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The ApoAlert Mitochondrial Membrane Sensor Kit provides a simple, fluorescence method for distinguishing between healthy and apoptotic cells by detecting changes in the mitochondrial membrane potential that occurs during the early stages of apoptosis. The fluorescence signals are easily distinguished by microscopy or flow cytometry.

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The *PROTEIN-Concentrate* Kit is a simple method of concentrating protein solution by using a proprietary Universal Protein Precipitation Reagent. Protein solution as dilute as 1 µg/ml can be quantitatively concentrated into a small volume. Protein precipi-

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tation is not affected by the presence of detergents, chiotropic agents, or other common laboratory reagents. The kit is suitable for concentrating protein for running gels, raising antibodies, protein purification, protein assays, and other applications.

THERMO SEQUENASE II

Thermo Sequenase II is a new enzyme for sequencing DNA. It offers several important advantages over its predecessor, including shorter cycling times, greater efficiency in difficult-to-read regions of DNA (so-called trouble spots with a high concentration of G-C pairings), toleration of high-salt conditions, and better incorporation of dyes, resulting in easier clean-up steps. The enzyme is combined in two new sequencing kits with new DYEnamic ET Terminators, which feature a novel rhodamine-based energy transfer system that can be used on all instrument platforms.

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LITERATURE

4500 Series Orbital Shakers brochure includes specifications, features, and four-color photos for this complete line of tabletop and console model shakers. Accessories include the universal test tube holder, which can be adjusted to fit any of four test tube rack sizes. The shakers all incorporate a microprocessor, audible and visible temperature tracking alarms, a patented heavy-duty eccentric drive, and large speed ranges.

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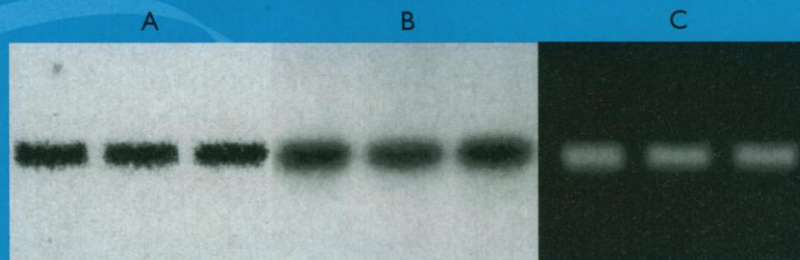
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Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics,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

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POSITIONS OPEN

THE UNIVERSITY OF CHICAGO

The Department of Neurobiology, Pharmacology, and Physiology at the University of Chicago invites applications for tenure-track positions at the **ASSISTANT** and **ASSOCIATE PROFESSOR** levels. New faculty will participate in the expanding research and teaching programs of the Department's Pharmacology program. Teaching opportunities are available in the Collegiate and Graduate Divisions and in the Pritzker School of Medicine. We are particularly interested in candidates working in (i) molecular and structural pharmacology and (ii) behavioral neuropharmacology with an emphasis in the area of substance abuse. The successful candidates will join a multidisciplinary department composed of 22 primary faculty and eight joint appointees with research interests in the neurobiology of disease, developmental neurobiology, neuropharmacology, membrane receptors, signal transduction and second messenger mechanisms, membrane transport, structure and function of ion channels, vestibular and systems physiology, cytoskeleton, secretory pathways, and cell growth regulation. Applicants should provide a brief statement of research interests and plans, curriculum vitae and bibliography, and the names of three individuals who are willing to write letters of recommendation to:

Dr. Sangram Sisodia
Pharmacology Search Committee
The University of Chicago
947 East 58th Street
Chicago, IL 60637

From the time of its original charter, the principle of the University of Chicago has been to appoint scholars without regard to race, color, religion, sex, or national origin.

UNIVERSITY OF HOUSTON DEPARTMENT OF PHARMACOLOGICAL AND PHARMACEUTICAL SCIENCES

Several tenure-track positions at the rank of **ASSISTANT**, **ASSOCIATE**, or **FULL PROFESSOR** are available. Applicants must have a Doctorate and post-doctoral experience. The research areas of interest could include any aspect of cellular and molecular approaches to drug action, drug delivery, or related areas. Successful candidates will be expected to develop and/or maintain an extramurally funded research program and participate in professional and graduate teaching. Generous start-up packages are available. Candidates should submit curriculum vitae, summary of research interest, and the names of three references to: Dr. Karim Alkadhi, Chair, Search Committee, Department of Pharmacological and Pharmaceutical Sciences, College of Pharmacy, University of Houston, Houston, TX 77204-5515. Applications should arrive before November 1, 1999, and will be reviewed upon receipt. *The University of Houston is an Equal Opportunity/Affirmative Action Employer; minorities, women, veterans, and persons with disability are encouraged to apply.*

