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### POSITIONS OPEN

#### TENURE-TRACK FACULTY POSITION IN GEOSCIENCES

The Department of Environmental Sciences at the University of Virginia invites applications for a tenure-track **ASSISTANT PROFESSORSHIP** in geosciences. The department is an interdisciplinary community of process-oriented scientists representing atmospheric sciences, ecology, geosciences, and hydrology. The department offers B.A., M.S., and Ph.D. degrees. We strongly encourage prospective candidates to review our departmental website: <http://www.evsc.virginia.edu/> prior to applying.

We encourage applications from scientists whose research and teaching strengths and interests show promise for capitalizing on the unique interdisciplinary nature of our department, and to build upon our existing strengths in low-temperature geochemistry and geomorphology in particular. Examples include, but are not limited to, landscape-scale geomorphic processes, field-oriented coastal and estuarine sedimentary processes, geochemical processes in soils and sediment, environmental geochemistry, and geochronology.

The successful candidate will be expected to develop outstanding programs in research and teaching at both the undergraduate and graduate levels and to participate in teaching our undergraduate core course in physical geology. Applicants must show demonstrated excellence in their research and a strong commitment to quality teaching.

Applicants should include one-page statements on their research and teaching interests and experience, a curriculum vitae, and the names and contact information of three references. The application deadline is December 15, 1999. Applications should be sent to:

**James N. Galloway, Professor and Chair**  
Department of Environmental Sciences  
Geosciences Search Committee  
University of Virginia  
Clark Hall  
Charlottesville, VA 22903  
Telephone: 804-924-0561

*We encourage applications from underrepresented groups. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.*

#### FACULTY POSITION REGENERATIVE/ DEVELOPMENTAL BIOLOGY

Department of Biology  
Indiana University-Purdue University Indianapolis

We seek a highly qualified individual working on the developmental and cellular biology of vertebrate regeneration for a tenure-track position at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** beginning August 2000. Possible research areas might include developmental regulation of regeneration; stem cell biology; intercellular signaling; cell/matrix interactions; or tissue engineering. Postdoctoral training is essential. The successful candidate will be expected to establish an externally funded research program and demonstrate a strong commitment to undergraduate and graduate education. Start-up funds will be provided.

Indiana University-Purdue University Indianapolis (IUPUI) encompasses 18 schools including the Indiana University School of Medicine. Research interests in the Department of Biology (website: [www.biology.iupui.edu](http://www.biology.iupui.edu)) in the School of Science include cell, molecular, and developmental biology; ecology; immunology; membrane biochemistry; microbiology; oncology; plant biology; and regeneration. Opportunities for collaborations with other Departments and Schools are available and encouraged.

Applicants should send their curriculum vitae, a statement of research and teaching interests, and three letters of recommendation to: **Chair, Search and Screen Committee, Department of Biology, Indiana University-Purdue University Indianapolis, 723 West Michigan Street, Indianapolis, IN 46202-5132** by November 1, 1999. *IUPUI is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are particularly encouraged to apply.*

### POSITIONS OPEN

#### FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY University of Iowa College of Medicine

The Department of Biochemistry of the University of Iowa seeks highly qualified applicants for one or more tenure-track positions. It is anticipated that these appointments will be made at the **ASSISTANT PROFESSOR** level, although exceptional candidates at any rank will be considered. Salaries are competitive and will depend on qualifications and experience. Support for equipping laboratories and initiating research programs will be excellent. Applicants with research interests in any area of contemporary biochemistry, including cell biology, biophysics, and molecular biology, will be considered. Quality of research, not a specific research area, will be the primary criterion.

All applicants must have a relevant graduate degree (Ph.D. and/or M.D., or equivalent foreign degree), and should have at least two years of productive post-doctoral experience and the potential to initiate and maintain a rigorous research program. The new faculty will also participate in the departmental teaching programs, including the training of graduate students and Postdoctoral Fellows.

Applications should include a complete curriculum vitae and a summary of future research plans. Applicants should ask three scientists familiar with their work to write letters of reference. Consideration of completed applications will begin on October 1, 1999. Applications should be sent to: **John E. Donelson, Head, Department of Biochemistry, College of Medicine, University of Iowa, Iowa City, IA 52242-1109. Telephone: 319-335-7934; FAX: 319-335-9570.**

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

#### ASSISTANT PROFESSOR OF BIOCHEMISTRY OR ANALYTICAL CHEMISTRY Wake Forest University

Applications are invited for a tenure-track Assistant Professor faculty position that augments a small, dynamic Ph.D.-granting department. The desired candidate will have a Ph.D. from any subdiscipline of biochemistry or analytical chemistry, will have a strong commitment to teaching at the undergraduate and graduate levels, and will establish a vigorous, externally supported research program. Collaboration with Biomedical Science Departments at Wake Forest University School of Medicine is possible and encouraged. Deadline for applications is November 1, 1999, and the submitted résumé should include graduate and undergraduate transcripts, three letters of recommendation, a statement of teaching philosophy, and proposals for research. Reply to: **Chair Biochemistry/Analytical Chemistry Search Committee, Department of Chemistry, Wake Forest University, Winston-Salem, NC 27109. WFU is an Equal Opportunity/Affirmative Action Employer.**

The Department of Biochemistry at Baylor College of Medicine (BCM) invites applications for a **TENURE-TRACK FACULTY POSITION** in X-ray crystallography at any rank. This heavily research-oriented department is seeking outstanding scientists who are committed to establishing excellent research activities in an expanding structural and computational biophysics group. The appointed faculty member would have an affiliation with the W. M. Keck Center for Computational Biology, a training-and-research infrastructure shared jointly with neighboring institutions in the Greater Houston Area. Applicants should send a curriculum vitae, a research plan, and three letters of recommendation to: **Professor Wah Chiu, c/o Ms. Mary Jane Perez, Faculty Search Committee, Department of Biochemistry, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030-3498 USA. Telephone: 713-798-6625; e-mail: [mperez@bcm.tmc.edu](mailto:mperez@bcm.tmc.edu); website: <http://www.bcm.tmc.edu/biochem>. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.**

## Modeling of Biological Systems

### An Interdisciplinary Course

October 18 – November 23, 1999

Modeling of Biological Systems (MOBS) is an intensive, multi-disciplinary, residential lecture & laboratory course designed to train biologists and non-biologists to apply and adapt successful modeling approaches in biology to their own research. MOBS is for students in the biological, chemical and physical sciences, mathematics and engineering. The course is organized into thematic cassettes that focus on particular broad areas of biology.

The MOBS curriculum is geared to advanced graduate students and above. Students require at least a working knowledge of calculus, and preferably a facility with differential equations. Successful applicants will receive pre-course assignments to help with their Course activities. The Course represents an innovative approach to education of modeling of biological systems in its thematic organization, modularity of content, interdisciplinary teaming, and multi-year involvement by both students and faculty.

The faculty will introduce students to successful approaches to modeling used to address contemporary biological questions. With faculty tutelage, students will have hands-on opportunity to work with these models, and to learn to apply these approaches to their own scientific questions.

Additional information is available at <http://www.mbl.edu/MOBS/>.

Funding support for the MOBS Course is provided by the Burroughs Wellcome Fund and the National Science Foundation.

**Course Director:** Robert B. Silver, Marine Biological Laboratory

**Faculty:** Robert Eisenberg, Rush University; Judith Herzfeld, Brandeis University; John Hummel, Argonne National Laboratory; Peter Kollman, UCSF; Stephen Leibholz, Chesapeake TechLabs; John Pearson, Los Alamos National Laboratory; Silvina Ponce-Dawson, Univ. of Buenos Aires; Gregory Petsko, Brandeis Univ.; Robert Silver, Marine Biological Laboratory; Merle Wastney, Georgetown Univ.; and others to be announced.

**Application Deadline Extended:** September 30, 1999. Applications will be reviewed as received. Course Fee: \$3,750 (room & board is provided). **Scholarship support is available.**



MARINE  
BIOLOGICAL  
LABORATORY

**For More Information or Application Contact:**  
Admissions Coordinator, Marine Biological Laboratory  
7 MBL Street, Woods Hole, MA 02543  
(508) 289-7401 / email: [admissions@mbl.edu](mailto:admissions@mbl.edu)

*The MBL is an EEO Affirmative Action Institution*

## SYMPOSIUM

### Whitehead Symposium XVII

#### "The Biology of Drug Discovery"

October 24 – 26, 1999  
Kresge Auditorium, MIT

**Speakers include:** Susan Amara, Carolyn Bertozzi, Patrick Brown, Jonathan Ellman, Ronald Evans, Stanley Fields, Judah Folkman, Claire Fraser, Ulrike Heberlein, Ira Herskowitz, Peter Kim, Chaitan Khosla, Eric Lander, John Mekalanos, Stuart Schreiber, Edward Scolnick, Robert Siliciano, Jose Varghese, Inder Verma, Charles Weissman, Jim Wells, Dyann Wirth.

#### Registration

Regular (includes postdocs): \$100  
Student: \$35 (ID required)  
MIT Student: No charge

To obtain a registration form call Whitehead Institute Public Affairs at 617-258-5183, or visit Whitehead Institute's website at [www.wi.mit.edu](http://www.wi.mit.edu) and click on "conferences."

## PRONUCLEAR MICROINJECTIONISTS THE ROCKEFELLER UNIVERSITY

The Rockefeller University is accepting applications for 2 pronuclear microinjectionist positions available immediately. Rockefeller University, a leader in biomedical research, is expanding its transgenic service facility to include an extensive new project using the transgenic model to study gene expression.

Responsibilities include pronuclear microinjection of mouse ova, animal husbandry (hormone injection, mating and weaning of mice), oviduct transfer surgery and extensive recordkeeping. Must have experience in pronuclear microinjection, able to manipulate microscopic materials, have excellent hand-eye coordination, and ease with handling mice.

We offer a competitive salary, excellent benefits, and a beautiful working environment. For immediate consideration, please send current resume, curriculum vitae, names of 3 references and a short record of successful injection results to: **The Rockefeller University, 1230 York Avenue, Box 125, New York, NY 10021; FAX: (212) 327-7079; Email: [hr@rockvax.rockefeller.edu](mailto:hr@rockvax.rockefeller.edu)**

**AA/EEO**



### MAURICE EWING AND J. LAMAR WORZEL CHAIR IN APPLIED GEOPHYSICS

Columbia University invites applications and nominations for the tenured position of Ewing-Worzel Professor of Applied Geophysics. Candidates of international stature are sought to contribute to the educational and research programs in Earth and Environmental Engineering. The EEE program provides unique multidisciplinary opportunities to focus on environmentally conscious extraction and use of Earth's resources, remediation of historic environmental malpractice, and ultimate management of residuals. The program is comprised of environmental engineers, geochemists, mining/mineral engineers, and surface chemists and addresses environmental issues from molecular to global scales.

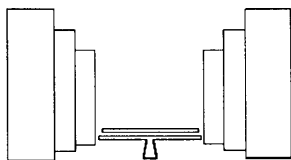
The position is open to individuals who have a broad and strong background in geophysics, environmental geophysics, and related fields, and are interested in establishing an internationally recognized program on environmental applications of geophysics. The successful candidate will already have gained distinction in his/her profession and is expected to interact closely with the Department of Earth and Environmental Sciences and the Lamont-Doherty Earth Observatory.

Applications (a complete vitae, names of three references, a statement of research interests, and e-mail address) or nominations should be sent by November 1, 1999, to Prof. Peter Schlosser, Chair of E-W Search Committee, Columbia University, 918 Mudd, Mail Code 4711, 500 West 120th Street, New York, NY 10027. Or e-mail to [ba110@columbia.edu](mailto:ba110@columbia.edu).

EEE web page: [www.seas.columbia.edu/columbia/departments/krumb](http://www.seas.columbia.edu/columbia/departments/krumb)

**COLUMBIA UNIVERSITY**  
EARTH AND ENVIRONMENTAL ENGINEERING

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## THE SALK INSTITUTE

A **postdoctoral position** is available in neuroscience/neuroendocrinology for conducting work focused on the control exerted by nitric oxide and carbon monoxide on hypothalamic neuronal activity. These studies will rely on tracing methods to identify hypothalamic afferents that contain enzymes responsible for the formation for these gases. Qualifications: recent Ph.D. and excellent knowledge of neuroanatomy and related techniques (including immunocytochemistry, in situ hybridization, identification of neuronal pathways and microinjection techniques). Salary (with benefits) based on NIH scale. Send CV, names of 3 references, and a brief statement of research objective to:

**The Salk Institute for Biological Studies**

Attn: Dr. Catherine Rivier  
10010 N. Torrey Pines Road  
La Jolla, Ca 92037

Crivier@salk.edu

**www.salk.edu**

The Salk Institute is an  
Equal Opportunity Employer

## Postdoctoral Fellowship

A Postdoctoral position is available for someone interested in:

**Recombination Fidelity:** We demonstrated that DNA synthesis associated with recombination has a relatively higher mutation rate (Genetics 140:965). We showed that the translesion polymerase Rev3 is responsible for the majority of the misincorporation events (Genetics 147:1017). We are continuing to identify components that contribute to the fidelity of the recombination process. We are applying a similar approach to the study of the fidelity of retrotransposition.

**HIV-1 Reverse Transcriptase:** We demonstrated that hybrid retrotransposons in which the RT of HIV-1 is substituted for the RT of Ty are able to transpose in yeast (Nature 380:30; PNAS 95:13905). These hybrid elements are sensitive to non nucleoside inhibitors of HIV-1. We are developing these elements as tools in drug discovery and to study basic biology of reverse transcriptases.

**Silencing:** We demonstrated that the efficiency of recombination between homologous sequences in different parts of the genome can be altered by Sir2-mediated silencing. We have initiated a survey of the genome for regions subject to silencing. We developed a retrotransposon carrying a silencer element and showed that it is silenced when inserted in some positions, but active when inserted elsewhere. We will characterize what features control this position effect.

The position is part of the Division of Basic Sciences of the National Cancer Institute and is located at the Frederick Cancer Research and Development Center in Frederick, MD. The National Institutes of Health is an equal opportunity employer and encourages all qualified women and minorities to apply. Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, marital status, physical or mental disability, age, sexual orientation or membership or non-membership in an employee organization.

Interested candidates should submit a CV and the names of three references to:

Jeffrey N. Strathern, PhD  
Genome Regulation and Chromosome Biology Laboratory  
PO Box B, Bldg. 539  
NCI-FCRDC  
Frederick, MD 21702-1201

Your curriculum vitae and names of references also may be faxed to 301-846-6911 or e-mail to strather@ncicrf.gov



## MAYO CLINIC POSTDOCTORAL POSITION

A postdoctoral fellowship position will become available starting December, 1999 in an NIH-grant funded laboratory in the Departments of Pediatrics and Immunology. Research will focus on the mechanism of action of CAML, a protein involved in signal transduction. A major emphasis of the project is to elucidate key steps in development, as well as signaling events that contribute to lymphocyte function. Methods currently in use include protein-interaction studies combined with mouse knockout technology. Salary will be determined by the successful candidate's experience. There is also an attractive benefit package. Mayo Clinic is a non-profit physician led clinical practice integrated with education and research in a unified multi-campus system.

Applications including a curriculum vitae, summary of past accomplishments and names of three references should be sent to:

**Richard J. Bram, MD, PhD**  
5-20 Guggenheim  
Mayo Clinic  
Rochester, MN 55905  
**e-mail: richard.bram@mayo.edu**

*Mayo Foundation is an affirmative action and equal opportunity employer and educator.*

## NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

### **POSTDOCTORAL RESEARCH POSITION**

**Starting Salary Range: \$27,500 to \$30,000**  
**Commensurate with experience/present salary**

Position will be available in the Respiratory Viruses Section of the Laboratory of Infectious Diseases. The research activity involves: (1) the development of live attenuated parainfluenza virus vaccine candidates and their characterization in rodents, in non-human primates, and in humans; (2) the use of new "rescue" systems for these viruses to examine basic questions of viral genetics, molecular virology, viral pathogenesis, and the molecular basis of attenuation; (3) production of new candidate vaccines using site-directed mutagenesis to introduce desired attenuating mutations into viral genomes; and (4) the evaluation of the immunologic determinants of resistance to infection and illness caused by these parainfluenza viruses. This full-time research position offers a unique opportunity to work on investigations that range from basic molecular biology to applied vaccinology, and the project provides excellent training for postdoctoral scientists within five to seven years of receiving their Ph.D. and for M.D.'s at all levels of training who plan a career in research in infectious diseases. The position involves a collaborative research project between Dr. Brian Murphy and Dr. Peter Collins. Salary will be commensurate with experience. Please send curriculum vitae and three references to:

**Dr. Brian R. Murphy**  
Laboratory of Infectious Diseases, NIAID  
Bldg. 7, Room 106  
7 Center Drive, MSC 0720  
Bethesda, MD 20892  
FAX: (301) 496-8312  
E-mail: **bmurphy@niaid.nih.gov**

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# POSTDOCTORAL FELLOW

Applications are invited for a postdoctoral research position in the laboratory of Dr. Razqallah Hakem. The main project will be to study animal models for tumor suppressor and apoptotic genes. Applicants should have a Ph.D. in molecular biology and/or biochemistry with a broad background in mouse genetics and cancer biology. Good written and verbal communication skills, strong organizational and interpersonal talents, and the ability to work independently are also important attributes for this role.

For confidential consideration, please send a complete copy of your curriculum vitae, together with the names and addresses of three referees to: **Dr. Razqallah Hakem, Amgen Institute, 620 University Avenue, Suite 7-706, Toronto, Ontario, Canada, M5G 2C1.**

**AMGEN. INSTITUTE**

Affiliated with Ontario Cancer Institute / University of Toronto



## University of California San Diego Faculty Position in Mammalian Molecular Biology

The Department of Biology at UCSD invites applications for a faculty position in Mammalian Molecular Biology with strong preference for the Assistant Professorial (tenured-track) level. Exceptional candidates pursuing innovative molecular approaches to problems in virology, immunology, mouse genetics, mammalian cell-cycle progression, and cancer biology are encouraged to apply.

Salary will be commensurate with level of appointment and based on the UC salary scale. The successful candidate is expected to develop a vigorous research program, and participate in the undergraduate and graduate teaching curriculum. A Ph.D. degree and several years of productive postdoctoral research are required.

Please submit curriculum vitae, a statement of professional goals and research interests, names of three references and their addresses, email addresses, phone and fax numbers, by November 1, 1999, to **Molecular Biology Search Committee, Department of Biology 0346, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0346.**

Position is contingent on funding becoming available. *UCSD is an equal opportunity/affirmative action employer* with a strong institutional commitment to the achievement of diversity among its faculty and staff.

