDICINE AT THE UNIVERSITY OF FLORIDA is searching for an individual to serve as Professor and Chair for the Department of Ophthalmology and to provide academic and administrative leadership in programs of patient care, teaching and research. Minimum qualifications include an M.D. degree and a distinguished record of performance in teaching, clinical care and/or research with abilities to lead a highly productive academic department. The deadline for receipt of applications is October 1, 1993. The anticipated starting date is July 1, 1994. Reply by sending current curriculum vitae to: Dwight L. Evans, M.D., Chair, Ophthalmology Search Committee, Department of Psychiatry, University of Florida, Box 100256, Gainesville, FL 32610-0256. *Affirmative Action/Equal Opportunity Employer. Women and minority applicants are encouraged to apply and voluntarily identify themselves.*

#### CHAIR

Department of Biology  
The University of Texas at Arlington

Applications and nominations are invited for the position of Professor and Chair of the Department of Biology beginning fall 1994. The successful candidate must have a Ph.D. in a relevant field, leadership abilities and a record of accomplishment in teaching and research. The Chair is expected to provide intellectual and administrative leadership for 22 faculty, with diverse research interests in the ecological, organismal and molecular aspects of biology, and will be responsible for faculty/staff personnel affairs, budget management and coordination of teaching programs. The department has teaching responsibilities for 1300 undergraduate majors and 60 graduate students, and offers the M.S. in Biology and the Ph.D. in Quantitative Biology. The University of Texas-Arlington is located midway between Dallas and Ft. Worth and, with 24,000 students, is the second largest university in the University of Texas System. Send curriculum vitae, statements of administrative philosophy and career goals, and names, addresses and telephone numbers of five references to: Chair Search Committee, Department of Biology, Box 19498, The University of Texas at Arlington, Arlington, TX 76019-0498. Evaluation of applications will begin October 15, 1993. *An Equal Employment Opportunity/Affirmative Action Employer.*

### FACULTY POSITIONS IN BIOLOGICAL CHEMISTRY AND STRUCTURAL BIOLOGY, PRINCETON UNIVERSITY

The Departments of Chemistry and Molecular Biology at Princeton University seek highly qualified applicants in biological chemistry and structural biology, broadly defined, for both senior and junior faculty positions. Send curriculum vitae, a summary of research interests, and the names of at least three referees to: Biological Chemistry Recruiting Committee, Department of Chemistry, Princeton University, Princeton, NJ 08544, by December 1, 1993. *Princeton University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### LYLE C. DICKMAN ENDOWED CHAIR FOR PLANT IMPROVEMENT UNIVERSITY OF FLORIDA

The University of Florida is seeking an experienced scientist who will conduct an innovative program in the area of plant genetics. The candidate must be internationally recognized in plant genetics, and must have a demonstrated ability to obtain external funds and to attract and work with outstanding graduate and postdoctoral students. Research results will be useful, in the long term, to tomato genetics. It is anticipated that the successful candidate will interact with others at the University of Florida with interests in plant molecular biology/genetics as well as those engaged in plant breeding. Persons with skills, experience and a track record in modern molecular or cellular genetics are especially encouraged to apply. Letters of nomination should be submitted by October 1, 1993, to: Dr. Daniel J. Cantliffe, Dickman Chair Search Committee, Horticultural Sciences Department, University of Florida, Gainesville, FL 32611-0690. Applications including a résumé and names of five referees will be accepted until November 1, 1993. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

### MOLECULAR-CELLULAR BIOLOGY TENURE-TRACK POSITIONS

The Department of Psychiatry at the University of Mississippi Medical Center invites applications to fill tenure-track positions in molecular-cellular biology in its newly established laboratories. Candidates should hold a M.D. or Ph.D. degree with at least two years of postdoctoral experience. Experience in cloning is highly desirable. Candidates will be expected to have demonstrated ability to develop independent research programs and to compete successfully for extramural funding. Joint appointments to basic science departments are possible. Teaching responsibilities are not excessive. Faculty rank and salary commensurate with degree and level of experience. Applicants should send curriculum vitae, an outline of research interests and the names of three individuals who have agreed to provide letters of recommendation to: Dr. Angelos Halaris, Professor and Chairman, Department of Psychiatry and Human Behavior, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. Applications will be accepted through November 1, 1993. *Equal Opportunity Employer, M/F/D/V.*

The Division of Biology, California Institute of Technology, seeks a JUNIOR FACULTY MEMBER in the area of Immunology for a tenure-track position. Successful applicants are expected to generate creative and productive research programs that will interface with the diverse scientific interests represented in the Biology Division. Applicants should send curriculum vitae, list of publications, and a brief statement of research interests and plans. In addition, the candidate should arrange to have three letters of reference sent directly to the search committee. Applications and letters of reference should be sent to: Ms. Joyce Kato, Immunology Search Committee, Division of Biology 147-75, California Institute of Technology, Pasadena, CA 91125. The deadline for receiving applications and letters of reference is December 15, 1993. *The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities.*

The Swiss Federal Institute of Technology in Zurich (ETHZ) invites applications for a

### FACULTY POSITION IN ORGANIC CHEMISTRY

The research program of the candidates should focus on the experimental investigation of fundamental organic-chemical processes using physical methods; a strong computational chemistry or synthesis component might be included. The candidate is expected to participate in the organic chemistry teaching curriculum at all levels.

Requirements for candidacy are a successful research program, facility with teaching, and a willingness to collaborate with colleagues both within and outside the university.