North Carolina State University seeks an **ASSISTANT PROFESSOR** in the Department of Animal Science. This tenure-track position (80 percent research, 20 percent teaching) is a component of a campuswide effort to build a genomics program. Responsibilities include developing a research program on the molecular basis of genes influencing economic traits of livestock. The application of vertebrate model systems to identify candidate genes, develop comparative genome-wide screening methods, and cross-species mapping procedures are appropriate approaches. Qualifications include a Ph.D. degree in animal genetics or molecular genetics, postdoctoral experience, and an interest in the genetics and biology of animals used for food production. Application deadline: October 15, 1999. Submit a letter of interest, curriculum vitae, original transcripts, and three letters of reference to: Dr. Kenneth L. Esbensen, Head, Department of Animal Science, Box 7621, North Carolina State University, Raleigh, NC 27695-7621. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN



University of Connecticut Health Center

TENURE-TRACK FACULTY POSITIONS IN GENETICS AND DEVELOPMENTAL BIOLOGY *Drosophila* Genetics

The newly created Department of Genetics and Developmental Biology at the University of Connecticut School of Medicine is seeking highly qualified individuals with an outstanding background in the genetics and molecular biology of *Drosophila*. Areas of interest include, but are not limited to, morphogenesis and patterning, genetic control of cell growth and differentiation, nuclear structure and function, DNA replication, recombination and repair, and mechanisms of gene regulation.

Applications are invited for positions at the **ASSISTANT**, **ASSOCIATE**, or **FULL PROFESSOR** level. Departmental faculty will enjoy superb resources including generous start-up funds and space in a new research building. There are state-of-the-art core facilities for mouse transgenics and ES cell manipulation, nucleic acid sequencing, flow cytometry, confocal microscopy, and fluorescence imaging. Faculty will be expected to establish independent and innovative research programs that will attract extramural funding and to actively contribute to a rich scientific environment.

Candidates should apply by submitting a curriculum vitae and names of three references by October 31, 1999, to: Marc Lalande, Ph.D., Professor and Chairman, Department of Genetics and Developmental Biology, The University of Connecticut Health Center, School of Medicine, 263 Farmington Avenue, Farmington, CT 06030-3301.

DEPARTMENT OF CELLULAR AND STRUCTURAL BIOLOGY

The University of Texas Health Science Center
at San Antonio

The Department of Cellular and Structural Biology has a number of tenure-track faculty positions available at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. The Department is particularly interested in recruiting qualified applicants undertaking research in the following areas: aging, cancer, functional genomics, immunology, or neurobiology and the ability/willingness to teach in one of the Department's professional courses. Interested individuals should submit their curriculum vitae, a statement of research and teaching interests and experience, and three letters of recommendation to: Dr. Robin Leach, Chair, Cellular and Structural Biology Search Committee, CSBL, The University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284-7762. Applications received prior to December 1, 1999, will be considered. *The University of Texas is an Equal Employment Opportunity/Affirmative Action Employer.*

Luther College invites applications for two tenure-track appointments at **ASSISTANT PROFESSOR** rank beginning September 2000. One position requires primary competence in microbiology; the other position requires primary competence in physiology. Both positions require participation in a team-taught principles of biology course. Ph.D. required; teaching and postdoctoral experience desirable. Candidate will be expected to direct undergraduate students in research appropriate to their area and to seek external funding for research. Commitment to undergraduate teaching and research in the context of a liberal arts college essential; visit our department homepage for more information ([website: www.luther.edu/~biodept](http://www.luther.edu/~biodept)). Review of applications will be completed by October 15, 1999. Send letter of application, curriculum vitae, three letters of recommendation, and transcripts of undergraduate and graduate work to: Dr. Jim Eckblad, Head, Department of Biology, Luther College, Decorah, IA 52101-1045. E-mail: eckblad@luther.edu. *An Equal Employment Opportunity Employer.*



National Institutes of Health /

THE NATIONAL INSTITUTE ON AGING, (NIA) mission is to improve the health of older Americans by supporting and conducting research on the processes of aging, on age-related diseases, and on the special health problems and needs of the aged. **The Intramural Research Program (IRP)**, comprises nine scientific laboratories and a research program that include the scientific disciplines of biochemistry, cell and molecular biology, genetics, behavioral sciences, epidemiology, statistics, and clinical research. The basic science laboratories include many unique training resources and core facilities such as transgenic & knockout mice, mouse and human cDNA arrays, confocal imaging, mass spectroscopy, NMR and flow cytometry. The clinical branch combines basic science/biomedical research and clinical investigation with patient care. The NIA IRP provides postdoctoral training to highly motivated physicians and Ph.D's at the Gerontology Research Center in Baltimore, Maryland and on the National Institutes of Health campus in Bethesda, Maryland.