## FACULTY POSITIONS (NMR) STRUCTURAL BIOLOGY

**SENIOR POSITION (SB99-2).** Applications are invited for a tenure-track senior faculty position, Associate or Professor level, in structural biology. Preference will be given to applicants with expertise in NMR spectroscopy applied to problems of macromolecular structure. The successful candidate must have a record of research and academic productivity commensurate to academic rank and a record of having established and supported from extramural sources an independent research laboratory. The applicant is expected to apply interdisciplinary interest in continuation of research and in the teaching of graduate and undergraduate students in courses adopted by the School of Biological Sciences. New facilities and complementary expertise in crystallography and electron microscopy (see <http://sgi.bls.umkc.edu>) are available as well as competitive start-up financial packages.

**ASSISTANT PROFESSOR (SB1).** The School of Biological Sciences as part of the expansion of its structural biology program, which has been selected for comprehensive development within the school, seeks investigators with outstanding potential in any aspect of molecular or cellular structural biology to complement or expand existing activities in spectroscopy (including a new NMR facility), crystallography or microscopy. (UMKC faculty, as part of the Southeast Regional Collaborative Access Team, can use the Advanced Photon Source at Argonne National Laboratory to conduct research.) Excellent start-up package, competitive salary and state of the art instrumentation available. Successful candidates for this tenure-track position will participate in undergraduate and graduate-level instruction and must have two to three years postdoctoral experience in an appropriate field. In addition, candidates must have received graduate, and preferably undergraduate, instruction in an English-speaking environment (a seven-year residence in such environments will satisfy this requirement).

Evaluation of applications will begin November 1, 1999. Candidates should provide *curriculum vitae*, a brief statement of research interests and the names, addresses, and telephone numbers of four references to:

Search Committee, Position (specify SB99-2 or SB 1)  
Office of the Dean, School of Biological Sciences  
5007 Rockhill Road, University of Missouri-Kansas City  
Kansas City, MO 64110-2499

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**Merck Research Laboratories**, a world leader in biological and pharmaceutical research, currently has an exceptional career opportunity at our **West Point, PA location (only 25 miles NW of Philadelphia).**

## Ph.D RESEARCH SCIENTIST Proteomics

Working as a scientist in **Proteomics**, in our Biological Chemistry Department, you will be involved in establishing a state-of-the-art proteomics laboratory for the characterization of biomolecules. Among your duties, you will be responsible for the identification and characterization of proteins/peptides by using electrospray, nanospray, LC/MS/MS and MALDI techniques. In addition, you will work closely with a team of scientists involved in various drug discovery programs here at Merck.

To qualify, you must have a Ph.D or equivalent in mass spectrometry, protein chemistry, biochemistry, analytical chemistry or equivalent with 1-2 years' experience in the characterization of proteins and other biomolecules by mass spectrometry. Excellent communication skills and the ability to work well in a team-oriented environment are also required.

We offer excellent salaries and benefits programs at our modern research facilities. To be considered, please send your resume with a cover letter and the names of 3 references to: **Merck Research Laboratories, Ad# MS/B-197, Department of Biological Chemistry, Mail Stop WP26-104, P.O. Box 4, West Point, PA 19486.** Only candidates considered for interviews will receive responses. We are an Equal Opportunity Employer, M/F/D/V.





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### PHARMACOKINETICS DYNAMICS & METABOLISM

**Senior Associate Scientist/Scientist**  
**Job Code: RJB-99620SC**

The qualified individual will be responsible for conducting *in vitro* drug metabolism-related experiments to support drug development. This includes *in vitro* incubations (microsomes and hepatocytes), cross species metabolic profiling, biochemical assays for drug metabolizing enzymes and drug-drug interactions.

To qualify, you must have a BS/MS degree in an applicable biological or chemical discipline with 5-10 years of relevant experience, or a Ph.D. with 0-1 year relevant experience. A background in drug metabolism and HPLC methods of development is essential. Must have excellent written and verbal communication skills. Experience with *in vivo* mass balance/metabolic profiling is desirable. Some tissue culture experience would be a plus.

### Postdoctoral Fellow

**Job Code: CJM-995973SC**

The successful candidate will investigate cell culture systems that may serve as alternatives to the widely accepted Caco-2 cell monolayer as a model for human intestinal permeability. The candidate will establish optimized cell culture conditions for the alternative cell lines in our lab and examine permeability correlations with Caco-2 cells and with fraction absorbed in humans. You will investigate the presence of marker systems for carrier-mediated transport, as well as examine differences in permeability as related to paracellular and carrier-mediated transport. Additionally, you will investigate the expression and activity of efflux systems *in vitro* and relevance to *in vivo*.

To qualify, you must have a Ph.D. in Pharmaceutics, Pharmaceutical Chemistry, Physiology, Biochemistry or related discipline, and a demonstrated publication record. Cell culture experience is highly desirable. Requires excellent oral and written communication skills.

### MOLECULAR BIOLOGY

**Associate Scientist/Senior Associate Scientist**  
**Job Code: RJB-99628SC**

The ideal candidate will have a BS/MS degree in Molecular Biology, Immunology, Virology, or Cell Biology, 2-5 years of relevant research

experience, and a background in the chemokine/HIV-1 field. Identification/validation of novel drug targets in the HIV-1 field is the ultimate goal. Must have experience in molecular biology techniques (DNA/RNA hybridization, RNase protection, RT-PCR, cDNA library construction and screening, western blot analysis), mammalian cell culture (including transfection of mammalian cells), and flow cytometry. Experience in DNA/RNA profiling would be advantageous. Excellent organizational, computer and oral/written communication skills are also required.

### INFLAMMATION THERAPEUTICS

**Postdoctoral Research Fellow**  
**Job Code: CJM-996045SC**

The ideal candidate will study the role of IL-1-induced MAP-Kinases in inflammation and connective tissue destruction associated with osteo- and rheumatoid arthritis. This position requires a Ph.D. and a minimum of 1 year experience as a Postdoctoral Research Fellow. Experience in cellular and molecular biology of cartilage/bone is desirable.

We offer competitive salaries, outstanding benefits, and an environment conducive to professional growth. We have the above opportunities in **ANN ARBOR, MI**. For consideration, please forward your resume with **Job Code**, to: **Parke-Davis, Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: 310-337-3367, E-mail: [humanresources.resume@wl.com](mailto:humanresources.resume@wl.com)**

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### Faculty Positions in Neurobiology at MCP-Hahnemann University

As part of a major university-wide neuroscience initiative the Department of Neurobiology and Anatomy in the School of Medicine is inviting applications for 6 tenure-track faculty positions. Successful candidates will be expected to establish and maintain externally funded research programs and contribute to the graduate and medical educational programs of the department. Candidates from all areas of neuroscience will be considered but the initial emphasis will be on individuals working in the field of spinal cord injury or with expertise in either molecular neurobiology, cellular or integrative neurophysiology, functional neuroanatomy, or developmental neurobiology. The academic rank is open, from assistant professor to full professor, with competitive start-up packages commensurate with experience.

The goal of this recruiting effort is to identify individuals whose interests complement those of existing ([www.mcphu.edu](http://www.mcphu.edu)) and new faculty and, by so doing, continue the tradition of highly interactive research activities within the department. Faculty in the department will also have the opportunity to collaborate with a broad-based and expanding community of clinical and basic neuroscientists throughout the School of Medicine.

Applicants should submit a curriculum vitae, statement of research interests and names of three references to:

Barry D. Waterhouse, Ph.D.  
Chair, Faculty Search Committee  
Department of Neurobiology and Anatomy  
MCP-Hahnemann University  
3200 Henry Avenue  
Philadelphia, PA 19129

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**Dendreon Corporation** is a privately held biotechnology company utilizing a novel therapy based on the use of dendritic cells. We've developed an innovative platform technology that allows the isolation and activation of dendritic cells from blood and the use of these cells to stimulate immune responses against both virally infected tissue and cancer cells. We are currently seeking a qualified Scientist and Clinical Immunologist who will be involved in programs associated with developing approaches for dendritic cell immunotherapy of cancer.

#### SCIENTIST

We are seeking a creative & experienced Scientist who will design and evaluate novel protein vaccines for use in cancer immunotherapy. Knowledge of gene design & expression, protein purification, & characterization required. Knowledge of Immunology and Virology vaccine designs a plus. Qualified candidates should possess a Ph.D. in Biochemistry or related discipline with at least 3 years postdoctoral experience.

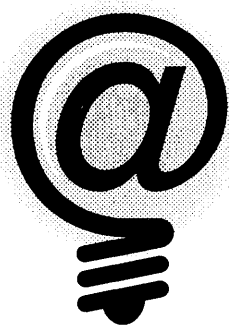
#### IMMUNOLOGIST

We are seeking an experienced Immunologist who will lead our clinical immunology team. You will plan, conduct, and supervise research in the field of human immunology. You will be evaluating immune responses in cancer patients who have been treated with dendritic cell immunotherapy. If you have a scientific track record in studying cellular immunology and/or cancer biology, we'd like to see your curriculum vitae. Qualified candidates should possess a Ph.D. in Cellular Immunology or related discipline with a least 6 years of postdoctoral experience. Previous supervisory experience necessary.

We offer a competitive salary and benefits package, including stock options. For consideration, please send your c.v. to Cheryl Fromm, Human Resources Dept., 3005 First Avenue, Seattle, WA 98121. Fax: 206-256-0571

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## GRADUATE PROGRAM



### Cell and Molecular Biology Graduate Group

The Graduate Group in CELL AND MOLECULAR BIOLOGY trains students in six research areas for the Ph.D. degree. The curriculum is designed to provide students with superior graduate-level education in modern cell and molecular biology as preparation for careers in biomedical research. First-year graduate students participate in a core curriculum of graduate courses and seminars designed to provide a strong foundation of knowledge in the fields of molecular biology, cell biology, and biochemistry. In addition, students initiate a series of laboratory rotations designed to provide experience in modern laboratory research methods. Second-year graduate students choose a program to pursue more specialized study in one of the six research areas: (1) CELL BIOLOGY AND PHYSIOLOGY, (2) CELL GROWTH AND CANCER, (3) DEVELOPMENTAL BIOLOGY, (4) GENE THERAPY, (5) GENETICS AND GENE REGULATION, and (6) MICROBIOLOGY AND VIROLOGY. There is sufficient flexibility in the program to allow it to be tailored to the specific background and research interests of each candidate. Most students are able to defend their thesis research after a total of five years of study (two years of course work and three years of doctoral research). All students receive full funding.

#### Contact information:

Cell and Molecular Biology Graduate Group, University of Pennsylvania, 237 Anatomy-Chemistry Building, 36th Street & Hamilton Walk, Philadelphia, PA 19104-6058; e-mail [camb@mail.med.upenn.edu](mailto:camb@mail.med.upenn.edu).

### UNIVERSITY OF CALIFORNIA, DAVIS SCHOOL OF MEDICINE

#### FACULTY and POSTDOCTORAL FELLOWS

#### TRANSGENIC APPROACHES TO SKELETAL MORPHOGENESIS AND REGENERATION

The University of California, Davis, School of Medicine has established a Center for Tissue Regeneration and Repair under the leadership of Dr. A. Hari Reddi. We invite applications for a tenure-track Assistant, tenured Associate or Full Professorship. Rank will be commensurate with qualification of selected candidate. We invite applications and nominations from candidates with major interests in transgenic approaches including homologous recombination and conditional knockouts, with published expertise in BMPs and other morphogens or cell cycle control and transcription factors. Must have a Ph.D. and/or M.D. with postdoctoral experience. Participation in postgraduate teaching and fellowship training is required. Joint appointments with basic science departments in the School of Medicine will be encouraged. Postdoctoral fellowships in the areas of cell cycle control, focal adhesions, cytoskeleton, signal transduction and apoptosis are also available.

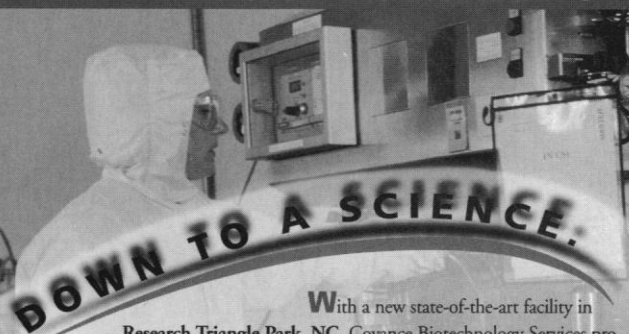
The recently established mouse biology program and Jackson Laboratory facilities at UC Davis will be a strong resource. The newly established Shriners Hospital research program in Sacramento assures an optimal critical mass for tissue regeneration and repair.

The Davis/Sacramento area is adjacent to the Sierra Nevada Mountains, Napa Valley, and the Northern California Coast. The environment is conducive for contemplation of research ideas and execution of research goals.

Send a letter of interest, a curriculum vitae, a two-page statement of research accomplishments and future goals, and names, addresses, and telephone numbers of five references to: A. Hari Reddi, Ph.D., Center for Tissue Regeneration and Repair, Research Facility, Room 2000, 4635 Second Avenue, Sacramento, CA 95817.

This position is open until filled but no later than March 31, 2000; to assure full consideration, applications must be received by October 31, 1999. The University of California is an Affirmative Action/Equal Opportunity employer.

## WE'VE GOT CAREERS



With a new state-of-the-art facility in Research Triangle Park, NC, Covance Biotechnology Services provides the biotechnology and pharmaceutical industry with world-class process development and cGMP manufacturing for recombinant products. Join us as we put our clients' products and your career onto the fast-track. We are currently recruiting for the following key positions:

### ■ SCIENTIST, FERMENTATION/CELL CULTURE DEVELOPMENT

In this position, you will be responsible for the development of cell culture processes (mammalian, hybridoma and insect cell) for the manufacture of biopharmaceuticals. A Ph.D. (or equivalent experience) in Cell Biology, Microbiology, or Biochemical Engineering and 5+ years of experience. Knowledge of relevant analytical techniques and a good understanding of cell biology and cell line development are also essential.

### ■ SCIENTIST, PURIFICATION DEVELOPMENT (MULTIPLE OPPORTUNITIES)

In this position, you will be responsible for the development of processes for the manufacturing of biopharmaceuticals and the transfer of these processes to Covance cGMP manufacturing facility. Position requires a Ph.D. (or equivalent experience) in Biochemistry or Protein Chemistry; 5+ years of experience in protein purification and protein chemistry, as well as knowledge in the areas of chromatographic methods, centrifugation, and ultrafiltration techniques. Relevant cGMP experience will be considered a significant plus.

### ■ SCIENTIST, FORMULATION DEVELOPMENT

In this position, you will be responsible for the development of formulations and formulation processes for protein therapeutics. Should be knowledgeable in the field of biophysical chemistry and in techniques to achieve protein formulations with long term stability. Should have experience in developing formulations for lyophilization as well as lyophilization cycle development. Analytical experience should include methods for quantitation of protein degradation and characterization of degradation products. A Ph.D. (or equivalent experience) in Biochemistry or Protein Chemistry and 5+ years of relevant experience required. Relevant cGMP experience a significant plus.

### ■ SCIENTIST, PROTEIN CHEMISTRY

The Analytical Process Development group is seeking a protein chemist with 5+ years of experience in characterizing recombinant proteins. The position requires significant experience in developing assays to assess identity, purity and strength of drug substance as well as identifying and quantifying process-derived impurities. Effective communication skills and familiarity with cGMP policies and regulatory testing required. Experience in protein formulations or vaccine development preferred.

Please send resume to: Covance Biotechnology Services, Director—Human Resources, 3000 Weston Parkway, Cary, NC 27513; FAX: (919) 678-0555; E-mail: [biotechcareers@covancebio.com](mailto:biotechcareers@covancebio.com). Only those selected for further consideration will be contacted. PRINCIPALS ONLY. Covance is an equal opportunity employer.

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## TOXICOLOGIST

Toxicology & Pharmacology Branch, DTP, DCTD  
National Cancer Institute, National Institutes of Health  
GS-0405/415/1320-13; Vacancy Announcement#: NCI-99-2328

The Toxicology & Pharmacology Branch (T&PB) of the Development Therapeutics Program is seeking candidates for the position of Staff Toxicologist. The T&PB plans and directs a collaborative, contract-supported program to conduct preclinical pharmacology and toxicology studies for anti-cancer and drugs. Candidates must have earned the Ph.D. degree in Toxicology, Pharmacology, Biochemistry, Chemistry or a closely related discipline; possess a working knowledge of modern toxicological/pharmacological methods of drug evaluation; and have at least 2 years of post doctoral experience in evaluating antitumor agents.

The Staff Toxicologist will be responsible for: (1) Planning, implementing, and analyzing contractor performed studies leading to the characterization of toxic effects of new anti-cancer drugs. (2) Reviewing biological, biochemical, and toxicological data prior to designing studies leading to IND submission to the FDA. (3) Summarizing all toxicology data and making recommendations for starting doses, dose escalation schemes and treatment schedules for clinical trial.

To apply for this position, please address the following rating criteria: (1) knowledge of toxicology and pharmacology study design; (2) skill in oral communication; and (3) skill in written communication.

Please submit your application/resume to: NIH/National Cancer Institute Human Resource Management & Consulting Branch, EPS, Suite 550 6120 Executive Blvd., MSC 7209, Rockville, MD 20852-7209.

For further information regarding application procedures, you may call the staffing office at 301-402-2789.

The base salary for this position ranges from \$58,027 to \$75,433. Benefits include health and life insurance options, retirement, paid holidays, and vacation leave.

Applications must be postmarked no later than 10/04/99. To be considered applicants must be U.S. citizens.

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## National Institute of Diabetes and Digestive and Kidney Diseases

### Postdoctoral Positions:

#### Genomics of Erythropoiesis

Jeffery L. Miller, MD ([jm7f@nih.gov](mailto:jm7f@nih.gov))

Several aspects of erythropoiesis are being studied. Emphasis is on the discovery, characterization, and manipulation of genes involved in diseases affecting red cells. Projects involve bench and informatic studies of individual genes versus custom arrays.

More information at <http://hembase.niddk.nih.gov/>

#### Molecular Biology of Energy Metabolism and Obesity

Marc Reitman, MD PhD

([MarcR@intra.niddk.nih.gov](mailto:MarcR@intra.niddk.nih.gov))

A position is available to study genes involved in energy expenditure and metabolic efficiency. We study gene regulation and function at the molecular (gene discovery, cloning, and elucidation of control elements) and physiological levels. Current projects focus on upcoupling protein-3 (UCP3) and a transgenic mouse lacking adipose tissue (a model for lipotrophic diabetes).