Please submit your application together with curriculum vitae and a list of publications to: President, ETH Zurich, Prof. J. Nüesch, ETH Zentrum, CH-8092 Zurich, no later than September 30, 1993. *Applications from women scientists are especially invited.*

## POSITIONS OPEN

**CHAIRPERSON, DEPARTMENT OF PSYCHOLOGY, WASHINGTON UNIVERSITY IN ST. LOUIS:** An outstanding scholar with an active research program and a broad understanding of contemporary psychology is sought to chair the Department of Psychology. This is a tenured position at the rank of full professor; salary is negotiable. *We especially encourage applications from women and members of minority groups.* The Psychology Department is part of a strong liberal arts curriculum in the Faculty of Arts and Sciences and has close ties to an outstanding medical school with well-developed programs in neurobiology and clinical neuroscience. Psychology is the most popular major for Washington University's superior undergraduate students. The Department has a variety of graduate programs leading to the Ph.D. degree. Washington University is a well-endowed private research and teaching university. The University is making a major commitment to building a first-rank Psychology Department. Reflecting this commitment, groundbreaking on a new building to house the Psychology Department is scheduled to occur in late 1993/early 1994. This search is for a leader of this effort. In addition to excellence in scholarship, broad knowledge of psychology and academic vision, an aptitude for administration is required. Direct inquiries (including curriculum vitae) to: Professor Marcus E. Raichle, Chair, Psychology Department Chairperson Search Committee, One Brookings Drive, Campus Box 1125, Washington University, St. Louis, MO 63130. *Washington University is an Equal Opportunity/Affirmative Action Employer. Employment eligibility verification required upon hire.*

#### DIRECTOR

#### YELLOWSTONE CENTER FOR MOUNTAIN ENVIRONMENTS

Interdisciplinary organization of faculty from physical, biological and social sciences and engineering. Conducts research, provides graduate education and performs outreach activities. Emphasis on biodiversity and ecosystem health, interaction of humans and natural systems, and sustainable resource use, management and economics. Successful candidate will be a dynamic and visionary leader who has achieved national and international prominence in a discipline closely related to the mission of the center. Required: terminal degree, evidence of effective leadership with an acknowledged national reputation, distinguished research record, particularly in integrated, multidisciplinary research, and successful record of obtaining extramural funding. Salary negotiable. **Screening begins October 18, 1993, and continues until position is filled.** Send letter of application addressing qualifications, résumé and names of three references: Search Committee Chair, YCME, Vice President for Research and Creative Activities, Montana State University, Bozeman, MT 59717-0246; Telephone: 406-994-2891. *ADA/Equal Opportunity/Affirmative Action/Veterans Preference.*

University of California, Santa Barbara (UCSB)

### FACULTY POSITION IN X-RAY CRYSTALLOGRAPHY

The Interdepartmental Biochemistry and Molecular Biology Program and the Department of Chemistry invite applications for a tenure-track faculty position in our expanding program in structural biochemistry. Research expertise and interest in the structural studies of proteins and/or nucleic acids at the atomic level of resolution using X-ray crystallography is sought. Experimental facilities will be available in the new Physical Sciences Building now nearing completion. The rank of the appointment is open and dependent upon qualifications. Applicants must have the Ph.D. degree and relevant postdoctoral experience. The successful applicant will be expected to lead vigorous independent research programs, and to participate effectively in the teaching programs of the Interdepartmental Biochemistry and Molecular Biology Program and the Department of Chemistry. Submit curriculum vitae, selected reprints, and a brief description of previous and anticipated research, and arrange to have at least three letters of reference sent to: Director, c/o Frances McCutcheon, Interdepartmental Biochemistry-Molecular Biology Program, c/o Department of Biological Sciences, University of California, Santa Barbara, CA 93106. Application deadline is October 1, 1993, or until position is filled. *UCSB is an Equal Opportunity/Affirmative Action Employer.*



## POSITIONS OPEN

### MOLECULAR PATHOGENESIS AND IMMUNOLOGY JUNIOR AND SENIOR FACULTY POSITIONS AVAILABLE

The Department of Microbiology and Immunology invites applications for junior- and senior-level, tenure-track positions focusing on the molecular analysis of significant problems in bacterial pathogenesis and immunology. Senior candidates should have strong records of research accomplishment with sustained program growth and development. Junior candidates will be expected to develop high-quality, independent research programs with long-term growth potential. Teaching responsibilities, which emphasize quality rather than quantity, include medical, dental and graduate students. The Department offers a high-quality intellectual environment with 80% of the faculty holding active extramural research grants.

A large Center of Excellence grant has resulted in establishment of a Molecular Resource Center within the Department featuring state-of-the-art facilities for: oligonucleotide synthesis, peptide synthesis, monoclonal antibody production, amino acid analysis, DNA sequencing, molecular graphics, and flow cytometry. Funds for the initiation of research programs will be available and salaries will be highly competitive.

Review of applications will continue until the position is filled. Applications should consist of curriculum vitae, copies of several recent publications, a brief statement of future research goals and three letters of reference to be sent to:

**Dr. Terrance G. Cooper**  
Department of Microbiology and Immunology  
The University of Tennessee, Memphis  
858 Madison Avenue, Room 801  
Memphis, TN 38163

*The University of Tennessee, Memphis, is an Equal Employment Opportunity/Title IX/Section 504/ADA Employer.*

The Swiss Federal Institute of Technology in Zurich (ETHZ) invites applications for a

### FACULTY POSITION IN ORGANIC CHEMISTRY

The research program of the candidates should focus on the development of modern analytical methods and their application to investigations of organic-chemical systems; the research program might be located at the interface with biochemistry or with the chemistry of new materials and devices. The candidate is expected to participate at all levels in the analytical and organic chemistry teaching curriculum.

Requirements for candidacy are a vigorous research program, facility with teaching, and a willingness to collaborate with colleagues both within and outside the university.

Please submit your application together with curriculum vitae and a list of publications to: **President, ETH Zurich, Prof. J. Nüesch, ETH Zentrum, CH-8092 Zurich**, no later than September 30, 1993. *Applications from women scientists are especially invited.*

**POSTDOCTORAL POSITION, PEPTIDE CHEMISTRY** available October 1, 1993, to synthesize and characterize novel amino acid derivatives and conformationally constrained analogues of the opioid peptide dynorphin A. Experience in organic synthesis required; experience in peptide synthesis and/or molecular modeling helpful. Send curriculum vitae and three letters of reference to: **Dr. Jane Aldrich, Postdoctoral Position, College of Pharmacy, Oregon State University, Corvallis, OR 97331-3507**. Review of applications will begin September 27, 1993. *OSU is an Affirmative Action/Equal Opportunity Employer and is responsive to dual-career needs.*

**FOX CHASE CANCER CENTER INSTITUTE FOR CANCER RESEARCH—POSTDOCTORAL POSITION**—A postdoctoral position is available immediately to study HIV-1 involvement in B-cell lymphomas and c-myc deregulation. Applicants must have a strong background in molecular biology. Please send curriculum vitae, a brief description of research experience and interests and names of three references to: **Dr. Susan Astrin, c/o Human Resources Department—MAS, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111**. *Equal Opportunity Employer.*



**MASSEY  
UNIVERSITY**

Massey University is one of New Zealand's most innovative academic institutions with a proud history of growth since its foundation in 1927. Today Massey University has eight faculties and three schools with over 800 academic staff and over 12,000 full-time equivalent students in New Zealand and throughout the Pacific Basin. The City of Palmerston North (population 70,200) is centrally located in the southern half of the North Island, and hosts four tertiary education institutions and several major government and private research institutions. The lifestyle is cosmopolitan but relaxed and friendly.

### CHAIR IN ECOLOGY Department of Ecology

Applications are invited for the newly established Chair in Ecology and Head of the Department of Ecology. The successful candidate should be an ecologist with a strong record in quantitative and theoretical research. They will be expected to initiate a vigorous programme of research in ecology, be an effective administrator and be able to enthuse undergraduate and postgraduate students.

The Department of Ecology has a strong commitment to research, and current programmes span a range of pure and applied ecology including population and conservation biology, community ecology, limnology, biogeography, systematics of plants and animals, entomology, plant-animal interactions and behavioural ecology. The Department plans to significantly strengthen and expand its activities in these areas.

There is a Chair in Zoology plus 13 other academic staff and 11 general staff in the Department, teaching in 19 undergraduate courses, and supervising 30 graduate students in Ecology, Zoology and Environmental Sciences. Teaching is in both internal and extramural modes.

Enquiries of an academic nature may be made to Dr. Edward Minot, Department of Ecology, telephone (64) 6 350-5315, facsimile (64) 6 350-5623, Internet email [ecology@massey.ac.nz](mailto:ecology@massey.ac.nz).

The University reserves the right not to make an appointment or to appoint by invitation. Reference number Sc 73/93 must be quoted.

Closing date: 30 September 1993.

### CHAIR IN PLANT BIOLOGY School of Biological Sciences Department of Plant Biology and Biotechnology

Applications are invited from suitably qualified persons for the newly established position of Chair of Plant Biology and Head of Department of Plant Biology and Biotechnology in the School of Biological Sciences at Massey University, Palmerston North, New Zealand. The successful applicant will be required to take full administrative responsibility for the Department and to lead its teaching and research activities.

The Department has teaching responsibilities at undergraduate and postgraduate levels for general botany, plant physiology, plant biotechnology and cytogenetics for both the BSc degree in the Faculty of Science and for degrees in applied plant science in the Faculty of Agricultural and Horticultural Science. Teaching at undergraduate level is in both the internal and extramural mode.

Major areas of research in this Department are the regulation of plant development, including molecular and physiological aspects of flower and seed development and germination, and the transfer and control of cytokinin genes; chromosome structure; pollen aeroallergens and allergy; mathematical analysis of DNA sequence data, with applications to questions of phylogeny and biogeography; and the flora of New Zealand. Within the University the Department has close working links with Horticultural and Agricultural Plant Science, the Seed Technology Centre, the Molecular Genetics Unit and the Department of Ecology. There is high potential also for collaborative research with neighbouring Government Research Institutes in the areas of Horticultural Products, Agricultural Plant Research, Crop and Food Research and Forest Research, particularly in the area of plant biotechnology.

Informal enquiries may be addressed to Professor R G Thomas, Department of Plant Biology, telephone (64) 6 350-5051, facsimile (64) 6 350-5623 or e-mail: [J.L.McDonald@massey.ac.nz](mailto:J.L.McDonald@massey.ac.nz).

The University reserves the right not to make an appointment or to appoint by invitation. Reference number Sc 74/93 must be quoted.

Closing date: 30 September 1993.

**An information package including Conditions of Appointment is obtainable by telephoning extension 7318.**

**Applications, including a full curriculum vitae and the names, addresses and fax numbers of three referees should be sent to Mrs V B Bretherton, Personnel Section before the closing date specified.**

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Palmerston North, New Zealand  
Telephone (64) 6 356-9099 • Fax (64) 6 350-5615



**University of Vienna,  
Medical Faculty  
Professor of Biochemistry**

Applications are invited for the position of a Full Professor at the Institute of Biochemistry of the Medical Faculty of Vienna.