#### RNA Metabolism and Ribosome Biogenesis

Brenda Peculis, PhD ([bp51h@nih.gov](mailto:bp51h@nih.gov))

We are studying the molecular mechanisms underlying ribosome biogenesis, with particular focus on those steps involving RNA metabolism. Current studies include examination of rRNA:snoRNA interactions, assembly of snoRNP particles in vivo and in vitro, and identification and characterization of proteins comprising specific snoRNPs. We use biochemistry, genetics and molecular biology approaches in various eukaryotic model systems to identify essential components in this pathway.

#### Structural and Cell Biology

Jenny E. Hinshaw, PhD ([jennyh@helix.nih.gov](mailto:jennyh@helix.nih.gov))

The structure and function of proteins and macromolecular complexes involved in membrane recycling and protein trafficking are being studied. Presently, emphasis is on dynamin, a protein shown to be essential for receptor-mediated endocytosis. This work will entail purifying and characterizing mutants of dynamin by combining molecular biology, biochemistry, cryo-electron microscopy, and 3 dimensional reconstruction methods. <http://www.niddk.nih.gov/intram/people/jhinshaw.htm>

Applicants must possess PhD, MD or equivalent with no more than five years of postdoctoral experience.

To apply, submit a cover letter, curriculum vitae, and the names of three references to the hiring scientist via e-mail.

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**POSTDOCTORAL POSITION** is immediately available in the Protein Chemistry and Molecular Biology Section, Laboratory of Drug Discovery Research & Development (LDDR), National Cancer Institute. The incumbent is charged with the task of characterization, mechanism of action, and developmental research of novel anti-HIV and antitumor proteinaceous and non-proteinaceous leads from natural products. Additional details of the LDDR, and the section organization therein can be found on the Internet at <http://dtp.nci.nih.gov/>

Applicants must have a Ph.D. in the biological sciences. Experience in a broad range of techniques within molecular biology, cellular biology, and biochemistry is essential; specific experience in phage-display techniques, two-hybrid systems and molecular cloning would be advantageous. Candidates must have less than 4 years postdoctoral experience. Send curriculum vitae and correspondence to:

**Dr. Michael R. Boyd**  
NCI-FCRDC, Bldg. 1052, Rm 121  
Frederick, MD 21702-1201  
e-mail: [boyd@dtpax2.ncifcrf.gov](mailto:boyd@dtpax2.ncifcrf.gov)

# UNIVERSITY OF MINNESOTA

**Twin Cities**

## **Department of Biochemistry, Molecular Biology and Biophysics Tenure-Track Assistant Professor Positions**

The University of Minnesota has begun a new \$123 million initiative that will result in the construction of a new Molecular and Cell Biology Building and the hiring of new faculty in basic biological science departments over the next three years. As part of this new initiative, the Department of Biochemistry, Molecular Biology and Biophysics invites applicants for several full-time, tenure-track Assistant Professor positions to start on or after July 1st, 2000. The Microbial Biochemistry & Biotechnology Division seeks candidates who conduct research in either or both computational and experimental aspects of microbial genomics. The Molecular Biology Division seeks candidates who study basic mechanisms of transcription or genome replication and maintenance. The Regulatory Biochemistry Division seeks candidates using molecular biological and biophysical techniques to study glucose homeostasis in diabetes mellitus. The Structural Biology & Biophysics Division seeks candidates who investigate the structure and dynamics of proteins and/or nucleic acids, with primary emphasis on the techniques of high-field NMR, x-ray crystallography, and/or spectroscopy. For more details about these positions please consult: <http://cbs.umn.edu/BMBB/>.

Successful candidates will be expected to develop strong, externally funded research programs and will contribute to the undergraduate, graduate and professional teaching programs of the department. The ability to interact collaboratively among a variety of disciplines will be strongly encouraged. All candidates must have a Ph.D. and/or MD degree. Desired experience includes at least two years of postdoctoral equivalent experience, and a strong publication record. Successful candidates must be U.S. citizens or be able to secure permanent resident status. Successful candidates will receive a substantial start-up package to establish their laboratories and a salary commensurate with education and experience. Please send a curriculum vitae, statement of research interests, and three letters of recommendation that consider both research and teaching potential, by October 15, 1999, to: BMBB Search Committee, c/o Mr. Jeff Schaub, University of Minnesota, Department of Biochemistry, Molecular Biology and Biophysics, 6-155 Jackson Hall, 321 Church Street, S.E., Minneapolis, MN 55455 or [schaub@biosci.cbs.umn.edu](mailto:schaub@biosci.cbs.umn.edu).

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## **MAYO CLINIC POSTDOC POSITIONS**

Positions are available beginning August-December 1999 for postdoctoral fellows to work with Dr. Karen E. Hedin of the Transplantation Research Program in the Departments of Surgery and Immunology at Mayo Clinic in Rochester, Minnesota. Research will focus on characterizing the molecular mechanisms and biological impact of chemokine signal transduction in T lymphocytes and endothelial cells, and on understanding how these signaling pathways regulate important biological processes, including lymphocyte immune activation, cytokine gene expression, endothelial cell activation, tumor formation, and the rejection of transplanted organs.

Applicants must have a PhD and/or MD and experience using molecular biological and/or biochemical laboratory techniques. A background in signal transduction or immunology would be helpful. The ideal applicant will be excited about doing cutting-edge basic science research within an interactive group of basic and clinical scientists that are focused on developing practical approaches to xenotransplantation.

To apply, please send a letter of application, curriculum vitae and three letters of recommendation to:

Karen E. Hedin, PhD  
Transplantation Research  
Medical Sciences Building, 2nd Floor  
Mayo Clinic  
Rochester, MN 55901  
[www.mayo.edu/research/immunology/](http://www.mayo.edu/research/immunology/)

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## POSITIONS OPEN

### FACULTY POSITION IN EVOLUTIONARY ANIMAL PHYSIOLOGY

Indiana University, Bloomington

The Department of Biology is seeking to hire an Evolutionary Animal Physiologist at any level from **ASSISTANT** to **FULL PROFESSOR**. The successful candidate will join a strong and growing group of Biologists in our program in evolution, ecology, and behavior. Candidates should bring an evolutionary/comparative perspective to work in any area of animal physiology broadly defined, including but not limited to areas such as neurobiology (e.g., neuroethology/sensory processing, neuroendocrinology, cognitive ecology), immunology (e.g., host-parasite interactions, development of immune competence), or behavioral development (e.g., development of sex differences in behavior). Junior candidates should send a curriculum vitae, a statement of research (past, present, and future), and representative publications and should arrange to have four letters of recommendation sent to: **Dr. John Phillips, Chair, Evolutionary Animal Physiology Committee, Department of Biology, Indiana University, 1001 East Third Street, Bloomington, IN 47405-3700. FAX: 812-855-6705; e-mail: phillips@indiana.edu.** Senior candidates should send a letter of interest and a curriculum vitae. Review of applications will begin October 1, 1999, and will continue until a suitable candidate is identified. For more information about our department, see our home page at **website: <http://www.bio.indiana.edu>.** *We are committed to increasing the representation of women, minorities, and disabled individuals on our faculty and strongly encourage applications from such candidates. We also welcome inquiries from two-career couples.*

### TWO FACULTY POSITIONS UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL Division of Medicinal Chemistry and Natural Products

The Division of Medicinal Chemistry and Natural Products invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level available fall 2000. Outstanding applications for more senior levels are also welcomed. Candidates for Assistant Professor must have a Ph.D. degree, and postdoctoral experience is desirable. The Assistant Professor position requires development of an internationally recognized program of scholarly research and the demonstration of commitment to excellence in teaching at the professional and graduate levels. Programs in all areas of medicinal chemistry will be considered, but preference given to studies in structural biology, molecular recognition, and functional genomics pertinent to medicinal chemistry. Applicants should submit curriculum vitae, publication list, a concise description of proposed research, and arrange for four letters of recommendation to be sent to: **Professor Harold Kohn, Chair, Division of Medicinal Chemistry and Natural Products, School of Pharmacy, University of North Carolina at Chapel Hill, CB# 7360, Beard Hall, Chapel Hill, NC 27599-7360.** Applications will be reviewed beginning October 11, 1999, and continue until the positions are filled. *Women and members of minority groups are encouraged to apply. The University of North Carolina at Chapel Hill is an Equal Opportunity Employer.*

### UNIVERSITY OF FLORIDA

Seeks an **ASSOCIATE PROFESSOR** in the Department of Medicine, Division of Rheumatology. M.D. and/or Ph.D. Full-time tenure-track position. Duties will include 100 percent research on mouse in the area of immunology and genetics. May be called on to help establish a clinical immunology laboratory for the detection of autoantibodies. Must currently have external research support. Salary and benefits commensurate with experience. Recruiting deadline is August 27, 1999. Anticipated start date October 1, 1999. Please reply with curriculum vitae to: **Roland Staud, M.D., Department of Rheumatology, Box 100221, JHMHC, Gainesville, FL 32608.** *An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS IN BIOLOGY

The biology program of Claremont McKenna, Pitzer, and Scripps Colleges seeks (i) a broadly trained Cell and Molecular Biologist and (ii) a broadly trained Marine Ecologist to fill two tenure-track positions. Appointments will be made at the **ASSISTANT PROFESSOR** level to begin September 2000. Teaching responsibilities will include participation in our introductory biology sequence and an upper-division undergraduate course in the area of specialization. Interest in developing courses for non-science majors is highly desirable. Supervision of undergraduates in research is expected. The successful candidate will show evidence of being able to sustain an active research program attracting and involving undergraduates at a liberal arts college. A Ph.D. degree, prior teaching experience, and a record of scholarly publication are required.

The Biology program is part of the Joint Science Department (**website: <http://www.jsd.claremont.edu>**), an interdisciplinary department that serves three selective liberal arts colleges in The Claremont Colleges consortium.

Send a curriculum vitae and a statement outlining teaching interests, philosophy, and research interests to: **Dr. Newton Copp, W. M. Keck Science Center, 925 North Mills Avenue, Claremont, CA 91711. E-mail: ncopp@jsd.claremont.edu.** Arrange to have three letters of recommendation sent to the same address. Review of applications will begin on October 1, 1999, and continue until the positions are filled.

*In a continuing effort to enrich its academic environment and provide Equal Educational and Employment Opportunities, The Claremont Colleges actively encourage applications from women and members of historically underrepresented social groups in higher education.*

### FACULTY POSITION IN COMMUNITY ECOLOGY Indiana University, Bloomington

The Department of Biology is seeking to hire a Community Ecologist at any level from **ASSISTANT** to **FULL PROFESSOR**. The successful candidate will join a strong and growing group of Biologists in our program in evolution, ecology, and behavior. We welcome applications from candidates who take empirical and/or theoretical approaches to understanding multispecies plant, animal, and/or microbial communities. Junior candidates should send a curriculum vitae, a statement of research (past, present, and future), and representative publications, and arrange to have four letters of recommendation sent to: **Dr. Keith Clay, Chair, Community Ecology Search Committee, Department of Biology, Indiana University, 1001 East Third Street, Bloomington, IN 47405-3700. FAX: 812-855-6705; e-mail: clay@indiana.edu.** Senior candidates should send a letter of interest and curriculum vitae. Review of applications will begin October 1, 1999, and will continue until a suitable candidate is identified. For more information about our department, see our home page at **website: <http://www.bio.indiana.edu>.** *We are committed to increasing the representation of women, minorities, and disabled individuals on our faculty and strongly encourage applications from such candidates. We also welcome inquiries from two-career couples.*

### ASSISTANT PROFESSOR

Assistant Professor position, available in the Department of Pathology, Division of Neuropathology at Case Western Reserve University School of Medicine as of October 1, 1999, to study prion diseases and other neurodegenerative diseases. Tenure track available upon qualifications. Strong background in molecular biology (DNA cloning, manipulation, and sequencing) is required; hands-on experience in the generation and characterization of transgenic mice is highly desirable. Send curriculum vitae to: **P. Gambetti, M.D., Division of Neuropathology, Room 419, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106. E-mail: slb20@po.cwru.edu.** *CW/RU is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### FACULTY POSITIONS CARDIOVASCULAR PHARMACOLOGY/ PATHOPHYSIOLOGY

Texas Tech University Health Sciences Center (HSC) School of Pharmacy invites applications for two tenure-track faculty positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the Department of Pharmaceutical Sciences. The Department is composed of 17 full-time faculty members with interests in biomedical and pharmaceutical research. Applicants must have a Doctoral degree and postdoctoral training experience with an undergraduate degree in pharmacy preferred but not required. Successful candidates will be expected to develop a strong, extramurally funded research program as well as teach and mentor undergraduate and graduate students. The School of Pharmacy is located in a 102,000-plus-square foot building on the Harrington Regional Medical Center in close proximity to the Amarillo campus of the Texas Tech School of Medicine. For more information on the school, visit our **website: <http://pharmacy.ama.ttuhsu.edu>.** Applicants should submit a curriculum vitae, a brief summary of research and teaching interests, and names and addresses of at least three references to: **Dr. Quentin Smith, Texas Tech University Health Sciences Center, School of Pharmacy, 1300 Coulter Drive, Amarillo, TX 79106. FAX: 806-356-4034; e-mail: [quentin@cortex.ama.ttuhsu.edu](mailto:quentin@cortex.ama.ttuhsu.edu).** Application review will begin September 20, 1999, and continue until the position is filled. *Texas Tech University Health Sciences Center is an Equal Opportunity/Affirmative Action Institution. Minorities and women are encouraged to apply.*

### ASSISTANT/ASSOCIATE PROFESSOR UNIVERSITY OF MINNESOTA-DULUTH SCHOOL OF MEDICINE Whiteside Institute for Clinical Research

We are seeking a tenure-track Assistant/Associate Professor in the Department of Family Medicine to serve as Codirector of the Whiteside Institute for Clinical Research. Appropriate space and start-up research funding is available. Primary responsibilities include (1) conducting public health research with an emphasis in rural settings; (2) promotion of clinical research and collaboration with basic science researchers; (3) medical school teaching. Applicant must possess a Doctoral degree in public health, epidemiology, or other health-related areas, and the skills to nurture research in the medical community and work within clinical and academic settings. Preference will be given to candidates with postdoctoral research/Fellowship experience. Interested individuals should submit a letter of interest, a curriculum vitae, and three (3) references to: **George Trachte, Ph.D., University of Minnesota-Duluth, School of Medicine, 10 University Drive, Duluth, MN 55812. Telephone: 218-726-8975; e-mail: [gtracht1@d.umn.edu](mailto:gtracht1@d.umn.edu).** Applications will be accepted until the position is filled. *The University of Minnesota is an Equal Opportunity Employer and Educator.*

### EVOLUTIONARY BIOLOGIST ASSISTANT PROFESSOR

The Department of Biology at the University of Rochester invites applications for an Evolutionary Biologist in a tenure-track position of Assistant Professor. Outstanding applicants conducting research in any branch of evolutionary biology are encouraged to apply. Of particular interest are individuals using molecular, genetic, or ecological genetic approaches to elucidate the evolutionary process. To ensure competitive consideration, applications should be received by November 1, 1999. Applicants should submit a curriculum vitae, statements of research and teaching interests, copies of no more than four papers, published or in press, and request three referees to send letters of recommendation to: **Chair, Evolutionary Biology Search Committee, Department of Biology, University of Rochester, Rochester, NY 14627.**

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## SCIENTIST — STRUCTURAL GLYCOBIOLOGY

The successful candidate for this position will have a PhD, extensive experience in glycobiochemistry, modern analytical techniques, and mass spectrometry. Responsibilities include profiling glycans using HPLC and electrophoretic techniques, profiling glycoforms at the glycoprotein/glycopeptide level and identifying the glycosylation sites by LC/MS peptide mapping. Additionally, this person will develop and apply methodologies for detailed structural characterization of oligosaccharides. He/she will also coordinate the glycan characterizations within the department, and interact with other groups involved in the glycan analysis within the company.

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The University of Missouri-St. Louis announces extension of the search for the E. Desmond Lee and Family Fund Professorship in Zoological Studies, a position created to enhance the partnership between the University and the Saint Louis Zoo. The E. Desmond Lee Professor will be a faculty member in the University's Department of Biology and Scientist in Residence at the Zoo. The position comes with an attractive salary, set-up funding, and funds renewed annually from the endowment to support programs of mutual interest to the Department and Zoo, including the candidate's research.

Candidates should merit appointment as Associate Professor or Professor. Although preference will be given to senior candidates, junior candidates on trajectory to an outstanding career will be seriously considered. Possible research and teaching areas include conservation biology, behavioral ecology, and population ecology/genetics. Preference will be given to research programs on vertebrate animals that include a field component, especially within tropical regions.

The Zoo/Department partnership includes collaboration with the International Center for Tropical Ecology, an eminent institute housed in the Department. The Department of Biology has an outstanding graduate program in ecology, evolution, and systematics that attracts scholars from around the world. The Saint Louis Zoo is a leader in both conservation and research. Its staff is involved in national and international conservation programs, including the IUCN Species Survival Commission.

Application review begins September 30, 1999. The position begins in August 2000. Applications should include a cover letter outlining qualifications and interests, curriculum vitae, a statement of research interests and goals, and the names and addresses of five references. Send applications to Dr. James H. Hunt, Chair, Zoology Search Committee, Department of Biology, University of Missouri-St. Louis, 8001 Natural Bridge Rd., St. Louis, MO 63121. Nominations may be submitted by mail, phone (314-516-6209), FAX (314-516-6233), or e-mail ([jimhunt@umsl.edu](mailto:jimhunt@umsl.edu)).

*The University of Missouri-St. Louis is an affirmative action, equal opportunity employer committed to excellence through diversity.*

## POSITIONS OPEN

### FACULTY POSITIONS IN MOLECULAR CARDIOLOGY University of Pennsylvania School of Medicine

As part of a new initiative in molecular cardiology, the University of Pennsylvania Cardiovascular Medicine Division and the Department of Physiology invite applications for two tenure-track positions. The candidate in cardiology should have a record of outstanding accomplishment and an active research program in genetics of cardiovascular disease, molecular cardiology, or vascular biology. Appointment at the **ASSISTANT, ASSOCIATE, or PROFESSOR** level will be based on candidates' records of academic achievement. The physiology candidate is expected to develop a research program in integrative cardiovascular physiology using molecular biological approaches. Academic appointment at the Assistant or Associate Professor level will be considered. Candidates must have an M.D. and/or Ph.D.