Candidates should be scientists of international reputation in any medically relevant area of Biochemistry. They should also have experience in teaching Biochemistry. Women scientists are particularly encouraged to apply.

The successful candidate is expected to set up an active research group, to organize and to participate in the teaching of Biochemistry to medical students, and to seek cooperation with clinical research groups.

The Institute of Biochemistry is part of the recently completed Vienna Biocenter. This new venture of the University of Vienna houses five University Institutes active in the fields of Biochemistry, Molecular Biology, Cell Biology, Genetics and Microbiology. The Vienna Biocenter provides a stimulating research environment and excellent support facilities. The Institute of Biochemistry is well equipped and offers sufficient space.

Applicants should submit a curriculum vitae, a list of publications, reprints of ten key publications and a description of teaching activities and future research plans. Applications should be sent before October 31, 1993 to the Dekanat der Medizinischen Fakultät der Universität Wien, Dr. Karl Luegerring 1, A-1010 Wien, Austria.

**UNIVERSITÄT WIEN**

**THE LADY DAVIS FELLOWSHIP TRUST  
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THE TECHNION-ISRAEL INSTITUTE OF  
TECHNOLOGY, HAIFA**

Graduate and Post-Doctoral Fellows are selected on the basis of demonstrated excellence in their studies and promise of distinction in their chosen fields of specialization.

Graduate Fellowships at Hebrew University are only intended for students enrolled in a Doctoral program abroad who wish to study or use library facilities here. At Technion, Fellowships are awarded at Master's and Doctoral levels.

Post-Doctoral applicants to The Hebrew University may apply not later than 3 years after completion of their Doctoral dissertation.

The Fellowships are tenable for one academic year and may be extended for another year. The grant covers travel, tuition fees and reasonable living expenses.

Visiting Professorships are intended for candidates with the rank of Full or Associate Professor at their own institution. They are tenable from one semester to a full academic year. The grant includes a professorial salary and travel. Deadline: November 30, 1993.

Requests from applicants (including Israelis), indicating category of Fellowship, should be sent to: P.O. Box 1255, JERUSALEM 91904, ISRAEL. TEL/FAX 972-2-663848.

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As a leading player in our Physical and Analytical Chemistry Research and Development area, you must have a PhD in Biochemistry or Chemistry, with at least 5 years of progressively responsible industrial experience, to include a minimum of two years in a supervisory capacity. Direct laboratory experience with protein chromatography and electrophoresis, a background in pharmaceutical dosage form analysis and knowledge of GMPs are required.

We offer a competitive compensation package and an environment charged with the energy of success. For confidential consideration, please send your resume/cv with salary requirements to: Ms. Ellen Yaffe, Human Resources, Dept. PH93-20, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, New Jersey 07033. We are an equal opportunity employer.

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**Schering-Plough  
Research Institute**

**Research Scientist  
Nucleic Acid Biochemistry**

Molecular Tool, Inc. is a biotechnology company located in Baltimore, Maryland committed to the development and commercialization of highly integrated, DNA-based systems for the analysis of complex genomes and genetic loci. Together with a key industry partner, Molecular Tool has embarked on a significant research and product development program for near-term implementation of a large-scale DNA analysis system.

A position is open for a creative, motivated research scientist to join a multi-disciplinary team that is shaping the future of DNA analysis technology. The successful candidate will be responsible for developing new biochemical approaches to DNA analysis. Candidates with experience in the following areas are encouraged to apply:

- ◆ **Enzymology:** Enzyme biochemistry with specific emphasis on nucleic acid enzymology and solid phase enzymology.
- ◆ **Nucleic Acid Biochemistry:** with specific emphasis on nucleic acid hybridization and physical chemistry.
- ◆ **Assay Development:** Product development in the area of nucleic acid or immunological assays.

Situated on a campus of the Johns Hopkins University School of Medicine, Molecular Tool, Inc. offers a stimulating scientific environment, competitive salaries, and incentive program and medical insurance benefits. Interested candidates should send resume together with the names of three professional references to **Ms. Stacey Hasener, Molecular Tool, Inc., Alpha Center, Hopkins Bayview Research Campus, 5210 Eastern Ave., Baltimore, MD 21224. EOE.**

**Molecular Tool, Inc.**

## Assistant Professor Department of Molecular Genetics and Cell Biology The University of Chicago

The Department of Molecular Genetics and Cell Biology at the University of Chicago invites applications for a tenure track position at the Assistant Professor level in the areas of Cell and Developmental Biology. We are especially interested in individuals who are working on mammalian development, retrovirology, plant biology, molecular motors and cell cycle regulation, and human genetics. However, we will consider outstanding applicants who have a strong potential for imaginative research in the broad areas encompassing the Department's name. Successful candidates will receive newly renovated laboratory space, ample start-up funds, and join an interactive Department with an active program of graduate education. The Department is part of a Division which includes the School of Medicine and which is a part of the University of Chicago campus.

By November 1, applicants should send curriculum vitae, reprints, statement of research experience and proposed program, and names of three references to:

**Dr. Anthony Mahowald, Chairperson**  
Department of Molecular Genetics and Cell Biology  
The University of Chicago  
920 E. 58th Street  
Chicago, IL 60637



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OF CHICAGO

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## DEPUTY DIRECTOR

National Center for Research Resources  
National Institutes of Health

The National Center for Research Resources (NCRR) is seeking applicants for the position of Deputy Director, National Center for Research Resources. This position is located in Bethesda, Maryland, and is a permanent full-time position with a salary range of \$92,900 to \$115,700 per annum commensurate with qualifications. Physicians may be eligible for Physician Comparability Allowance ranging from \$5,000 to \$20,000 per year.

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

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

A one-year probationary period must be served by the individual selected if not currently or previously in the Senior Executive Service.

The Deputy Director, NCRR is responsible for providing leadership and development of intra- and inter-institutional programs of shared critical research technologies and resources. He/She will serve as Executive Secretary of the National Advisory Research Resources Council and provide leadership in the NCRR Committee Management function, manage the day-to-day operation of NCRR's extramural program, the Office of Review, the Office of Grants and Contract Management, and provide leadership and guidance to the Program Directors. Applicants for this Senior Executive Service position must have a Doctor of Medicine or Ph.D. in one of the health sciences (or equivalent combination of experience and training). Send applications to: **Ms. Pathenia Wiggins, National Institutes of Health, National Center for Research Resources (NCRR), 9000 Rockville Pike, Building 31, Room 3B40, Bethesda, Maryland 20892.** For application forms and a copy of the requirements, contact Ms. Wiggins at NCRR on (301) 496-1524. **Deadline for applications is September 7, 1993.**

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

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## ENZYMOLOGIST

Bristol-Myers Squibb Biochem Division in Syracuse, New York has an opening for an Enzymologist to study the application of enzymes for the manufacture of pharmaceuticals. You will source and screen enzymes from animals, plants and microorganisms and purify, if necessary, to determine if their properties are suitable. Also, you will develop enzyme processes for the preparation of intermediates to final products associated with the manufacture of pharmaceuticals.

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We offer an excellent starting salary, comprehensive benefits and a working environment conducive to professional growth. For confidential consideration, forward your resume with salary requirements to: **Manager Human Resources, Position BC-045-93, BRISTOL-MYERS SQUIBB COMPANY, P.O. Box 4755, Syracuse, NY 13221-4755.** Equal Opportunity Employer, M/F/D/V.



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## BIOTECH JOB FAIR

## POSITIONS OPEN

### POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL

Two positions available in research group investigating pathogenesis of group B streptococcal infection: (1) to purify and characterize enzyme proteins involved in capsular polysaccharide biosynthesis; (2) to study interaction of complement proteins with bacterial antigens. Send curriculum vitae and telephone numbers of 3 references to: **Dr. Michael R. Wessels, Channing Laboratory, Brigham and Women's Hospital, 180 Longwood Avenue, Boston, MA 02115. Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

### POSTDOCTORAL RESEARCHER

Postdoctoral position (NIH-funded for up to 4 years) available December 1, 1993, to study the electrophysiology of pancreatic islet cells. Research will employ patch clamping, optical measurements of cell calcium and theoretical modeling. Experience in cellular electrophysiology is desirable. Send curriculum vitae, statement of research background and interests and the names of 3 references by November 15, 1993, to: **Dr. L. S. Satin, Department of Pharmacology and Toxicology, Box 524, Medical College of Virginia, Richmond, VA 23298. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.**

**POSTDOCTORAL POSITIONS** (2 to 5 years) are available at the National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Public Health Service, to study the molecular mechanism of muscle contraction. Positions involve training in advanced techniques of physiology and biochemistry to explore how modification of the myosin molecule affects its interaction with actin. Salary is \$25,000 to \$42,000 per year. Send curriculum vitae and names of three references to: **Dr. Mark Schoenberg, NIAMS, NIH, Building 6, Room 108, Bethesda, MD 20892. An Equal Opportunity Employer.**

Two **POSTDOCTORAL POSITIONS** are available immediately for one year to complete ongoing projects. One study involves the further characterization of cis and trans elements involved in the transcriptional regulation of endothelial cell-specific expression of von Willebrand factor (vWF). Techniques involved include subcloning, transfection, and RNase protection. The other study is on the behavior of wild type and mutant vWF protein in a rat model. Techniques involved include non-skilled handling of rats, metabolic labeling, and protein gel electrophoresis. Qualified applicants able to begin by November 1993 should send curriculum vitae to: **Dr. Dennis Lynch, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-4381. Email: dennis\_lynch@dfci.harvard.edu.**

**POSTDOCTORAL POSITION** in Molecular Neurobiology at Massachusetts General Hospital/Harvard Medical School for studies investigating the anatomical organization and molecular basis of regulation of basal ganglia neurotransmitter receptors. Research is part of a multidisciplinary approach using cloned receptor cDNAs. A major area of focus is interaction between dopamine and adenosine receptors. Background in molecular biology, neuroanatomy or pharmacology is desired. Send curriculum vitae and names of three references to: **Dr. J. Stephen Fink, Molecular Neurobiology Lab, Department of Neurology, Massachusetts General Hospital, Boston, MA 02114.**

**POSTDOCTORAL POSITIONS** at the Savannah River Technology Center in Aiken, South Carolina, are available to investigate projects on subsurface microbial ecology, bioremediation, environmental biotechnology, and environmental monitoring. Emphasis will be placed on developing and applying new technologies for characterization of microorganisms in subsurface sediments and ground water and their response to environmental perturbations. Experience in microbial ecology, molecular biology, bioremediation or environmental microbiology is required. Degree within last 3 years required as is U.S. citizenship. Contact: **Postgraduate Research Program/SRTC, Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117; Telephone: (615) 576-3456.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN IMMUNOLOGY