By October 1, 1999, please provide curriculum vitae including full list of publications, names of three references, and a brief statement of research interests to: **Cardiology Position, Michael Parmacek, M.D., Cardiovascular Division Chief, Hospital of the University of Pennsylvania, 9123 Founders Pavilion, 3400 Spruce Street, Philadelphia, PA 19104. FAX: 215-349-8017. Or: Physiology Position, Dr. Lee Sweeney, Department of Physiology Chairman, University of Pennsylvania School of Medicine, 3700 Hamilton Walk, Philadelphia, PA 19104-6085.**

*An Equal Opportunity/Affirmative Action Employer encouraging women and minority applicants.*

### ASSOCIATE PROFESSOR PHYSIOLOGY

Individuals employing modern cellular and molecular approaches to investigate the physiology of organs and organ systems are invited to apply for a tenure-track position at the Associate Professor level. Candidates must possess a Ph.D., M.D., or equivalent degree. A strong record of continuous research productivity and funding, including current support from national sources, is required. Preference will be given to candidates with expertise in cardiovascular physiology, but individuals with outstanding credentials in other areas of physiological research will be considered. The appointee will be expected to pursue an active research program and participate in medical and graduate teaching. Applicants should send a curriculum vitae, a brief description of current and future research interests, and the names and addresses of three references to: **Dr. Robert Beesley, Vice Chair, Department of Physiology, College of Medicine, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. E-mail: robert-beesley@ouhsc.edu; website: <http://w3.ouhsc.edu/physiology>.** Review of applications will begin November 15, 1999. Anticipated starting date: July 2000. *OUHSC is an Equal Opportunity Institution.*

### INSTRUCTOR OF PHYSICS THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

University of Alabama at Birmingham Department of Physics seeks candidates for a non-tenure-track faculty position, beginning fall 1999 at the Instructor level. The successful candidate will teach four courses per year and should be interested in implementing computer-aided instruction. Duties will include coordinating and managing the undergraduate laboratories including organizing, maintaining, and repairing lecture/laboratory equipment and resources. Candidates must have a M.S. degree in physics; Ph.D. preferred. Send curriculum vitae with names, addresses, e-mail addresses, and telephone numbers of two references to: **Dr. David Shealy, University of Alabama at Birmingham, Department of Physics, Birmingham, AL 35294-1170.** This position will be filled as soon as a suitable candidate is identified. *University of Alabama at Birmingham is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### AVIAN BIOLOGY

The Division of Biology at Kansas State University invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level, beginning in the 2000/2001 academic year. A strong research program with national extramural funding and active participation in undergraduate and graduate teaching is expected. A Ph.D. or equivalent is required; postdoctoral training and teaching experience are desirable. The Division has an excellent record of training and research in avian biology. Further information on the Division and the position can be found at website: <http://www.ksu.edu/biology>. Applicants should submit a curriculum vitae, selected reprints, and a summary of research and teaching interests, and have three letters of reference sent to: **Dr. Christopher C. Smith, Avian Biology Search Committee, Division of Biology, Ackert Hall, Kansas State University, Manhattan, KS 66506-4901.** Review of applications will begin on October 11, 1999, and continue until the position is filled. *KSU is an Equal Opportunity/Affirmative Action Employer, and encourages diversity among its employees.*

### ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY Medical College of Ohio

Applications are invited for a 12-month, tenure-track faculty position from individuals who possess a Doctoral degree, postdoctoral experience, and record of research productivity. The successful candidate is expected to develop an independent, extramurally funded research program and participate in teaching medical and M.S./Ph.D. students. We are particularly interested in applicants who use bacteria, fungi, or viruses to dissect and elucidate cellular and molecular pathways involved in microbial infection, as part of an expanded departmental focus on molecular pathogenesis. The Department is in a growth phase and is concurrently filling an Endowed Research Chair in immunology. Medical College of Ohio (MCO) is a state school with a modern campus. To learn more about the Department and MCO, visit our website: <http://www.mco.edu>.

Applicants should submit a statement of research goals with representative reprints, a curriculum vitae, and three letters of recommendation to: **Garry T. Cole, Ph.D., Chair, Department of Microbiology and Immunology, Medical College of Ohio, 3055 Arlington Avenue, Toledo, OH 43614-5806.** Applications should be received by October 1, 1999, although the search will continue until the position is filled. *Affirmative Action/Equal Opportunity Employer.*

### NEUROSCIENTIST ASSOCIATE PROFESSOR OR PROFESSOR LEVEL

Columbia University College of Physicians and Surgeons, Department of Psychiatry, at New York State Psychiatric Institute seeks an eligible Neuroscientist at the Associate Professor or Professor level involved in basic neuroscience work relevant to schizophrenia research (pharmacology, molecular biology, or system neurosciences). Candidates should have demonstrated expertise and independence in a particular field of neuroscience and gained national and international recognition for their work. An established record of publications and success in obtaining funding are mandatory. Ability to generate translational research to link the laboratory work with the other components of the Center for Studies in Schizophrenia is preferred. Applicants should submit a letter of interest, a curriculum vitae, and five references to: **Marc Laruelle, M.D., New York State Psychiatric Institute, 1051 Riverside Drive, Unit 42, New York, NY 10032.** *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### TENURE-TRACK APPOINTMENT RENSSELAER POLYTECHNIC INSTITUTE DEPARTMENT OF CHEMISTRY

Rensselaer Polytechnic Institute invites applications for a tenure-track **ASSISTANT PROFESSOR** position in the Department of Chemistry. Preference will be given to those candidates that have a strong background in the areas of polymer-analytical or polymer-physical chemistry; however, outstanding candidates from all areas of polymer chemistry are encouraged to apply. Exceptional candidates may be considered at a higher rank. Applicants should possess a Ph.D. degree in chemistry, polymer science, materials science, or a related field and are expected to teach general chemistry, analytical or physical chemistry, and graduate courses in the polymer chemistry curriculum. The successful candidate is expected to develop an internationally recognized, externally funded research program. The successful candidate is encouraged to participate in Rensselaer's Polymer Science and Engineering Program, an interdisciplinary program with close interactions between faculty and students in the Departments of Chemistry, Chemical Engineering, and Materials Science and Engineering, and the newly formed Center for Polymer Synthesis. Interested applicants should send a letter of application, curriculum vitae, a concise description of research plans, and arrange to have three letters of reference sent to: **Professor Brian C. Benicewicz, Chair, Faculty Search Committee, Department of Chemistry, Rensselaer Polytechnic Institute, Troy, NY 12180-3590.** Review of applications will begin immediately and all applications should be received by November 15, 1999. *Rensselaer Polytechnic Institute is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.*

### ANTICIPATED ASSISTANT PROFESSOR NEUROPHYSIOLOGY

The Department of Biological Sciences invites applications for a tenure-track position at the Assistant Professor level. The department is seeking an individual who uses contemporary approaches to study sensory/nervous system function, preferably in a non-mammalian model system. Candidates must possess a Ph.D. or equivalent degree and have postdoctoral experience. The successful candidate will be expected to maintain a strong extramurally supported research program, supervise the research of graduate students, and teach at the undergraduate and graduate levels. Review of applications will begin on September 27, 1999, and continue until a suitable candidate is identified. Send curriculum vitae, statement of research plans, teaching interests, and three letters of recommendation to:

**Neurophysiology Search Committee  
Ref. Log # 023966  
Department of Biological Sciences  
508 Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803  
Website: <http://www.biology.lsu.edu>  
*LSU is an Equal Opportunity/Equal Access Employer.***

### ASSISTANT/ASSOCIATE PROFESSOR TWO POSITIONS AT THE UNIVERSITY OF PITTSBURGH

The newly established Center for Pharmacogenetics in the School of Pharmacy seeks outstanding Investigators to fill two tenure track-eligible positions. These are full-time, 12-month appointments. Successful candidates must have a Ph.D. and/or M.D., as well as excellent research records in one of the following areas: gene therapy (including oligonucleotides), functional genomics, nucleic acid chemistry, and pharmacogenetics. Rank and salary will commensurate with qualifications and experience. Send curriculum vitae, three letters of recommendation, and a statement of research interest by November 15, 1999, to: **Dr. Leaf Huang, W1351 Biomedical Science Tower, University of Pittsburgh, Pittsburgh, PA 15261.**

## TENURE TRACK INVESTIGATOR

Two Tenure Track Investigator positions are available to study *Drosophila* genetics and Cell Cycle Checkpoints in the Regulation of Cell Growth Laboratory (RCGL), Division of Basic Sciences, National Cancer Institute, Frederick Cancer Research and Development Center (NCI-FCRDC) in Frederick, Maryland.

***Drosophila* genetics.** This position requires a strong background in the use of *Drosophila* as a genetic system. Candidates whose research emphasizes genetic approaches to the study of cell cycle control, signaling pathways or development biology are especially encouraged to apply. The successful candidate will become part of an expanding community of *Drosophila* researchers within the RCGL and at the NCI-FCRDC.

**Cell Cycle Checkpoints.** Candidates whose research focuses on molecular mechanisms of cell cycle regulation, oncogenesis or signal transduction are encouraged to apply. However, exceptional candidates in other areas of molecular biology will also be considered.

The successful candidates for these fully funded groups will recruit and supervise a staff of several associates and will have at least two years of postdoctoral experience. The RCGL provides a highly interactive, collaborative environment, including existing groups with expertise in cell cycle regulation, tumor suppressor genes, signal transduction, regulation of gene expression and apoptosis.

If interested, please send your curriculum vitae, a one to two page statement of research interests and three letters of recommendation to Dr. Karen Vousden, Building 560, P.O. Box B, NCI-FCRDC, Frederick, MD 21702.

The National Institutes of Health is an equal opportunity employer and encourages all qualified women and minorities to apply. Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, marital status, physical or mental disability, age, sexual orientation or membership or nonmembership in an employee organization.

## POSTDOCTORAL POSITION IN IMMUNOLOGY/AUTOIMMUNITY

Postdoctoral position available immediately to study the role of apoptosis in pathogenesis of autoimmune disease, as it affects the lymphoid cells and the target tissue. Approaches utilize lpr and gld mice, bcl-2 transgenic mice and other apoptosis-relevant mutant strains. Other directions of study address the role of IL-12 and IL-18 in apoptosis and in other aspects of pathogenesis using models of autoimmune uveitis and encephalomyelitis.

Additional information can be found on <http://www.nei.nih.gov/intramural/immreg.htm>. Applicants should have a strong background in immunology and molecular biology, less than 5 years postdoctoral experience and have US citizenship or permanent resident status. Stipend ranges from \$30,000 to \$38,000 per year, commensurate with experience. Contact:

**Rachel Caspi, Laboratory of Immunology  
NEI, NIH**

**10 Center Drive, MSC 1857, 10/10N222  
Bethesda, MD 20892-1857**

**Voice: (301)435-4555, Fax: (301) 480-6668  
email: rcaspi@helix.nih.gov.**

**NIH is an Equal Opportunity Employer**

## BIOLOGISTS/IMMUNOLOGISTS

**Merck Research Laboratories**, a world leader in biological, pharmaceutical and vaccine research, currently has exceptional career opportunities in our Department of Virus & Cell Biology located in **West Point, PA (only 25 miles NW of Philadelphia)**.

### Immunologists

3 junior-level positions are available to support the performance of human and primate cellular immune assays in support of multiple vaccine programs. Requirements include a BS or MS, or equivalent, in the biological sciences with at least 2 years' laboratory experience and mastery in mammalian cell culture. Preference will be given to candidates with previous experience of cellular immune assays, such as ELISPOT and chromium release assays. You must be willing to work with radioactive isotopes and human clinical samples as well as infectious viral agents (e.g. HIV). Good communication and computer skills are a plus.  
**AD# JS/B-198**

### Microbiologists – Viral

2 junior and 1 senior-level position are available to support live virus vaccine projects. In these positions, you will be involved in the cloning/construction of recombinant viruses and the preparation of virus and cell stocks as well as virus growth and characterization studies. To qualify for the junior-level positions, you must have a BS or MS, or equivalent, in Virology, Cell Biology, Molecular Biology or a related field and 1-5 years' research laboratory experience. To qualify for the senior-level position, you must have a Ph.D in Virology, Cell Biology, Molecular Biology or a related field with at least 2 years of postdoctoral experience. Candidates for all positions must have strong communication skills.  
**AD# AS/B-199**

### Microbiologists – Bacterial

2 junior and 1 senior-level position are available to support bacterial vaccine projects. To qualify for the junior-level positions, you must have a BS or MS, or equivalent, in Microbiology, Cell Biology, Molecular Biology or a related field and 2 years' research laboratory experience. To qualify for the senior-level position, you must have a Ph.D in Microbiology, Cell Biology, Molecular Biology or a related field with at least 2 years of postdoctoral experience. We require individuals with skills in microbiology, immunology, molecular biology, assay development, biochemistry, animal model experience and tissue culture experience. The specific microbiological skills needed include culture, characterization and bioassays of both Gram negative and Gram positive bacteria. Preference will be given to those candidates with previous experience in the microbiology of Gram positive bacteria. Assay development experience in ELISA and bactericidal assays is also necessary. Experience in GLP is a plus.  
**AD# DK/B-200**

We offer excellent salaries and benefits programs at our modern research facilities. To be considered, please send your resume with a cover letter and the names of 3 references to: **Merck Research Laboratories, Department of Virus & Cell Biology, (INDICATE AD#), WP16-225, P.O. Box 4, West Point, PA 19486**. Only candidates considered for interviews will receive responses. We are an Equal Opportunity Employer, M/F/D/V.



## POSITIONS OPEN

### BIOMOLECULAR/BIOMATERIALS CHEMISTRY EMORY UNIVERSITY Atlanta, Georgia

A tenure-track faculty appointment is available at the **ASSISTANT PROFESSOR** level in the areas of biomolecular and/or biomaterials chemistry. Applications are invited from outstanding candidates with a high potential for creative research and a commitment to quality teaching at both undergraduate and graduate levels. This tenure-track position will be available beginning in the fall semester of 2000, and the successful candidate will be joining a new division with several additional hires anticipated over the next few years. Research laboratories and office space will be housed in a new building, Cherry Logan Emerson Hall, which is currently under construction and will open in fall 2000. To be considered, applicants should submit a résumé, list of publications, statement of research plans with estimated start-up costs, and arrange to have three letters of recommendation sent on their behalf to: **Chair, Biomolecular/Biomaterials Faculty Search Committee, Department of Chemistry, 1515 Pierce Drive, Emory University, Atlanta, GA 30322**. Review of applications will commence November 1, 1999, and will continue until the position is filled. A job description can be found at [website: http://www.emory.edu/HR/jobseop.html](http://www.emory.edu/HR/jobseop.html). *Emory University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and members of minority groups.*

### ASSISTANT PROFESSOR SEARCH ENVIRONMENTAL HEALTH

Assistant Professor. Environmental health. Academic year appointment, tenure-track, beginning January 1, 2000. Minimum qualifications include (1) Doctorate (or A.B.D. with the requirement that the degree will be completed within one year of hire date) in discipline appropriate to area of expertise; (2) expertise in toxicology, and chemical or biological analytical techniques; (3) the ability to teach courses related to expertise at the undergraduate and graduate levels. The person selected will be expected to teach, provide service to the university and community at large, and develop a funded research program in area of expertise. Preference will be given to those candidates with teaching experience and evidence of the ability to establish a funded research program. Applicants must include letter of interest, current curriculum vitae, and at least three letters of reference. The contact person is: **Dr. Phillip Scheuerman, Department of Environmental Health, East Tennessee State University, Box 70682, Johnson City, TN 37614-0682**. Review of the applications will begin on September 30, 1999, and continue until a suitable candidate is selected. *An Equal Opportunity/Affirmative Action Employer.*

### CRYSTALLOGRAPHER

The Department of Biochemistry and Biophysics at the University of Rochester Medical Center is searching for a tenure-track faculty member with strong expertise in macromolecular crystallography. The appointment will be made at the **ASSISTANT PROFESSOR** level. The new hiree will join a growing structural biology group providing state-of-the-art diffraction and magnetic resonance facilities and will have excellent opportunities for collaboration. For additional information, see [website: http://www.urmc.rochester.edu/smd/bcbp](http://www.urmc.rochester.edu/smd/bcbp). If interested, please arrange to have at least three letters of recommendation, as well as a curriculum vitae, an outline of proposed research, and relevant reprints or preprints sent to:

**Crystallography Search Committee  
Department of Biochemistry and Biophysics  
University of Rochester Medical Center  
601 Elmwood Avenue  
Rochester, NY 14642**

*Receipt of all applications will be acknowledged promptly. The University of Rochester is an Equal Opportunity/Affirmative Action Educator and Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR POSITIONS Département de sciences biologiques Université de Montréal

The Département de sciences biologiques, Université de Montréal, invites applications for NSERC University Faculty Awards (women), [website: http://www.nserc.ca/indexfr.htm](http://www.nserc.ca/indexfr.htm) and FCAR Professor-Researcher program (men and women), [website: http://www.fcqr.qc.ca/suniv.html](http://www.fcqr.qc.ca/suniv.html). The position, effective June 1, 2000, is conditional on receiving an NSERC or FCAR award. The candidate must have a Ph.D. and postdoctoral experience, and must be ready to teach in French in his/her specialty. We are looking for candidates in the following fields:

Plant developmental biology. Having a background in molecular biology, anatomy, and electron microscopy. The position will be held at the Institut de recherche en biologie végétale.

Experimental animal biology. Preferably studying endocrine mechanisms of adaptation, and using molecular techniques on invertebrate or lower-vertebrate models.

Ecology. Especially river ecology and biogeochemistry.

Applicants should send their curriculum vitae, a description of the proposed research, and reprints, and arrange for three reference letters to be sent, before September 22, 1999, to:

**Thérèse Cabana  
Chairman  
Département de sciences biologiques  
Université de Montréal  
C.P. 6128, Succ. Centre-ville  
Montréal, Québec H3C 3J7 Canada  
E-mail: cabanat@ere.umontreal.ca**

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents in Canada. Université de Montréal is committed to a program of access to Equity in Employment for women.*

### ASSISTANT PROFESSOR TRANSPLANT IMMUNOLOGIST

The Department of Surgery at the University of Nebraska Medical Center is seeking a Transplant Immunologist with interest and experience in independent research and a demonstrated record of publications and grants. He/she must have significant experience with experimental methods and models. The candidate would be expected to carry out an independent research program involving tolerance, rejection, or prevention/reversal of rejection of xenotransplantation technology. Level of appointment and salary will be commensurate with qualifications.

Please send letter of application and curriculum vitae to:

**Alan N. Langnas, D.O.  
Professor of Surgery  
Chief, Section of Transplantation  
University of Nebraska Medical Center  
983280 Nebraska Medical Center  
Omaha, NE 68198-3280**

### ASSISTANT PROFESSOR/ POSTDOCTORAL RESEARCH POSITIONS Cleveland Clinic Foundation Cerebrovascular Center

The Cleveland Clinic Foundation is seeking applicants for full-time research appointments at the Assistant Professor (one position) and Postdoctoral level (three positions). Applicants should possess a Ph.D. or M.D. with background in cerebrovascular biology, electrophysiology, or radiation biology. Resources and benefits at the Cleveland Clinic Foundation are extremely competitive. Send curriculum vitae and references to:

**Damir Janigro, Ph.D., Director  
Cerebrovascular Center  
Marc R. Mayberg, M.D., Chairman, Neurosurgery  
The Cleveland Clinic Foundation NB-20  
9500 Euclid Avenue  
Cleveland, OH 44195 USA  
E-mail: janigrd@ccf.org  
E-mail: mayberg@neus.ccf.org**

## POSITIONS OPEN

Hope College has a tenure-track position for a Biochemist/Molecular Biologist who has an emphasis in neuroscience research. This is an interdisciplinary appointment in the Biology and Chemistry Departments at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. The starting date is flexible. The successful candidate will have a Ph.D. in biochemistry, neuroscience, or a related field. S/he will be expected to teach courses in the areas of biochemistry and neuroscience and, on occasion, either introductory biology or introductory chemistry. S/he will be expected to develop a strong, externally funded research program involving undergraduate students that applies modern biochemical/protein chemistry techniques within the broad area of neuroscience. Applicants with postdoctoral experience will be given preference. Start-up funds will be provided, in part, by a grant from the Howard Hughes Medical Institute. Hope College is a coeducational, liberal arts college ([website: www.hope.edu](http://www.hope.edu)) affiliated with the Reformed Church in America. Applicants should arrange to have a curriculum vitae, transcripts, statements of research plans and teaching philosophy/competencies, and three letters of recommendation sent to: **Dr. Michael Seymour, Chairperson, Biology-Chemistry Search Committee, Hope College, 35 East 12th Street, Holland, MI 49422-9000. E-mail: seymour@hope.edu**. Review of applications will begin October 15, 1999. *Hope College complies with all legal requirements prohibiting discrimination in employment and actively seeks diversity in its applicant pool. Women and persons of color are strongly encouraged to apply. Hope College has a strong commitment to recruiting and sustaining an ethnically diverse student body and faculty. This is particularly important to us in biology and chemistry because we seek to serve better our students from groups traditionally underrepresented in the sciences.*

### ASSISTANT PROFESSOR NEURO/ENDOCRINE PHYSIOLOGY

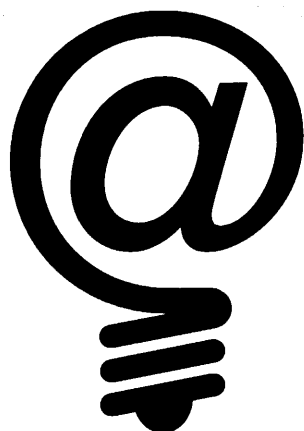
Individuals employing modern cellular and molecular approaches to investigate the physiology of organs and organ systems are invited to apply for a twelve-month tenure-track position at the Assistant Professor level. Candidates must possess a Ph.D., M.D., or equivalent degree and at least two years of postdoctoral experience. Preference will be given to candidates with anticipated/current research funding from national sources and expertise in neuro/endocrine physiology. The successful candidate will be expected to pursue an active, independent research program and participate in medical and graduate teaching. Applicants should send a curriculum vitae, a brief description of current and future research interests, and three letters of reference to: **Dr. Robert Beesley, Vice Chair, Department of Physiology, College of Medicine, The University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. E-mail: robert-beesley@ouhsc.edu; website: http://w3.ouhsc.edu/physiology**. Completed applications will be accepted until November 15, 1999. Anticipated starting date: July 2000. *OUHSC is an Equal Opportunity Institution.*

### SENIOR RESEARCH SCIENTIST IN PHYSIOLOGY AND ENDOCRINOLOGY

Applications are invited for a non-tenure-track Senior Research Scientist position. To direct a core facility in biotelemetry. The Director would collaborate with other Investigations in designing and executing experiments that use biotelemetry (in measurement of blood pressure, heart rate, body temperature, activity, and other parameters). The individual would also be expected to develop an externally funded research program. Minimum requirements: Ph.D. in physiology, postdoctoral experience, and at least five years of experience using state-of-the-art biotelemetry technology. Applicants should send by September 18, 1999, a curriculum vitae, statement of research interests, and the names of three references to: **Dr. Thomas M. Mills, Department of Physiology and Endocrinology, Medical College of Georgia, Augusta, GA 30912-3000. MCG is an Equal Opportunity/Affirmative Action Employer. J-0099120.**



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## POSITIONS OPEN

### ANTICIPATED ASSISTANT PROFESSOR PLANT BIOLOGIST ANATOMY/MORPHOLOGY

The Department of Biological Sciences invites applications for a tenure-track Assistant Professor position specializing in contemporary plant anatomy/morphology. Areas of interest include, but are not limited to, experimental approaches to the role of plant structure in evolution, developmental processes in plants, functional anatomy and morphology, plant fungal/microbe interactions, and plant cell biology. Maintenance of an extramurally supported research program, supervision of graduate students, and teaching in the area of specialization and in the general biology program are expected. Review of applications will begin September 27, 1999, and will continue until a suitable candidate is identified. Qualifications require a Ph.D. or equivalent degree and interest in teaching a course in plant anatomy. Preference will be given to applicants with postdoctoral experience. Send curriculum vitae, selected reprints, statement of research and teaching interests, three letters of recommendation, and an outline for a course in plant anatomy at the senior/graduate student level to:

**Dr. L. Urbatsch, Chair**  
**Plant Biology Search Committee**  
Ref. Log # 210

Department of Biological Sciences  
508 Life Sciences Building  
Louisiana State University  
Baton Rouge, LA 70803  
E-mail: leu@lsu.edu

Website: <http://www.biology.lsu.edu>

LSU is an Equal Opportunity/Equal Access Employer.

### UNIVERSITY OF UTAH CHEMISTRY DEPARTMENT

Three **TENURE-TRACK POSITIONS** are available in analytical, biological, and organic chemistry. We intend to fill the positions at the junior level, but exceptional senior candidates will be considered. For the biological position, biophysical chemistry is of particular interest. Candidates are expected to demonstrate the background, motivation, and ability to develop vigorous, competitive research programs and to be excellent teachers at the undergraduate and graduate levels. A Ph.D. is required; postdoctoral experience is desirable. Applicants for junior-level positions should send an application letter including a description of proposed research and detailed curriculum vitae, and arrange for three letters of recommendation to be sent directly to the address below. Senior applicants should send an application letter and curriculum vitae. Review of applications will begin October 15, 1999, and continue until suitable candidates are identified. Reply to: **Search Committee, Department of Chemistry, University of Utah, 315 South 1400 East Room Dock, Salt Lake City, UT 84112-0850.** The University of Utah is an Affirmative Action/Equal Employment Opportunity Employer, encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

### RESEARCH ASSOCIATE

Unique opportunity to oversee and develop molecular biological techniques in an active and well-funded immunopathology laboratory, while the Principal Investigator devotes more time to administrative responsibilities. Current techniques include transgenic and knockout mouse work and massively parallel DNA analysis ("gene chips"), the latter in collaboration with Argonne National Laboratory. Documented expertise with genetic manipulations of mice is required. Salary and academic rank commensurate with experience. Send curriculum vitae, brief description of work experience, and names of three references to: **Dr. Richard Quigg, Department of Medicine, The University of Chicago, 5841 South Maryland Avenue, MC5100, Chicago, IL 60637.** E-mail: [rquigg@medicine.bsd.uchicago.edu](mailto:rquigg@medicine.bsd.uchicago.edu). Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN



The Immunology and Disease Resistance Laboratory, Livestock and Poultry Sciences Institute (LPSI), Beltsville, Maryland is seeking a permanent full-time **IMMUNOLOGIST**. The scientist will characterize immune responses to *Neospora caninum* infections and will develop means to use host immunity in parasite control. *U.S. citizenship is required.* Salary range (GS-11/12) is \$40,714 to \$63,436 per annum and is commensurate with experience (Ph.D. desired). Position has specific requirements that must be addressed. Announcements are available by **Telephone: 301-504-1484** or from the Internet at **website: [www.ars.usda.gov/afm/hrd/resjobs](http://www.ars.usda.gov/afm/hrd/resjobs)** (announcement #ARS-D9E-9403). Applications must be postmarked by October 4, 1999. For information on the research program contact: **Dr. Joan Lunney, Telephone: 301-504-8201.** USDA/ARS is an Equal Opportunity Provider and Employer.

The University of Florida (UF) College of Medicine is seeking nominations and applications for the position of **PROFESSOR and CHAIR** of the Department of Neurology. The Chair will be responsible for the management of the department including faculty recruitment and development, undergraduate and graduate medical education, fiscal affairs, clinical programs, and research. The Chair will also provide an effective interface between the department, the UF Brain Institute, and other research and clinical centers. Applicants should have an M.D. or M.D.-Ph.D. degree and demonstrated accomplishments in research, education, clinical service, and administration. Candidates should also have proven leadership capabilities and excellent interpersonal skills. Applicants should submit a curriculum vitae and three letters of recommendation to: **William A. Friedman, M.D., Chair, Search Committee, Department of Neurological Surgery, University of Florida College of Medicine, P.O. Box 100265, Gainesville, FL 32610-0265.** The closing date for the position is October 1, 1999, with an anticipated starting date on or after July 1, 2000. Salary will be commensurate with experience. The University of Florida is an Equal Opportunity/Affirmative Action Employer.

**LABORATORY SCIENTISTS** in pediatric hematology-oncology. The Division of Hematology-Oncology, Department of Pediatrics, University of Texas Southwestern Medical Center at Dallas is seeking two full-time faculty members at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level who will be charged with developing an outstanding basic research program involving the initiation, progression, or control of childhood malignancy. Candidates should have an M.D. or M.D.-Ph.D. Successful candidates will spend 80 to 90 percent of their time in laboratory research, with the remainder devoted to clinical responsibilities and teaching. The positions are available immediately. For further information, contact: **George R. Buchanan, M.D., Department of Pediatrics, University of Texas Southwestern, 5323 Harry Hines Boulevard, Dallas, TX 75235-9063. Telephone: 214-648-8594; FAX: 214-648-3122.** The University of Texas Southwestern Medical Center at Dallas is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT MEMBER POSITION TAMPA BAY RESEARCH INSTITUTE

Available in the Laboratory of Virology to study the molecular biology of the human viruses (Herpes and Hepatitis C). Candidates with a Ph.D. or M.D.-Ph.D. and experience in molecular biology are encouraged to apply. Applicants should send a curriculum vitae, research goals, and three references to: **Chairman, Search Committee, Tampa Bay Research Institute, 10900 Roosevelt Boulevard, St. Petersburg, FL 33716.**

## POSITIONS OPEN

### RESEARCH SPECIALIST IN CHEMISTRY MASS SPECTROMETRY SCHOOL OF CHEMICAL SCIENCES University of Illinois at Urbana-Champaign

Primary duties of this position will include, under minimal supervision of the Laboratory Director, the operation and routine maintenance of Micromass Instruments ZAB-SE and 70-VSE mass spectrometers providing routine service functions such as low-resolution and high-resolution EI, CI, and low-resolution FAB services. Duties will also include carrying out nonindependent research projects with graduate students, faculty, and Postdoctoral Research Associate users of the laboratory. The minimum requirement for the position is a B.S. degree in chemistry (or related discipline). Some previous experience in operating mass spectrometers and gas chromatography equipment or related instruments is desired. A suitable candidate will be trained.

This is a full-time, 12-month regular academic professional position. Salary commensurate with qualifications and experience. Proposed starting date is November 22, 1999.

In order to ensure full consideration, applications must be received by November 5, 1999. Please send a letter of application and résumé, and have three letters of reference sent to:

**Dr. Thomas B. Rauchfuss, Director**  
c/o Renee Schum  
School of Chemical Sciences  
University of Illinois  
106 Noyes Laboratory  
505 South Mathews Avenue  
Urbana, IL 61801  
Telephone: 217-333-5070

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

**ACADEMIC NEUROLOGISTS** with basic neuroscience research interests are sought to join the Department of Neurology at the University of Cincinnati (UC). Rank and track commensurate with experience. Applicants must be Board-eligible or Board-certified in neurology. They must have completed or be in the process of completing a laboratory-based Fellowship and should be in the process of applying for independent research funding at the time of application. The applicants will be joining a rapidly growing neurology department based in a new basic science research building that will house the neuroscience graduate program at UC. More senior faculty with research interests that complement existing strengths at UC will also be considered. Positions will be filled as rapidly as space allows. Candidates should send a curriculum vitae and names of three references to: **Frank R. Sharp, M.D., Professor and Chairman, Department of Neurology, University of Cincinnati Medical Center, 231 Bethesda Avenue ML #525, Cincinnati, OH 45267-0525.** The University of Cincinnati is an Affirmative Action/Equal Opportunity Employer; minorities, women, disabled persons, Vietnam-era and disabled veterans are encouraged to apply.

### MEDICAL SCIENCE WRITER/EDITOR

We seek an experienced individual with demonstrated medical/scientific writing skills. The incumbent will work with research staff, which includes Physicians, basic scientists, Nurses, and other health care professionals to prepare abstracts, manuscripts, and grant applications. The minimum requirements for this position include a Bachelor's degree in English, journalism, scientific/medical writing, health sciences, or in a related field plus three years of experience or the equivalent. Preferred candidates will have a M.S./A.B.D./Ph.D. or other advanced degree. Strong interviewing and interpersonal skills are also a must. Qualified applicants should send their application letter, curriculum vitae, and the names of three references to: **Dr. William D. Lyman, Director, Children's Research Center of Michigan, 3901 Beaubien, Detroit, MI 48201-2196.** Wayne State University is an Affirmative Action/Equal Opportunity Employer.



**The Manitoba Cancer Treatment and Research Foundation  
The University of Manitoba**

**The Margaret A. Sellers Chair for the  
Executive Director of the  
Manitoba Institute of Cell Biology**



Applications and nominations are invited for the position of The Margaret A. Sellers Chair for the Executive Director of the Manitoba Institute of Cell Biology for a five-year term.

The Manitoba Institute of Cell Biology is an Institute created jointly between the University of Manitoba and the Manitoba Cancer Treatment and Research Foundation. The Institute is dedicated to fundamental research in cancer biology and its relation to health, with a primary emphasis on basic and translational cancer research. The Institute is housed in the Manitoba Cancer Treatment and Research Foundation building at the Bannatyne Campus of the University of Manitoba. A new facility, double the present size, will be ready for occupancy in mid-2000. Information about the Institute can be found at its website ([www.umanitoba.ca/institutes/manitoba\\_institute\\_cell\\_biology](http://www.umanitoba.ca/institutes/manitoba_institute_cell_biology)).

The appointment will be a full-time contingent position, or geographical full-time position, at the rank of Professor in the appropriate department(s). Candidates should have a Ph.D. and/or M.D., an outstanding record of achievement in a field related to basic or translational cancer research, extensive experience in teaching and research, as well as proven administrative experience. M.D. applicants should be eligible for registration and licensure in Manitoba.

The Director of the Institute is responsible to its Board of Directors for the overall research policy and budget of the Institute, supervision of its research, teaching, and academic programs, re-

cruitment and supervision of academic and administrative staff of the Institute, use of research space within the Institute and the development and facilitation of research collaborations between university departments. The Director of the Institute has Department Head status within the Manitoba Cancer Treatment and Research Foundation. Members of the Institute take responsibility for programs of education at the undergraduate, graduate and post-graduate levels in the Faculty of Medicine at the Manitoba Cancer Treatment and Research Foundation and in related areas.

*Applications are encouraged from qualified women and men, including members of visible minorities, Aboriginal peoples, and persons with disabilities. In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.* Applications and nominations accompanied by a curriculum vitae and the names and addresses of three referees should be submitted not later than OCTOBER 15, 1999 to: DR. B. A. SCHACTER, CHAIR, SEARCH COMMITTEE FOR THE MARGARET A. SELLERS CHAIR FOR THE EXECUTIVE DIRECTOR OF THE MANITOBA INSTITUTE OF CELL BIOLOGY, MANITOBA CANCER TREATMENT AND RESEARCH FOUNDATION, 100 OLIVIA STREET, WINNIPEG, MANITOBA, R3E 0V9. Telephone: 204-787-2241; Fax: 204-787-1184; E-mail: [brent.schacter@mctrf.mb.ca](mailto:brent.schacter@mctrf.mb.ca)

**EUROPEAN OPPORTUNITIES**



The Swiss Federal Institute of Technology in Zurich (ETH Zurich) invites applications for the position of a

**Professor in Biochemistry**

Research will focus on a significant area of Biochemistry that complements the areas represented at the Institute of Biochemistry. Support is provided by excellent facilities, and the forthcoming relocation of the Institute to a newly renovated building on the Hönggerberg-Campus will establish immediate proximity to the Institutes of Molecular Biology and Biophysics, Cell Biology, and Biotechnology. This offers ideal conditions for an active research programme in a scientifically dynamic environment. Involvement in teaching is expected at undergraduate and graduate levels.

Candidates should provide evidence of excellent achievements in biochemistry research. Moreover, the ability to cooperate with colleagues and pleasure in teaching are essential.

Applications with curriculum vitae, list of publications and research plan should be submitted to the **President of the ETHZ, Prof. Olaf Kübler, ETH Zentrum, CH-8092 Zurich, Switzerland, no later than October 31, 1999.** ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.



**ÉCOLE POLYTECHNIQUE  
FÉDÉRALE DE LAUSANNE**

The Swiss Federal Institute of Technology Lausanne (EPFL) invites applications for three posts of

**Professor of  
Applied Mathematics**

**in the Department of Mathematics**

The future professors will be mathematicians with an international reputation, proven by published work at the forefront of their fields. Candidates from all areas of applied mathematics are welcome. Specialists in the fields of probability or statistics, differential geometry, and discrete mathematics or optimization are particularly encouraged to apply. A taste and talent for multidisciplinary collaboration would be an asset. Teaching will be an important responsibility; the positions demand strong interest and skills in teaching and the ability to direct PhD/advanced research in mathematics.

The EPFL is an internationally-oriented technical university which offers competitive salaries, substantial start-up packages and excellent research and teaching facilities.

Applications are sought for appointments at the associate or full professor levels. The EPFL strongly encourages women to apply.