To study mechanisms of induction and maintenance of tolerance in T lymphocytes. Focus on molecular events responsible for clonal anergy in naive and cloned T cells. Recent Ph.D. in Molecular Immunology or Biochemistry preferred. Please send curriculum vitae and names of three references to: **Dr. Helen Quill, University of Pennsylvania School of Medicine, Department of Pathology, Philadelphia, PA 19104-6082. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITIONS** available immediately. Experience in biochemical and molecular biological techniques to work on glycoprotein hormones and membrane receptors. Experience in protein and/or carbohydrate techniques desirable. Send curriculum vitae to: **Dr. O. P. Bahl, Department of Biological Sciences, State University of New York at Buffalo, 347 Cooke Hall, Buffalo, NY 14260. SUNY is an Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION IN T-CELL IMMUNOLOGY**—Applications are invited for a postdoctoral position focusing on T-cell development and T-cell signal transduction. The successful applicant will be involved in studying mouse models in which components of the T-cell signal transduction machinery have been disrupted by gene targeting. Candidates should have a background in molecular biology and/or cellular immunology as well as experience with tissue culture. Applications including curriculum vitae, list of publications, summary of current research efforts and names and addresses of three references should be sent to: **Dr. Dietmar Kappes, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. For further information, please contact Dr. Kappes at 215-728-5374 (FAX: 215-728-2412). Equal Opportunity Employer.**

### 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.**

**ECOLOGICAL ECONOMIC FELLOWSHIPS**—The Maryland International Institute for Ecological Economics (MIIEE) announces the availability of research fellowships for graduate research in ecological economics. Research areas may include: sustainability issues, resource valuation, ecological/economic modeling, and institutions for sustainable governance. Students must be enrolled in a related graduate degree program at UMS as well as a graduate certificate program in Ecological Economics. Deadlines: Spring 1994: **October 1, 1993**; Fall 1994: **June 1, 1994**. For information contact: **Dean Button, MIIEE, Box 38, Solomons, MD 20688. Telephone: (410) 326-7336, FAX: (410) 326-7354; Internet: Button@cbl.umd.edu.**

### FELLOWSHIP IN CARDIOVASCULAR BIOLOGY

**POSTDOCTORAL POSITIONS:** available immediately to continue studies on the development of ribozyme and antisense technologies for inactivation of cardiovascularly relevant genes. Applicants should hold a doctoral degree and have expertise in molecular biology, and, preferably, in working with mRNA. Applicants should be prepared to join my current laboratory in the United States for 3 to 4 months before moving to a new institute in Sydney, Australia. Send résumé and names of three references to: **Doctor Robert M. Graham, Chairman, Department of Cardiovascular Biology, Cleveland Clinic Foundation/FF30, 9500 Euclid Avenue, Cleveland, OH 44195.**

## POSITIONS OPEN

### POSTDOCTORAL INTRAMURAL RESEARCH TRAINING AWARD (IRTA) FELLOWSHIP

Neuropsychologist to join research team using positron emission tomography (PET) in studies of human drug abuse. Active collaboration with the nearby Johns Hopkins Medical Institutions. Fellowship requires Ph.D. degree, knowledge of neuropsychological testing and analysis. Would participate in developing research protocols and in supervising and interpreting collection of psychometric data. Salary commensurate with experience. Position is a training opportunity for individuals with up to, but not exceeding, 5 years of research experience. Send curriculum vitae, statement of experience, and names of 3 references to: **Edythe D. London, Ph.D., Chief, Neuroimaging & Drug Action Section, NIDA, P.O. Box 5180, Baltimore, MD 21224. The NIDA/Addiction Research Center is an Equal Opportunity Employer.**

**POSTDOCTORAL RESEARCH ASSOCIATE** available from September 1, 1993, to purify and characterize the pea chloroplast protein phosphatase, an enzyme located in the thylakoid membrane and playing a critical role in dephosphorylation of thylakoid proteins. Should have demonstrated skills in protein purification, FPLC, HPLC and other instrumentation to analyze proteins and peptides. Thorough knowledge of radioactive isotope use and disposal advantageous. Will develop purification protocols and will participate in ensuing molecular biological aspects of the project. A two-year position, review of applications will begin September 15, 1993, with a negotiable starting date preferably before October 1. Send curriculum vitae, reprints and at least two letters of reference or requests for further information to: **Dr. John P. Markwell, Department of Biochemistry, University of Nebraska-Lincoln, Lincoln, NE 68583-0718, Telephone: 402/472-2924; Email: markwell@unlinfo.unl.edu. UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans With Disabilities Act; contact Dr. Markwell for more information.**

### RESEARCH ASSOCIATE POSITIONS

Positions available within broad-based research program involving application of biochemistry, electrophysiology, neuroanatomy, and molecular biology to neuronal systems, emphasizing catecholamines and basal ganglia function. Projects include: tyrosine hydroxylase gene expression, responses to stress, ultrastructural and electrophysiological characterization of neurons and receptors, etiology of neurodegeneration, recovery of function, and gene transfer as therapy. *In vivo* and *in vitro* preparations are used. Investigators include: **Drs. Joseph Glorioso, Anthony Grace, Barry Kaplan, David Lewis, Adrian Michael, Robert Moore, Susan Sesack, Thomas Sherman, Alan Sved, and Michael Zigmond.** Fellows work in one or more projects, learning a variety of methodological approaches. Stipends range from \$22,000 and include health benefits. Interested persons should send statement of interests, curriculum vitae, and letters of reference to: **M. Zigmond, University of Pittsburgh, 570 Crawford Hall, Pittsburgh, PA 15260.**