Deadline for registration: October 29, 1999. Starting date: upon mutual agreement. Please ask for the application form by writing or faxing to: **Présidence de l'Ecole polytechnique fédérale de Lausanne, CE-Ecublens, CH-1015 Lausanne, Suisse, fax nr. +41 21 693 70 84.** For further information, please consult also URL: <http://www.epfl.ch>, <http://dmawww.epfl.ch/>, <http://admwww.epfl.ch/pres/profs.html> or <http://research.epfl.ch/>



## St. Jude Children's Research Hospital

ALBAC • Danny Thomas, Founder

### POSTDOCTORAL POSITIONS

Two postdoctoral fellow positions are available immediately in the laboratory of Vincent J. Kidd, Ph.D. to study NIH-funded projects concerning the 1) mechanisms of apoptotic signaling in human neuroblastomas, or 2) CDK regulation of transcription/RNA processing. Ongoing projects related to neuroblastoma are focused on determining why specific apoptotic genes are silenced in certain tumors and how these alterations impact the ability of tumor cells to undergo drug- and radiation-induced cell death. Projects related to CDKs and transcription/RNA processing currently emphasize the role of phosphorylation in the assembly of both active and inactive RNA polymerase II complexes, as well as regulation of CDK activity. Descriptions/lists of publications can be found at [www.stjude.org](http://www.stjude.org). Experience in molecular biology, cell culture and genetic manipulation of mice is beneficial for the cancer studies, and experience in protein biochemistry/purification and molecular biology would be beneficial for the CDK studies. Applicants must either have a Ph.D., M.D./Ph.D., or M.D. degree, or be currently enrolled in a graduate program and completing their degree. Please send a current C.V. and the names and addresses of three references to:

Vincent J. Kidd, Ph.D.  
Department of Tumor Cell Biology  
St. Jude Children's Research Hospital  
332 N. Lauderdale  
Memphis, TN 38105

### Program Analysts

The Howard Hughes Medical Institute, a national and international philanthropy devoted to biomedical research and science education, is seeking two **Program Analysts** to work in the **Office of Grants and Special Programs**. These positions will assist in the development and operations of grants programs.

**Responsibilities include** assisting in the management of periodic program competitions and awarded grants. Competition activities include developing program policies; reviewing applications for eligibility; and recruiting panel members, assigning proposals, and coordinating panel meetings for reviewers. Awarded grants activities include coordinating award/payment procedures, responding to inquiries, and collecting/reviewing annual program and financial reports. Other duties include assisting in the design/implementation of program databases, assessment projects, and program web pages; preparing reports/publications; conducting research; and responding to inquiries from applicants, grantees, and the public.

Specific duties for the **Pre-college Science Education Program** include: directing the development of scientific computer animations using 2D and 3D software tools and developing interactive multimedia teaching modules as well as overseeing HS interns.

Specific duties for the **International & Research Resource** programs include: processing/tracking grant payments, organizing the scientific sessions of the annual meetings of grantees, and coordinating activities with the Moscow Office.

**Requires:** A Ph.D. in Cell or Molecular Biology; 2+ years of professional experience, preferably in an area of research administration, grants management, or science education (Pre-college position only); strong management, organizational, communication, interpersonal, and information-gathering skills; and excellent computer skills (Microsoft Office, Internet, client/server, web-based database applications).

HHMI offers a competitive salary and excellent benefits package.

Please send your resume, indicating salary requirements, to:  
**HHMI, Attn: HR Dept., GPA, 4000 Jones Bridge Road, Chevy Chase, MD 20815-6789.** Visit our websites at: [www.hhmi.org](http://www.hhmi.org); [hhmi.org/grants/precollege](http://hhmi.org/grants/precollege); [hhmi.org/grants/international](http://hhmi.org/grants/international)

HHMI is an Equal Opportunity Employer.

### POSITIONS OPEN

#### EVOLUTIONARY BIOLOGIST

The Department of Biological Sciences, University of Iowa, invites highly qualified applicants at the **ASSISTANT or ASSOCIATE PROFESSOR** level for a tenure-track position in evolutionary biology. Required qualifications include a Ph.D. degree; postdoctoral research experience; significant publication record in leading scientific journals; evidence of ability to conduct a strong, independent research program in molecular systematics, population genetics, or a closely related specialty, with high visibility in the international scientific community. The successful candidate will participate in teaching evolutionary biology to beginning or advanced undergraduates and will teach at the graduate level in the area of his/her research specialization. Applicants should ask three referees to send letters of recommendation and should themselves send a curriculum vitae, statement of future research objectives, description of teaching interests, and selected reprints or preprints to: **Evolution Search Committee, Department of Biological Sciences, University of Iowa, 138 Biology Building, Iowa City, IA 52242-1324.** Applications will be reviewed starting November 1, 1999. *The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply.*

#### RESEARCH ASSISTANT PROFESSOR IN MOLECULAR BIOLOGY OF ALZHEIMER'S DISEASE

Experienced Molecular Biologist desired to conduct studies profiling gene expression by single neurons in Alzheimer's disease. Successful applicant will use laser capture microdissection, amplification of message from single cells, gene chip and other arrays, and sophisticated statistical and informatics methods for data analysis. Apply to: **Paul D. Coleman, Ph.D., University of Rochester Alzheimer's Disease Center, 601 Elmwood Avenue, Box 645, Rochester, NY 14642.** E-mail: [paul\\_coleman@urmc.rochester.edu](mailto:paul_coleman@urmc.rochester.edu). *Affirmative Action/Equal Opportunity Employer.*

### POSITIONS OPEN

Pacific Northwest-based health education institution is in need of a **SENIOR RESEARCH ASSOCIATE** to work in Portland, Oregon to perform research on the molecular biology of membrane transporters in parasitic protozoa of the genera *Leishmania* and *Trypanosoma*. Will be required to perform the following duties: maintain sterile cultures of parasites; make and screen genomic and cDNA libraries; perform analysis of cloned DNAs including restriction mapping, DNA sequencing, Southern and Northern blotting; perform computer analysis of DNA and protein sequences including database searches; prepare, purify, and characterize antibodies made from fusion proteins or peptides; utilize various PCR methodologies; perform biochemical assays for transport of radiolabeled ligands; train and supervise Technicians; prepare and draft manuscripts describing results of research; submit grant applications to obtain support for research. Minimum requirements: (1) Doctor of Philosophy degree in molecular biology; (2) at least one year of experience working in area of molecular biology; (3) Ph.D. training with at least four years of experience in the culture and maintenance of parasitic protozoa; (4) at least four years of graduate-level experience in both biochemistry and molecular biology of parasites; (5) at least one year of previous experience with Genetics Computer Group (GCG) software used for analysis of DNA and protein sequences for database analysis; (6) previous experience in preparing at least one grant application to obtain support of research projects. (Experience may have been gained concurrently with educational and/or Fellowship requirements.) Hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. Salary: \$30,200 per year. *Applicants must have legal authority to permanently work in the United States.* Send résumé to: **Employment Department, Attn: Job Order Number 5551538, 875 Union Street N.E., Room 201, Salem, OR 97311.** Résumé and/or cover letter must reflect every listed requirement or it will be rejected. *An Equal Opportunity Employer.*

### POSITIONS OPEN

#### UNIVERSITY OF LOUISVILLE PROTEOMICS LABORATORY

**PROTEOMICS RESEARCH SCIENTIST.** The University of Louisville seeks a Research Scientist to serve as **ASSOCIATE DIRECTOR** of the newly established Proteomics Laboratory. The laboratory employs high-throughput robotics for 2-D electrophoresis, sample preparation, and mass spectroscopy. Candidates should have a Ph.D. in protein chemistry or related field and at least two years of experience in protein analysis. Position includes appointment to the research faculty at the university.

**POSTDOCTORAL FELLOWSHIP** in proteomics. Position available to study the molecular regulation of neutrophil apoptosis. Expertise in molecular biology and cell biology required. Background in protein separation techniques desirable.

Applicants for these positions should submit curriculum vitae and three references to: **Dr. Jon Klein, Director, University of Louisville Proteomics Laboratory, 615 South Preston Street, Louisville, KY 40292.** FAX: 502-852-4384; e-mail: [jon.klein@louisville.edu](mailto:jon.klein@louisville.edu). *Affirmative Action/Equal Opportunity Employer.*

**MATERIALS SCIENTIST, JUNIOR.** Design, test, conduct experiments of the scientific/physical properties of materials used in the manufacture of printed circuit boards; evaluate test data/prepare reports of experimental results on materials; make recommendations to management regarding suitability of various materials. 40 hours per week, 8 a.m. to 4:30 p.m.; \$36,000 per year. Four years of college with Bachelor's degree in materials science or physics (emphasis in solid state physics) and one year of experience as Materials Scientist, Junior or one year of experience as Materials Testing Supervisor required. Employer paid advertisement. Résumés to: **MJC/ESA, P.O. Box 11170, Detroit, MI 48211-1170.** Ref. #91699KLH.



**Research Chemist/Biochemist Position:** The USDA, Agricultural Research Service (ARS), Food Safety and Health Research Unit, Western Regional Research Center, Albany, California (San Francisco Bay Area) is accepting applications for the position of Research Chemist (GS 12/13, depending on experience; \$51,444 - \$79,063 per annum, plus benefits). The incumbent will be a permanent Scientist in a laboratory studying the biology and chemistry of bacterial human (animal) and plant pathogens in fruits and vegetables.

The overall project involves the study of host-microbe interactions, food-pathogen biofilms, detection and identification methods, and methods for minimizing pathogens in food. The incumbent defines approaches, and plans experimental procedures, on aspects of the project involving (1) purification of proteins, carbohydrates and small molecules from bacteria, and animal and plant tissues; (2) chemical and structural characterization of proteins and carbohydrates by a variety of analytical techniques including protein sequencing, two-dimensional gel electrophoresis, MALDI-TOF and electrospray mass spectrometry and NMR; and (3) chemical characterization of molecules involved in host-microbe interactions, biofilm formation, microbial cell-cell communication.

Candidates must be a U.S. Citizen. A complete copy of the vacancy announcement and where to apply can be found at: <http://www.ars.usda.gov/afm/hrd/resjobs/index.html>; select announcement ARS-X9W-9407; or contact Personnel at 510/559-6014. Closing date for applications is September 20, 1999. For information, contact Stacey Pascoe, USDA, ARS, WRRRC, Albany CA 94710; Tel: 510-559-5610; email: [spascoe@pw.usda.gov](mailto:spascoe@pw.usda.gov).

*USDA/ARS is an Equal Opportunity Provider and Employer, women and minorities are encouraged to apply.*







**Microbiologist/Research Plant Biologist/Research Molecular Biologist.** The USDA, Agricultural Research Service (ARS), Food Safety and Health Research Unit, Western Regional Research Center, Albany, California (San Francisco Bay Area) is accepting applications for the position of Microbiologist/Research Plant Biologist/Research Molecular Biologist (GS-13/14, depending upon training and experience; \$60,818 - \$93,431 per annum, plus benefits). The incumbent will be a permanent scientist in a Unit working on the biology and control of human pathogens related to poultry and fresh produce. The incumbent will lead a project to understand the biology of pathogens in agricultural environments and develop innovative new strategies for limiting the presence and virulence of pathogens. The incumbent will define approaches and plan aspects of the project involving development of methods for (1) sampling and tracking microorganisms present in environmental sources (manure, treated wastewater, compost and air samples); (2) near real-time identification of microbes present in complex environmental samples; (3) identifying metabolic pathways important in survival of human pathogens in manure or compost; (4) disrupting metabolic pathways of pathogens specifically. General objectives of the research are to better understand the biology of human pathogens in complex environments and to exploit this knowledge to develop new strategies for minimizing their survival.

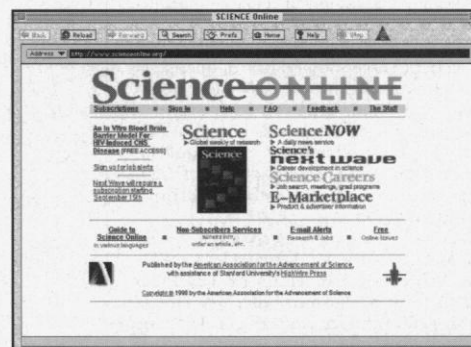
Candidates must be a U.S. Citizen. A complete copy of the vacancy announcement, and where to apply, can be found at: <http://www.ars.usda.gov/afm/hrd/resjobs/index.html>; select announcement ARS-X9W-9408; or contact Personnel at 510/559-6014. Closing date for applications is September 20, 1999. For information, contact Stacey Pascoe, USDA, ARS, WRRRC, Albany CA 94710; Tel: 510-559-5610; email: [spascoe@pw.usda.gov](mailto:spascoe@pw.usda.gov).

*USDA/ARS is an Equal Opportunity Provider and Employer, women and minorities are encouraged to apply.*

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AMERICAN ASSOCIATION FOR THE  
ADVANCEMENT OF SCIENCE

## POSITIONS OPEN

### SPECIAL ASSISTANT TO THE DEAN/SCIENCE PROGRAM DIRECTOR University of Alaska Fairbanks School of Fisheries and Ocean Sciences

Responsibilities: Provide scientific and administrative staff support to the Dean and Associate Dean of School of Fisheries and Ocean Sciences (SFOS) on a day-to-day basis and assist in a broad range of planning, management, grant, and liaison duties. Provide University of Alaska Fairbanks (UAF)/SFOS day-to-day representation on SFOS construction projects, short and long-term planning, and management for programs, laboratories, office space, and all facilities, and to serve as Science Program Director for large projects in SFOS (this presently includes oversight for the NPMR and CMI groups).

Qualifications: Required: A scientific Master's degree, demonstrated organizational/administrative skills, an ability to deal with a variety of people. Desirable: Active leadership of, or significant participation in, marine research; five or more years of professional science management; experience in research proposal preparation; good writing skills.

Salary: \$2,112.80 biweekly plus benefits.

Closing: September 27, 1999.

Contact: Send a statement of interest, professional résumé, the names and addresses of five references to: **Dr. Vera Alexander, University of Alaska Fairbanks, School of Fisheries and Ocean Sciences, Fairbanks, AK 99775-7220.**

UA is an Affirmative Action/Equal Opportunity Employer and Educational Institution. Your application for employment with UA is subject to public disclosure under the Alaska Public Records Act.

### THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER SCIENCE PARK-RESEARCH DIVISION

The M. D. Anderson Cancer Center Science Park-Research Division has outstanding opportunities at our research facility in Smithville, Texas for

#### POSTDOCTORAL TRAINEES

Postdoctoral Training positions through an NCI-sponsored training program in molecular and cellular mechanisms of carcinogenesis are available immediately. Research programs include DNA repair and mutagenesis, genetic susceptibility, role of oncogenes and/or tumor suppressor genes in multistage carcinogenesis, normal and tumor cell cycle regulation and differentiation, carcinogen metabolism and adduct formation, retrovirology, chemoprevention, and nutrition in cancer. For detailed descriptions of faculty research programs, visit our website: <http://sciencepark.mdanderson.org>.

Applicants must be U.S. citizens or permanent residents with a Ph.D., M.D., or D.V.M. degree. Contact: **Dr. Ellen Richie, Professor, University of Texas Science Park, P.O. Box 389, Smithville, TX 78957. E-mail: erichie@odin.mdacc.tmc.edu; Telephone: 512-237-9425. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITIONS** available to study the pathogenesis of HIV and human cytomegalovirus (CMV). Areas of HIV research examine factors that impact on mother-to-infant transmission, the role of macrophages, dendritic cells, viral quantification, viral phenotypes, cytokines and chemokines in HIV pathogenesis including central nervous system impairment. Additional research opportunities explore the consequences of phenotypic and genotypic antiretroviral resistance on the progression of HIV-related disease in children and mother-to-infant transmission. Ongoing research projects on CMV study the cell types, molecular mechanisms, and pathogenic significance of CMV latency and reactivation. Additional studies examine CMV genotypes that confer antiviral resistance and markers of viral pathogenicity. Applicants should provide a curriculum vitae and three letters of recommendation to: **Stephen A. Spector, M.D., University of California, San Diego, Stein Research Building, 9500 Gilman Drive, La Jolla, CA 92093-0672. FAX: 858-534-7411; e-mail: saspector@ucsd.edu.**

## POSITIONS OPEN



### POSTDOCTORAL FELLOW MUCOSAL VACCINES FOR THE THIRD WORLD

Join a multidisciplinary team developing novel antigen delivery methods and new adjuvants. The research group (two Postdoctorates, three Technicians and students) has expertise in bacterial, protozoal, and plant molecular biology, and is focused on the development of practical vaccines for the third world. You will be part of a collaboration with five other research teams at universities and small biotechnology companies to develop "edible" vaccines.

Qualified applicants should submit a letter of application, including complete curriculum vitae, to: **Dr. Tracy D. Wilkins, Fralin Biotechnology Center, West Campus Drive, MC 0346, Blacksburg, VA 24061. Website: [www.biotech.vt.edu](http://www.biotech.vt.edu). Deadline for application submission is September 30, 1999.**

Virginia Tech is an Equal Opportunity Employer.

**Two Ph.D. POSTDOCTORAL POSITIONS** are available immediately at the Breast Center, Baylor College of Medicine. Using newly designed state-of-the-art equipped laboratories, we perform breast cancer research focusing on growth factor signaling, transcription factors, nuclear matrix proteins, tumor suppressor genes, steroid receptors, and their coregulators. Candidates should be highly motivated with experience in cell and molecular biology. One project will emphasize the use of knockout mice, thus previous experience with transgenic animals is sought for one position. Minimum requirements: recent Ph.D. degree in molecular or cellular biology. Send a curriculum vitae, letter of research interests, and names of three references to:

**Dr. Steffi Oesterreich and/or Dr. Adrian Lee  
Breast Center  
Baylor College of Medicine  
One Baylor Plaza, MS: 600  
Houston, TX 77030  
FAX: 713-798-1642  
E-mail: [steffio@bcm.tmc.edu](mailto:steffio@bcm.tmc.edu)  
E-mail: [avlee@bcm.tmc.edu](mailto:avlee@bcm.tmc.edu)**

Baylor College of Medicine is an Equal Opportunity/Equal Access/Affirmative Action Employer.

### POSTDOCTORAL POSITION IN VASCULAR BIOLOGY FOR TARGETED DRUG DEVELOPMENT

A Postdoctoral position is available to develop ligand-drug conjugates that act on specific vascular beds, leading to growth inhibition of tumors or accelerated repair at sites of myocardial infarction or stroke. Basic science and drug development studies are envisioned. Applicants should possess a Ph.D. degree and have experience in angiogenesis, endothelial cell biology, pharmacology, cardiovascular biology, or related fields. Salary will be commensurate with the level of experience of the applicant. Please send cover letter and curriculum vitae to: **Dr. Philip Thorpe, The University of Texas Southwestern Medical Center at Dallas, Department of Pharmacology, 5323 Harry Hines Boulevard, Dallas, TX 75235-9041. The University of Texas Southwestern Medical Center at Dallas is an Equal Opportunity Employer.**

**POSTDOCTORAL POSITION** available immediately for studies on structure/function relationships of HIV-1 and Hepatitis C envelope proteins, including use of a novel retroviral particle display system for directed modification of immunoreactivity. The successful candidate will have experience in molecular and cell biology. U.S. citizenship or permanent visa status (green card) required. Send curriculum vitae and references to: **S. Kayman, Public Health Research Institute, 455 First Avenue, New York, NY 10024. E-mail: [skayman@phri.nyu.edu](mailto:skayman@phri.nyu.edu); FAX: 212-576-8420.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN CEREBROVASCULAR PHYSIOLOGY AND STROKE

The Department of Pharmacology and Therapeutics, University of Florida College of Medicine (website: [www.med.ufl.edu/pharm/](http://www.med.ufl.edu/pharm/)) in collaboration with the University of Florida Brain Institute (website: [www.ufl.edu/](http://www.ufl.edu/)) seeks to recruit a Postdoctoral Associate to study basic cerebral vascular physiology and stroke. Studies will include biochemical, electrophysiological, and (confocal) calcium imaging of vascular smooth muscle and endothelium in intact pressurized small brain blood vessels from animals and humans. Good dexterity and computing skills are essential. Application deadline is October 31, 1999, with a flexible start date. Check out the University and Gainesville communities as a place to work and live at website: [www.ufl.edu](http://www.ufl.edu). Applicants with expertise in one or more of the areas mentioned above are invited to send a curriculum vitae and names/telephone numbers of three references to: **Dr. Harm J. Knot, Department of Pharmacology, University of Florida, P.O. Box 100267, Gainesville, FL 32610-0267. E-mail: [hknot@pharmacology.ufl.edu](mailto:hknot@pharmacology.ufl.edu). The University of Florida is an Equal Opportunity Employer; minorities and women are especially encouraged to apply.**

### POSTDOCTORAL RESEARCH FELLOWSHIPS WEILL MEDICAL COLLEGE AT CORNELL UNIVERSITY Hospital for Special Surgery

Postdoctoral positions are available for NIH-supported research in autoimmune diseases in rheumatology (lupus, rheumatoid arthritis, and their animal models). We are seeking candidates who have a high interest in a career in academic rheumatology and/or immunology. Candidates must have a M.D. and/or Ph.D. and be a U.S. citizen or have permanent resident status. Our training program includes multidisciplinary faculty from the "Tri-Institutional Complex on York Avenue." Applicants should send their curriculum vitae, names of three references, and their career goals to: **Pam Quigley, c/o Keith B. Elkon, M.D., Hospital for Special Surgery, Cornell University Medical Center, 535 East 70th Street, New York, NY 10021. E-mail inquiries should be sent to e-mail: [quigleyp@hss.edu](mailto:quigleyp@hss.edu).**

### POSTDOCTORAL RESEARCH FELLOWSHIP WALTHER ONCOLOGY CENTER

A Postdoctoral position is available immediately to study molecular and cellular regulation of hematopoiesis and cancer. Studies focus on the molecular mechanisms involved in cytokine and chemokine-induced mobilization of stem cells, anti-apoptotic proteins, and new growth factor-regulated genes. Candidates should have a Ph.D. and a strong background in molecular and cellular biology. The Walther Oncology Center is located in the strong academic environment of Indiana University School of Medicine. Send curriculum vitae, names of three references, and a brief overview of your research background, interests, and accomplishments to: **Dr. Louis M. Pelus, Associate Director, Walther Oncology Center, 1044 West Walnut Street, Room 302, Indianapolis, IN 46202. FAX: 317-274-7492; e-mail: [lpelus@iupui.edu](mailto:lpelus@iupui.edu).**

### POSTDOCTORAL POSITION

A Postdoctoral position is immediately available to study the transcriptional regulation of cardiac development (see: *MCB* 18:3405-15, 1998). The candidate should have a Ph.D. in molecular biology or equivalent; good verbal and written communication skills; excellence in routine molecular and cell biology procedures; background in DNA-protein and protein-protein interactions, yeast genetics, and FISH preferable. Contact: **Jorge Sepulveda, M.D., Ph.D., e-mail: [jorges@bcm.tmc.edu](mailto:jorges@bcm.tmc.edu). Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.**

Applications are invited for Career and Career Track Scientific Appointments in the following areas:

- Structural studies of complex I from mitochondria
- Structural & mechanistic studies of transport proteins from mitochondria, including uncoupling proteins
- Over-expression of membrane proteins
- Bioinformatics and Proteomics in relation to the Unit's scientific programme
- Nutritional determinants of gene expression
- Nutritional and mitochondrial aspects of apoptosis
- Diet, free radicals, mitochondria, ageing and disease
- Dietary modification of energy metabolism
- Biomarkers of nutritional intake

Applications in other areas of molecular and genetic aspects of nutrition are also invited.

The Unit occupies new laboratories in the Wellcome Trust/MRC Building adjacent to the MRC Laboratory of Molecular Biology, the Cambridge Centre for Protein Engineering and the University of Cambridge Clinical School on the Addenbrooke's site in Cambridge. It has specialist facilities for electron microscopy, protein crystallography and tissue culture, a volunteer suite for nutrition studies, and the usual modern facilities for molecular biology and biochemistry. Additional information is available on the Unit's web site at [www.mrc-dunn.cam.ac.uk](http://www.mrc-dunn.cam.ac.uk).

Starting salaries are likely to be in the range £30,000 to £50,000 for Career appointments, and £25,000 to £35,000 for Career Track appointments, according to qualifications and experience. Further information about these positions can be obtained from: The Director, Dr J E Walker, MRC Dunn Human Nutrition Unit, Wellcome Trust/MRC Building, Hills Road, Cambridge, CB2 2XY.

Telephone (01223) 252701. E-mail [walker@mrc-dunn.cam.ac.uk](mailto:walker@mrc-dunn.cam.ac.uk) and from Mr. Ken McCormick at the same address. Telephone (01223) 252710. E-mail [km@mrc-dunn.cam.ac.uk](mailto:km@mrc-dunn.cam.ac.uk)

To apply, please send two copies of your CV and the names, addresses and emails of two academic referees by 24th September 1999 to : Bob Tillson, Personnel Manager, Medical Research Council Centre, Hills Road, Cambridge CB2 2QH.

Some financial assistance with relocation may be available.

**MRC**  
Medical Research Council

*The Medical Research Council is an Equal Opportunities Employer and operates a strict no smoking policy.*



Alfred Wegener Institute for Polar and Marine Research, Bremerhaven (AWI) and the Faculty of Biology/Chemistry at the University of Bremen, Germany, are inviting applications for the following lifetime position:

## Full Professor (C4) in Marine Natural Products

The candidate will head the newly established section „Marine Natural Products“ in the AWI and pursue research on chemically/biologically active substances in marine organisms. The candidate is expected to carry out basic research on secondary metabolites in close collaboration with chemists, microbiologists, molecular biologists, physiologists and ecologists of the AWI and to test potential applications of active compounds in cooperation with industrial partners.

The candidate is expected to have an outstanding research track record in the fields of chemical marine ecology and/or structural analysis and biosynthesis of natural compounds and the ability to link ecological, physiological and biochemical approaches with one another.

The candidate should be willing to participate in prolonged research cruises and is expected to teach a minimum of 2 hours per week during semester period at the Faculty of Biology/Chemistry of the University of Bremen.

Please send application letters including the outline of a research concept, together with vita and addresses of three references by September 20th. 1999 to

The Director

**Stiftung Alfred-Wegener-Institut für Polar- und Meeresforschung**

Postfach 1201 61  
27515 Bremerhaven  
Germany

Visit our website: <http://www.awi-bremerhaven.de>

AWI ist an equal opportunity employer and specifically encourages female scientists to apply.

## POSITIONS OPEN

**MASSACHUSETTS GENERAL HOSPITAL  
HARVARD MEDICAL SCHOOL  
CUTANEOUS BIOLOGY RESEARCH CENTER**  
A POSTDOCTORAL RESEARCH POSITION is available to study the mechanisms regulating skin and mammary gland development. Our laboratory uses mouse models to investigate the control of cell division and differentiation, epithelial/mesenchymal interactions, and tumor formation. Applicants should have a Ph.D. or M.D.-Ph.D. as well as experience in molecular biology. Send curriculum vitae and the names of three references (including addresses and telephone numbers) to:

Janice L. Brissette, Ph.D.  
Cutaneous Biology Research Center  
Massachusetts General Hospital East  
Building 149, 13th Street  
Charlestown, MA 02129

Website: <http://cbrc-alz.mgh.harvard.edu>

The MGH/Harvard CBRC is a committed Equal Opportunity/Affirmative Action Employer. Minorities, women, disabled, and veterans are encouraged.

## OREGON HEALTH SCIENCES UNIVERSITY MOLECULAR BIOLOGY OF MEMBRANE PROTEINS

POSTDOCTORAL POSITION(S) are available to study structural aspects (topology, folding) and mechanism of cation-transporting P-type ATPases. The strategies of mutational analysis using baculovirus-infected insect cell expression systems and protein chemistry are currently employed. Strong background in biochemistry and/or molecular biology preferred. Send curriculum vitae and names of three references to:

Professor Jack H. Kaplan, Ph.D., F.R.S.  
Department of Biochemistry and  
Molecular Biology, L224  
Oregon Health Sciences University  
3181 S.W. Sam Jackson Park Road  
Portland, OR 97201-3098

## POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

In the Center for Engineering in Medicine (Massachusetts General Hospital and Shriners Hospital) to study the activation of cells that occurs following tissue injury and in response to biomaterials. Particular emphasis will be placed on TGF- $\beta$ , extracellular matrix proteins, and the mechanisms by which these molecules govern fibroplasia. Interested candidates must have a Ph.D. in a biological science or bioengineering and should send a curriculum vitae and the names of three references to: Livingston Van De Water, Ph.D., Shriners Burns Hospital, Room 222, 51 Blossom Street, Boston, MA 02114. FAX: 617-371-4950; e-mail: [lvandewa@sbi.org](mailto:lvandewa@sbi.org).

## NITRIC OXIDE

POSTDOCTORAL POSITION open immediately for molecular biological, biochemical, and chemical studies of NO and reactive oxygen cell injury. Experience in biochemical and molecular biological techniques preferred. Send curriculum vitae to: J. R. Lancaster, Jr., Department of Physiology, Louisiana State University Medical Center, 1901 Perdido Street, New Orleans, LA 70112. E-mail: [jlancal@lsu.mc.edu](mailto:jlancal@lsu.mc.edu); website: <http://www.apnet.com/www/no/jussayno.htm>. An Equal Opportunity/Affirmative Action Employer.

## POSTDOCTORAL POSITION PENN STATE COLLEGE OF MEDICINE

To investigate molecular and biochemical aspects of a kidney metalloprotease implicated in susceptibility to diabetic nephropathy. Experience with transgenic/knockout mice preferred. Send curriculum vitae and names and addresses of three references to: Dr. Judith S. Bond, Department of Biochemistry and Molecular Biology, H171, Penn State University, Hershey, PA 17033-0850. Affirmative Action/Equal Opportunity Employer.

## POSITIONS OPEN

### INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

The National Institutes of Health has both! For more information, visit our website which lists an array of clinical and postdoctoral opportunities, including tenure-track positions.  
<http://www.training.nih.gov>  
The NIH is an Equal Opportunity Employer.

### POSTDOCTORAL FELLOWSHIP IN NEUROSURGICAL TREATMENTS OF MOVEMENT DISORDERS

A three-year Postdoctoral Fellowship position is being cosponsored by the Departments of Neurological Sciences and Neurosurgery at Rush Presbyterian-St. Luke's Medical Center to study neurosurgical approaches for the treatment of movement disorders. The successful applicant will join a large group of well-funded scientists and clinicians with similar interests, and will participate in studies examining a variety of experimental therapeutic strategies in rodent and nonhuman primate models of Parkinson's disease and Huntington's disease such as gene therapy, trophic factor administration, and neural transplantation. The applicant should have a M.D. or Ph.D. degree and experience with experimental neurosurgical procedures is desirable. Please send curriculum vitae and the names and telephone numbers of three references by mail or e-mail to: Dr. Jeffrey H. Kordower, Department of Neurological Sciences, Rush Presbyterian Medical Center, 2242 West Harrison Street, Chicago, IL 60612. E-mail: [jkordowe@rush.edu](mailto:jkordowe@rush.edu).

### POSTDOCTORAL RESEARCH ASSOCIATE SCRIPPS RESEARCH INSTITUTE

Postdoctoral positions are available to participate in a multidisciplinary group developing and applying novel tools to study the dynamics and larger-scale organization of signaling in living cells. Projects are focused on growth factor/ECM crosstalk through Rho family proteins, determination and maintenance of polarized cell movement, and control of apoptosis induction. Experience in ratio imaging, protein biochemistry, and/or molecular biology techniques would be valuable. Please send your curriculum vitae and a summary of research accomplishments and interests to: Dr. Klaus Hahn, Department of Cell Biology, Scripps Research Institute, BCC162, 10550 North Torrey Pines Road, La Jolla, CA 92037.

### POSTDOCTORAL POSITIONS HARVARD MEDICAL SCHOOL

Two positions available immediately to study molecular/cellular aspects of the intestinal epithelium in mucosal immunity and inflammation. Research will focus on antigen processing and on the regulation of intestinal barrier function using both cell-based and transgenic models. Desired qualifications include recent Ph.D. and practical experience in cellular and/or molecular biology. Please send curriculum vitae, statement of interests, and names of three references to: Robert Hershberg, M.D., Ph.D., Division of Gastroenterology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. E-mail: [rmhershberg@bics.bwh.harvard.edu](mailto:rmhershberg@bics.bwh.harvard.edu).

POSTDOCTORAL POSITION available to investigate novel immunogenic proteins involved in the pathogenesis of breast and ovarian cancer. Applicants must have a background in immunology and a strong interest in tumor immunology. The studies combine molecular biology, developmental ELISA, and cellular immunology. Send your curriculum vitae and the names of three references to: Mary L. (Nora) Disis, M.D., Division of Oncology, Box 356527, University of Washington, Seattle, WA 98195-6527. E-mail: [ndisis@u.washington.edu](mailto:ndisis@u.washington.edu); FAX: 206-685-3128.

## POSITIONS OPEN

### AEROSPACE POSTDOCTORAL FELLOWSHIPS

University of Houston System and  
NASA-L. B. Johnson Space Center

Sixteen two-year Fellowships, with a third year possible, are immediately available for research positions with the University of Houston, with research conducted at NASA-Johnson Space Center. Requires Ph.D., up to three years of relevant experience. For detailed information, additional contacts, and an application form visit the World Wide Web at website: <http://www.isso.uh.edu>. Application forms can also be obtained from: Aerospace Postdoctoral Fellowship Program, Institute for Space Systems Operations, ENL-5505, University of Houston, Houston, TX 77204-5505. Telephone: 713-743-9135; FAX: 713-743-9134.

The University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disability are encouraged to apply.

### POSTDOCTORAL RESEARCH ASSOCIATE

A Postdoctoral Research Associate position is available to characterize the interaction of the novel antibiotic bicyclomycin and derivatives with prokaryotic rho transcription termination factor. Applications are encouraged from individuals with a Ph.D. and strong interests in the areas of molecular biology, protein biochemistry, and drug design. Send curriculum vitae and the names of three references to: Dr. William R. Widger, Department of Biology and Biochemistry, University of Houston, Houston, TX 77204-5513. FAX: 713-743-8351; e-mail: [widger@uh.edu](mailto:widger@uh.edu). The University of Houston is an Equal Opportunity Employer.

POSTDOCTORAL POSITION is open in the laboratory of Jerry Simecka, Ph.D., Department of Molecular Biology and Immunology, to study the role of T helper cell subsets in the pathogenesis and resistance in mycoplasma respiratory disease in mice. Research experience in immunology and infectious disease is desirable. Send curriculum vitae and names of three references to: Human Resource Services, University of North Texas Health Science Center at Fort Worth, 3500 Camp Bowie Boulevard, Fort Worth, TX 76107-2699. The University of North Texas Health Science Center at Fort Worth is an Equal Employment Opportunity/Affirmative Action Institution.

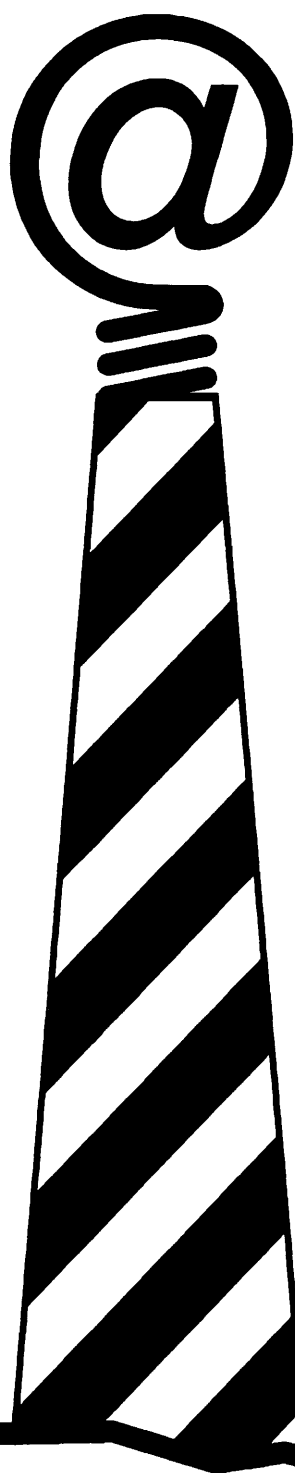
POSTDOCTORAL POSITION in molecular oncology to study the expression and function of paired domain transcription factors in cancer. A current focus is the chimeric PAX3-FKHR and PAX7-FKHR proteins generated by chromosomal translocations in rhabdomyosarcoma. Experience in molecular biology is required. Send curriculum vitae and names of three references to: Dr. Frederic G. Barr, Department of Pathology, University of Pennsylvania, 36th Street and Hamilton Walk, Philadelphia, PA 19104-6082. FAX: 215-898-4227; e-mail: [barrfg@mail.med.upenn.edu](mailto:barrfg@mail.med.upenn.edu). Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study molecular mimicry, autoimmunity, and infection utilizing animal models, transgenic mice, cellular and molecular immunology. Candidate should have experience in cellular immunology, immunochemistry, or molecular immunology. Send curriculum vitae to: Madeleine Cunningham, Ph.D., University of Oklahoma Health Sciences Center, Department of Microbiology and Immunology, e-mail: [madeleine-cunningham@ouhsc.edu](mailto:madeleine-cunningham@ouhsc.edu); FAX: 405-271-2217.