### RESEARCH ASSOCIATES IN SPACE BIOLOGY

The current **SPACE SHUTTLE Program** has allowed the development of **SPACE BIOLOGY SCIENCE** that offers exceptional opportunities for research. **NASA** is offering **RESEARCH ASSOCIATE AWARDS** at the postdoctoral level for scientists to conduct Space Biology Research in a university laboratory or nongovernmental research institute of their choice that can provide the necessary facilities and research environment. Projects should be in the gravitational and space biology discipline. The awards are: \$20,000 for the first year and \$22,000 for the second year if the renewal proposal is approved. Funding will begin July 1 to October 1, 1994. **U.S. citizens and permanent resident aliens with Ph.D., M.D., D.V.M., D.M.D. or equivalent degrees are eligible to apply. PROPOSALS ARE DUE FEBRUARY 15, 1994.** For information and application booklet contact: **Dr. Gerald Sonnenfeld, Department of Microbiology & Immunology, School of Medicine, University of Louisville, Louisville, KY 40292. Telephone: (502) 588-8317. FAX: (502) 588-7043 or Dr. Thora Halstead, Life and Biomedical Sciences Division, NASA Headquarters, Washington, DC 20546.**



## National Institutes of Health MOLECULAR PHARMACOLOGIST

The Laboratory of Bioorganic Chemistry, National Institute of Diabetes and Digestive and Kidney Diseases, is seeking an outstanding molecular pharmacologist to carry out studies on the molecular mechanisms underlying the function of muscarinic acetylcholine receptors. The candidate must have a Ph.D. in pharmacology and at least five years of postdoctoral training in the molecular pharmacology/biology of this type of neurotransmitter receptors. The candidate should have a thorough background in the study of structure-function relationships of drugs acting through muscarinic acetylcholine and other G protein-coupled receptors. In addition, the applicant must have extensive experience in all molecular biological techniques, particularly site-directed mutagenesis, required to study the function of these receptors at a molecular level. Extensive experience in mammalian tissue culture, radioligand binding assays, and second messenger studies is also essential. In addition to research on muscarinic receptors, the candidate will provide guidance for similar programs on other G protein-coupled receptors. The position has a starting salary of \$45,000, which may be negotiable depending on qualifications. Interested candidates should submit curriculum vitae, relevant reprints, summary of research interests and names of three references by September 30, 1993 to:

**Dr. John W. Daly**  
National Institutes of Health  
Bldg. 8, Room 1A17  
9000 Rockville Pike  
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### Protein Biochemistry

MS or BS degree in Biology, Biochemistry, or related discipline required, coupled with extensive background in purification methods (chromatography, HPLC, electrophoresis). Experience with protein purification from mammalian or insect cell systems and/or biophysical analysis preferred.

Regeneron is situated on an expansive wooded campus in Tarrytown, Westchester County, 25 miles north of New York City. We offer a dynamic, highly collaborative environment conducive to professional growth. Please send detailed resume with salary history, indicating position desired, in confidence to: Human Resources Dept., 777 Old Saw Mill River Road, Tarrytown, N.Y. 10591-6707. EOE m/f.

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## RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

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**PROJECT LEADER, TRANSGENIC PLANT ANALYSIS (JOB #1386-D)** - This position will direct analytical research in a lab of the Transgenic Plant Analysis (TPA) group. The successful candidate will work with other groups to determine the appropriate analyses for various projects and then will manage the analytical work. This position will also be responsible for projects conducted under GLP regulations.

**EDUCATION/EXPERIENCE:** PhD or equivalent in biochemistry, molecular biology or related field plus 2 years of relevant post-doc experience. Experience in biochemical analysis, an understanding of nucleic acid analysis, preferably in transgenic plants and strong communication skills are essential. GLP and supervisory experience are highly desirable. Good working knowledge of computers and statistical analysis are also needed. **CONTACT PERSON:** Dawn Meyer

**SENIOR RESEARCH ASSOCIATE, TRANSGENIC PLANT ANALYSIS (JOB #1386-E)** - Primary responsibilities of this position will be to work with other researchers to determine the appropriate analyses, and to conduct biochemical analyses, such as ELISAs and enzyme assays, on transgenic plants. In addition, this position will work with other TPA members to coordinate nucleic acid analysis and protein assay development. **EDUCATION/EXPERIENCE:** MS degree or equivalent in biochemistry, molecular biology, or related field plus 2 years of relevant research experience are required. Applicants should have experience in biochemical analysis and an understanding of nucleic acid analysis, preferably in transgenic plants, along with experience with computers and statistical analysis. Strong communication skills are essential, and supervisory experience is preferred. **CONTACT PERSON:** Dawn Meyer

**SENIOR RESEARCH ASSOCIATE, VECTOR CONSTRUCTION (JOB #1330/2353-A)** - Positions are available in vector construction. The people in these positions will have responsibility for designing and constructing vectors for use in transgenic plants for several projects. Successful candidates will interact with other researchers working on agronomic traits and/or technology development. **EDUCATION/EXPERIENCE:** MS degree in molecular biology or equivalent experience plus 4 years directly related lab experience in molecular biology, cloning and vector construction; or 6 years directly related experience in addition to BS degree. Direct experience in cloning methods and molecular techniques such as PCR, site-specific mutagenesis and cloning into oligonucleotides, familiarity with computers and good communications skills are required. Familiarity with gene expression requirements in plant systems is also desirable. **CONTACT PERSON:** Jo Ann Jorgensen

**RESEARCH ASSOCIATE, TRANSGENIC PLANT ANALYSIS (JOB #1386-F)** - This position will join a lab which is responsible for analyzing primary transformants and their progeny. The successful candidate will be interacting with several research groups and will participate in the planning as well as implementation of experiments. Required skills include proficiency in Southern blots and PCR with a familiarity with RNA analysis. **EDUCATION/EXPERIENCE:** BS degree in molecular biology, biochemistry or a related field, plus 2 years relevant experience is required. Excellent communication skills are essential. Knowledge of computers and statistical analyses are preferred. **CONTACT PERSON:** Dawn Meyer

**RESEARCH ASSOCIATE, VECTOR CONSTRUCTION AND TESTING (JOB #1364-A)** - The successful candidate will be responsible for the design and construction of vectors for appropriate expression in plant tissue and for the testing of these and other vectors in plant cells. This opening is in the Male Sterility and Canola group. **EDUCATION/EXPERIENCE:** BS degree or equivalent work experience in biological sciences, molecular biology or related field plus 2 years directly related lab experience; or MS degree. Experience in cloning and/or vector construction methods is required. **CONTACT PERSON:** Jo Ann Jorgensen

Applications received by **OCTOBER 1, 1993** will be assured of consideration. However, applications will be considered until the positions are filled.