POSTDOCTORAL POSITION to study interactions of *Mycobacterium tuberculosis* with host macrophages by producing and characterizing gene knockout mutants deficient in cell wall lipid biosynthesis. Send curriculum vitae and at least three references to: P. E. Kolattukudy, Rightmire Hall, 1060 Carmack Road, The Ohio State University, Columbus, OH 43210. E-mail: [kolattukudy.2@osu.edu](mailto:kolattukudy.2@osu.edu). An Equal Opportunity Employer.



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## POSITIONS OPEN

### POSTDOCTORAL POSITION IN DIABETES RESEARCH

A Postdoctoral position is available in diabetes research to study glucose-regulation of gene expression in pancreatic beta-cells, to identify proteins involved in determining beta-cell specific gene expression, and to study the mechanisms of glucose toxicity associated with chronic hyperglycemia. See website: <http://dynamo.ecn.purdue.edu/~hankd/CV/sozcan.html>. Experience in standard molecular biology techniques, tissue and cell culture, transcription factors, signal transduction, adenoviral gene transfer, and islet isolation is desirable but not required. The anticipated start date for this position is September 1, 1999. Applicants should send a curriculum vitae and the names of three references to:

**Sabire Özcan, Ph.D.**  
Department of Biochemistry  
University of Kentucky  
College of Medicine  
800 Rose Street, Room MN 608  
Lexington, KY 40536-0298  
E-mail: [sozcan@pop.uky.edu](mailto:sozcan@pop.uky.edu)  
Telephone: 606-323-6048  
FAX: 606-257-2283

### POSTDOCTORAL POSITION

The University of Louisville has an immediate opening for a Postdoctoral student to join a NIH-funded study of the functional organization of descending projections from auditory cortex. Techniques include fluorescent multiple-tracer labeling, combined anterograde/retrograde labeling, intracellular injection, and 3-D computer reconstruction.

Please send curriculum vitae, a brief statement of research interests, and three references to:

**Brett Schofield, Ph.D.**  
Department of Anatomical Sciences  
and Neurobiology  
School of Medicine  
University of Louisville  
Louisville, KY 40292

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

### POSTDOCTORAL POSITION WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

Available in hematology in a laboratory interested in the biology and genetics of clonal blood disorders (website: <http://dbbs.wustl.edu/rib/bessler.html>). Projects include the study of hematopoiesis, immuno surveillance, and tumorigenesis in transgenic animals. Experience in cell culture and/or immunology preferred. Send curriculum vitae and three references to: **M. Bessler, M.D., Ph.D.,** e-mail: [mbessler@im.wustl.edu](mailto:mbessler@im.wustl.edu); FAX: 314-362-8826. *An Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans.*

### POSTDOCTORAL POSITION CARDIAC SIGNALING PATHWAYS

Two NIH-funded positions are available to study cardiac tissue-specific gene expression and hypertrophic signaling pathways. We utilize molecular techniques including transgenic mouse models and knockouts to investigate disease-causing pathways. Please send your curriculum vitae to: **Dr. Jeffery D. Molkentin, Children's Hospital Medical Center, Division of Molecular Cardiovascular Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039.** FAX: 513-636-5958. *Children's Hospital is an Affirmative Action/Equal Opportunity Institution.*

**POSTDOCTORAL POSITION** to study biochemical mechanisms controlling pollination. Experience with protein purification, molecular cloning, and immunological methods required. Send curriculum vitae, statement of research experience, and names of three references to: **Dr. Bruce McClure, University of Missouri, Department of Biochemistry, 117 Schweitzer Hall, Columbia, MO 65211.** MU is an Equal Opportunity/Affirmative Action/ADA Institution.

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS

The Bunting Institute at Radcliffe, a multidisciplinary residential research center, offers Fellowships for scientists, scholars, writers, artists, or activists in any field with the receipt of a Doctorate or appropriate terminal degree at least two years prior to appointment (September 2000). Office space, auditing privileges, and access to libraries and most other resources of Harvard University are provided. Residence in the Boston area and participation in the Institute community are required during 11-month Fellowship appointment (begins September 2000). Write, e-mail, or call for an application: **34 Concord Avenue, Cambridge, MA 02138.** Telephone: 617-495-8212; e-mail: [bunting\\_fellowships@radcliffe.edu](mailto:bunting_fellowships@radcliffe.edu). Application deadline (postmarked): October 1, 1999.

### POSTDOCTORAL POSITIONS ANTIVIRAL RIBOZYMES UNIVERSITY OF VERMONT

Two Postdoctoral positions are available in an established, interactive, multidisciplinary research group. Projects involve the expression and use of the hairpin ribozyme (a small catalytic RNA) in tissue culture cells as a potential therapeutic inhibitor of viral replication and as a molecular tool for specific targeting of cellular RNAs. Experience in some combination of virology, cell biology, expression vectors, or RNA localization and quantitation is desirable. Contact: **Professor John M. Burke, The University of Vermont, Department of Microbiology and Molecular Genetics, The Markey Center for Molecular Genetics, 306 Stafford Hall, Burlington, VT 05405-0068.** Telephone: 802-656-8503; FAX: 802-656-8749; e-mail: [john.burke@uvm.edu](mailto:john.burke@uvm.edu).

**POSTDOCTORAL POSITION** available. Join team studying the production of exoproteins and signaling in *S. aureus*, with particular interest in the interactions between electron transport and the production of toxins. Training in bacterial genetics, experience with gram-positive bacterial genetics is preferred. Send one-page description of background and research interest plus curriculum vitae, including names, addresses, e-mails of three references to: **Dr. Richard Proctor, Department of Medical Microbiology and Immunology, University of Wisconsin-Madison, 1300 University Avenue, Madison, WI 53706-1532.** E-mail: [rap@facstaff.wisc.edu](mailto:rap@facstaff.wisc.edu). *UW-Madison is an Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS** are available to study molecular mechanisms involved in (1) chylomicron biosynthesis and the assembly of fat-soluble vitamins into these particles (*JBC* 274:19565), and (2) protein-protein interactions in lipoprotein assembly (*JBC* 273:25612). Knowledge in molecular and biochemical techniques, protein purification, eukaryotic gene expression preferably using viral vectors, site-directed mutagenesis, or cell culture is required. Contact: **Dr. M. Mahmood Hussain, Department of Anatomy and Cell Biology, SUNY Health Science Center, Brooklyn, NY 11203.** FAX: 718-270-3732; e-mail: [egoldberg@netmail.hscbklyn.edu](mailto:egoldberg@netmail.hscbklyn.edu).

### CA CHANNELS AND FERTILIZATION UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

**POSTDOCTORAL POSITIONS** available immediately to study sperm calcium channel regulation during mammalian fertilization (see: *PNAS* 96:6757, 1999). Experience in electrophysiology is desired. Send curriculum vitae and letters from three references to: **Dr. Harvey Florman, Department of Cell Biology, University of Massachusetts Medical School, Worcester, MA 01655.** E-mail: [harvey.florman.umassmed.edu](mailto:harvey.florman.umassmed.edu).

## POSITIONS OPEN

### HIV BIOCHEMISTRY AND ENZYMOLOGY

Several **POSTDOCTORAL POSITIONS** are available in the laboratory of **Michael A. Parniak** at the McGill University AIDS Centre. Current projects include studies of the coupling between reverse transcriptase oligomeric structure and catalysis, molecular basis for HIV resistance to nucleoside and nonnucleoside inhibitors, characterization of novel nonnucleoside inhibitors of HIV reverse transcriptase-associated ribonuclease H, molecular genetic approaches to HIV therapy, and characterization of sugar-modified oligonucleotides in antisense applications. Applicants must be self-motivated, highly ambitious, and possess a good degree of scientific curiosity. A Ph.D. in chemistry or biochemistry is essential; research experience in protein biochemistry/enzymology is highly desirable. Salary minimum is MRC/NSERC base; additional remuneration possible depending on experience and demonstrated productivity. Send curriculum vitae and names/contact information of three referees to: **Dr. Michael A. Parniak, Lady Davis Institute for Medical Research, 3755 Cote Ste-Catherine Road, Montréal, Québec H3T 1E2 Canada.** FAX: 514-340-7502; e-mail: [mparniak@ldi.jgh.mcgill.ca](mailto:mparniak@ldi.jgh.mcgill.ca).

### POSTDOCTORAL POSITION IN HIV RESEARCH

Is available immediately to do NIH-funded research on HIV pathogenesis. Candidates must have a Ph.D. or M.D. degree by the time of appointment with preference for experience in molecular biology to study viral/cellular interactions (*Nature* 395:189, 1998; *J. Exp. Med.* 186:1395, 1997; *J. Virol.* 72:8650, 1998). The salary will be based on experience with a minimum of \$25,000 (the University policy on benefits will apply). *Applicants must be U.S. citizens or permanent residents.* Send curriculum vitae, three letters of reference, and summary experience to: **Dr. W. A. O'Brien, M.D., University of Texas Medical Branch, Division of Infectious Diseases, 301 University Boulevard, Galveston, TX 77555-0835.** E-mail: [wobrien@utmb.edu](mailto:wobrien@utmb.edu). *Equal Opportunity Employer.*

Applications are invited for a **POSTDOCTORAL POSITION** in molecular biology. The project investigates chromatin structure and transcription using newly developed techniques. The successful candidate is expected to have expertise in molecular biology and a willingness to be trained in the use of biophysical instrumentation that allows manipulation and examination of single molecules. This training program requires working collaboratively in the laboratories of **John Lis** (molecular biology and genetics) and **Michelle Wang** (physics). Please send a curriculum vitae and arrange to have three letters of reference sent to: **John Lis, Department of Molecular Biology and Genetics, Biotechnology Building, Cornell University, Ithaca, NY 14853.**

**POSTDOCTORAL POSITION** immediately available in neuroimmunology. The laboratory focuses on abnormal immune-brain interactions and the current ongoing research projects are in multiple sclerosis, schizophrenia, and ALS. Applicants must have extensive experience in molecular and cell biology, and immunology. Send curriculum vitae to: **Dr. Saud A. Sadiq, St. Luke's-Roosevelt Hospital Center, Columbia University, Antenucci Building, 432 West 58th Street, Room 117, New York, NY 10019.** FAX: 212-523-8859. *Equal Opportunity Employer/Minorities/Females/Disabled/Veterans. Qualified minority candidates are urged to apply.*

**POSTDOCTORAL POSITIONS** in HIV immunopathogenesis and dendritic cell vaccine research at the University of Pennsylvania. We are a multidisciplinary team of Immunologists and Molecular Biologists with projects utilizing mRNA transfection of dendritic cells for the development of vaccines to HIV and other infectious or neoplastic diseases. Send curriculum vitae and three letters of reference to: **Drew Weissman, M.D., Ph.D., Division of Infectious Diseases, 536 Johnson Pavilion, Philadelphia, PA 19104.**

## POSITIONS OPEN

### POSTDOCTORAL POSITION IN COASTAL ECOLOGY

Two-year position in the School of Fisheries will begin fall 1999 with PNCERS, a research program analyzing natural and anthropogenic sources of variation in coastal ecosystems of Oregon and Washington. We seek an individual to synthesize estuarine and coastal oceanography, salmon, and other nearshore indicator organisms, through analyses of data collected by PNCERS, concurrent research programs, and historical databases. Field sampling and one quarter of undergraduate teaching may be included. Outstanding interpersonal communication, writing, and quantitative skills are requirements; knowledge of GIS and salmonid life histories is desirable. Send letter of interest, writing sample, curriculum vitae, and contact information for three references to: **Attn: PNCERS Post Doc, University of Washington, School of Fisheries, Box 357980, Seattle, WA 98195.** Applications will be reviewed starting 20 September 1999. For more information, contact: **Julia Parrish, e-mail: jparrish@u.washington.edu.** *The University of Washington is an Equal Opportunity Employer.*

**POSTDOCTORAL/RESEARCH ASSOCIATE** position for experimental therapy projects to study (1) radioimmunoconjugates and chemotherapeutics in animal models, (2) vascular physiology in tumor and normal tissues, and (3) application of immunodetection and immunotherapy to nontumor pathophysiological conditions. Ph.D. with zero to four years of experience and knowledge in several of the following areas: immunology, physiology, cell/molecular biology, and/or histochemistry/pathology. Must have good verbal/written English skills. Starting salary is \$23,000 to \$30,000. You will be given approximately 25 percent time to work on your own independent projects and funding opportunities with the possibility of future faculty opportunity. Position available immediately. Send curriculum vitae and three references to: **Dr. Rosalyn Blumenthal, Director, Tumor Biology, Garden State Cancer Center, 520 Belleville Avenue, Belleville, NJ 07109. FAX: 973-844-7020.** *Equal Opportunity Employer.*

### POSTDOCTORAL POSITION CANCER PHARMACOLOGY

Two Postdoctoral positions are available to join a team studying the genetic determinants of tumor response to anti-cancer drugs in mouse models of gastrointestinal cancer. Focus is on inhibitors of the S-phase enzyme thymidylate synthase. More detailed information can be found at our website: <http://www.biol.sc.edu/faculty/berger.html>. Candidates must have a Ph.D. and experience in biochemistry and/or molecular biology. Send a recent curriculum vitae, along with names of three references to: **Dr. Franklin G. Berger, Professor and Chair, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208. E-mail: berger@biol.sc.edu.**

### POSTDOCTORAL POSITION

Funded position available to study the role of nitric oxide in epithelial barrier function using molecular biology and biochemistry. Experience in gene regulation or immunohistochemistry is desirable. Attractive salary and benefits package. Please send curriculum vitae and three references to: **Russell Delude, Ph.D., Department of Anesthesiology/CCM, University of Pittsburgh, A-1305 Scaife Hall, 200 Lothrop Street, Pittsburgh, PA 15261. FAX: 412-648-4977; e-mail: deluder1@smtp.anes.upmc.edu.**

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## POSITIONS OPEN

**POSTDOCTORAL POSITION** available to investigate in the areas of lung development, extracellular matrix, and smooth muscle myogenesis. Strong background in molecular biology is essential. Applicants should send a curriculum vitae and three letters of recommendation to: **Dr. Lucia Schuger, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201.** For additional information, please contact: **Dr. L. Schuger, e-mail: lschuger@med.wayne.edu.** *Wayne State University is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the neurobiology of food intake and body weight regulation in animal models. Ph.D. with experience in neuroendocrinology, neuroscience, and/or molecular biology preferred. Send curriculum vitae and three letters of reference to: **Dr. Abhiram Sahu, Department of Cell Biology and Physiology, University of Pittsburgh School of Medicine, S329 BST, 3500 Terrace Street, Pittsburgh, PA 15261. FAX: 412-383-7159; e-mail: asahu@vms.cis.pitt.edu.** *Equal Opportunity Employer.*

## EUROPEAN OPPORTUNITIES



### FACULTY OF MATHEMATICS AND NATURAL SCIENCES UNIVERSITY OF BERGEN Department of Research and Education

**POSTDOCTORAL RESEARCH POSITION** under the project "Applications of Molecular Techniques in Systematic Biology." Postdoctoral Research position in insect molecular systematics. More information at website: <http://www.zoo.uib.no/forsking/molsys/SUPHOME1.html>. For further details please contact: **Lawrence Kirkendall, Department of Zoology, Allégt 41, Bergen 5007 Norway. E-mail: lawrence.kirkendall@zoo.uib.no; FAX: +47-55589675. Deadline: 17 September 1999.**

## GLOBAL OPPORTUNITIES

**POSTDOCTORAL POSITION** available immediately in a team dedicated to novel gene discovery in the areas of obesity and NIDDM. The position involves validation of new genes, and applicants should have experience in molecular biology, protein analysis, and protein interactions. The position is initially for a period of one year, with the possibility of extension. Salary will be commensurate with experience. Contact: **Prof. Greg Collier, Metabolic Research Unit, Deakin University, Geelong, Victoria 3217 Australia. E-mail: beacon@deakin.edu.au.** *Equal Opportunity is University policy.*

## SYMPOSIUM

**MOLECULAR LIBRARY TECHNOLOGIES AT THE MILLENNIUM.** October 24-26, 1999; Holiday Inn, Chinatown, San Francisco. Organizers: **D. Burton, J. Larrick, J. Marks.** Sponsor: **Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043 USA. Telephone: 650-694-1420; FAX: 650-694-7717; e-mail: paimm@netgate.net.** Details, website: [www.pano.com/paimm](http://www.pano.com/paimm).

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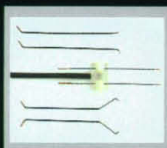
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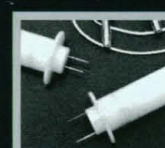
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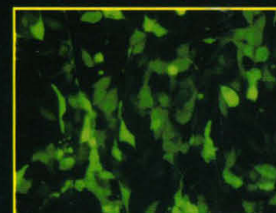
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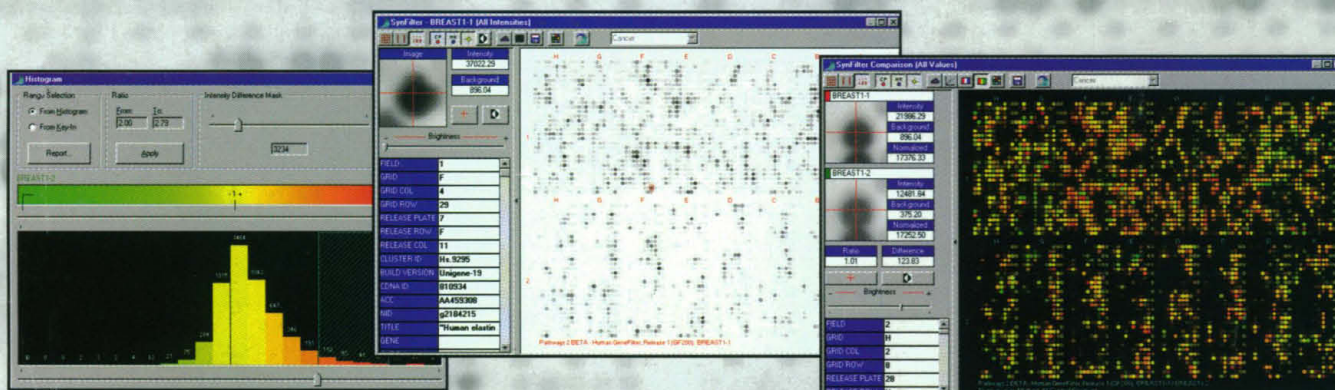
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- Ref 1. Lennon, G., Auffray, C., Polymeropoulos, M., Soares, M.B. (1996) *Genomics* 33, 151-152.  
2. <http://www.ncbi.nlm.nih.gov/UniGene/index.html>  
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