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## RESEARCH ASSOCIATE IN BEHAVIORAL PHARMACOLOGY

Applications are invited for a Research Associate position in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center. Candidates should have a Ph.D. in Psychology, Pharmacology or Neuroscience with expertise in behavioral and/or neuropharmacology. The successful candidate will be expected to supervise technicians, prepare reports and manuscripts for publication and will have limited administrative responsibilities. Salary will be commensurate with experience. Applicants should send curriculum vitae, a statement of current and future research goals and names of three references to: **William L. Woolverton, Ph.D., Department of Psychiatry and Human Behavior, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216. Equal Opportunity Employer, M/F/D/V.**

## The Program in Genetic Therapy for Human Diseases, Duke University Medical Center, Durham, North Carolina

We are interested in hiring a **RESEARCH ASSOCIATE** or **RESEARCH SCIENTIST** for translational development of gene therapy for human carcinomas and viral infections. Applicants should have expertise in recombinant DNA technology, Southern, Northern and Western analysis, and PCR techniques for the evaluation of DNA and messenger RNA. Tissue culture experience is also required. This individual must be well-suited for interactions with basic scientists and clinicians in developing preclinical studies for the treatment of malignancies and viral infections by gene transfer. Contact: **Dr. H. Kim Lysterly at (919) 681-8350. Duke University is an Equal Opportunity Employer.**

Position available: **RESEARCH AND DEVELOPMENT CHEMIST** in Activated Carbon Production and Sale. The Research and Development Chemist performs research for new product development and existing product problem resolution with regard to surface chemistry applications in the production of lignite, bituminous coal and wood. In addition, this position requires consultation and lab work with our Technical Services Department with regard to product processing and coordination with the National Science Foundation and the International Standards Organization for product certification. The Research and Development Chemist must, as well, communicate on a regular basis with our Research and Development Division in the Netherlands and must meet with our other company chemists and management staff to discuss product development and surface chemistry applications and solutions to current product processing. This position requires one year of prior working experience with and an ability to perform: Thermogravimetric analysis; combustion, carbonization, and activation of carbons; coal petrography; and automated and manual adsorption isotherm apparatus. Ph.D. in Chemistry required, as well as two years of work experience in coal/activated carbon research. The two years of working experience in coal/activated carbon must include work experience in adsorption and surface chemistry, gasification of carbon, coal structure and chemistry, and porosity. Must be able to read and evaluate trace element results and electronmicroscopy data. *Must have proof of legal authority to work in the United States.* Forty hours per week, 5 days, 7:30 a.m. to 4:30 p.m. Salary range \$39,015 to \$45,000 per year. Apply at the Texas Employment Commission, Marshall, Texas, or send résumé to: **Texas Employment Commission, TEC Building, Austin, TX 78778, Job Order #TX6926264. Ad paid by an Equal Opportunity Employer.**

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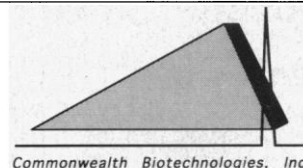
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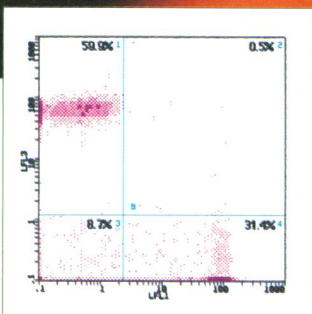
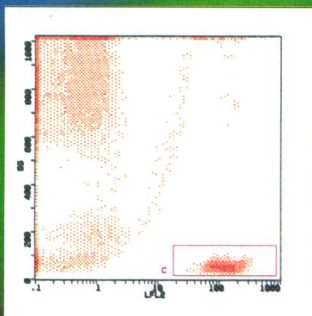
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Bio Medic, by far the leading innovator and designer of electronic lab animal monitoring systems, proudly introduces a third-stage variation... the DAS 4004 Pocket Scanner (DAS 4004 EM with extended memory), the simplest, quickest way to convert from unreliable mechanical identification methods to the fool-proof proven technology of encoded, implantable microchip transponders.

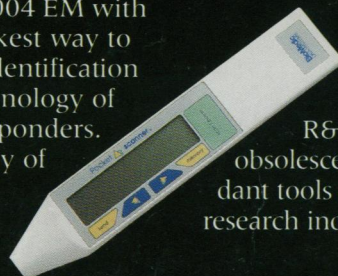
Now you can choose from an array of scanning systems that perfectly match your lab procedure formats. And, a

Bio Medic exclusive, you can continue to use your own ID coding systems because each unit can be easily programmed with your numbers.

The new Pocket Scanner has a replaceable battery, on-board memory and a serial port enabling you to connect to your computer. Bio Medic continues to

R&D new, non-obsolete, non-redundant tools for the animal research industry. Call us.

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