POSTDOCTORAL APPOINTMENTS

Post-doctoral positions are available for those with less than 5 years postdoctoral training in the following areas:

**NIH-NIA-GERONTOLOGY
RESEARCH CENTER -
BALTIMORE, MARYLAND
www.grc.nia.nih.gov**

■ Laboratory of Cardiovascular Science

A postdoctoral position is available immediately to join the ongoing research program directed at the development of methods of application of gene therapy for treatment of coronary and peripheral vascular diseases and heart

failure. A successful candidate should hold a Ph.D., M.D., or equivalent degree, with a strong background in cardiovascular physiology, cardiac and vascular functional assessment in vivo, experience in microsurgery and animal experimentation on an organismic level, and knowledge of the principles of molecular biology and genetics.

Correspondent: Dr. Mark Talan
E-mail: talnm@grc.nia.nih.gov

The Receptor Signaling Unit will have a postdoctoral position available in the Fall of 1999. Candidates should hold a M.D. or Ph.D. with physiological or pharmacological research experience and expertise. The main research direction of the candidate will be focused on G-protein-coupled receptor mediated modulation of cardiac function at cellular and subcellular levels.

Correspondent: Dr. Rui-Ping Xiao
E-mail: xiaor@grc.nia.nih.gov

An immediate postdoctoral position is available to study cardiac excitation-contraction coupling using patch clamp techniques and confocal microscopy.

Correspondent: Dr. Konstantin Bogdanov
E-mail: BogdanovK@grc.nia.nih.gov

* Laboratory of Molecular Genetics

A postdoctoral position is available to study DNA repair and the molecular defects in human premature aging syndromes.

Correspondent: Dr. Vilhelm A. Bohr
E-mail: BohrV@grc.nia.nih.gov

A postdoctoral position in immunology is available immediately to study somatic hypermutation in immunoglobulin variable genes. The research will focus on identifying the genes involved in the mutation mechanism, using knockout

mice and DNA microarray systems.
Correspondent: Dr. Patricia Gearhart
E-mail: gearharp@grc.nia.nih.gov

Postdoctoral fellowship available to investigate uses of DNA damage and DNA Repair molecular pathways and technology as tools in clinical medicine. Ongoing research projects center on understanding the mechanisms responsible for the cellular response to genotoxic agents and interactions between the DNA repair pathways and signal transduction pathways. Candidate should have strong background in DNA damage/repair, signal transduction, and molecular biology techniques especially in vitro DNA repair assays and Single Cell Gel Electrophoresis Assay (COMET).
Correspondent: Dr. Michele K. Evans
E-mail: me42v@nih.gov

♦ Laboratory of Cellular and Molecular Biology

A candidate is sought to join a multidisciplinary team to investigate the neurological effects of cancer chemotherapy in rat models in order to identify possible therapeutic approaches to alleviate these effects. The successful candidate will have experience in neurotoxicology, behavioral neuroscience, or neurophysiology. The appointed individual will share the resources and opportunities afforded a by multi-investigator biomedical research program.

Correspondent: Dr. Donald K. Ingram
E-mail: DONI@vax.grc.nia.nih.gov

* Laboratory of Clinical Investigation

A postdoctoral position is available immediately for a postdoctoral fellow interested in molecular biology of ion channels and calcium signaling mechanisms in human cardiac and vascular cells. The

National Institute on Aging



selected candidate will work with a team to explore these issues using a multifaceted approach. The incumbent must have experience in DNA mutagenesis, cDNA epitope library screening, eukaryotic transfection, genotyping, and transgenic molecular biology.

Correspondent: Julita Nieve
E-mail: nievej@grc.nia.nih.gov

NIH-NIA BETHESDA, MARYLAND

■ Laboratory of Neuroscience

A postdoctoral position is available to study the dynamic aspects of brain phospholipid metabolism in awake rodent models using intravenously injected labeled long chain fatty acids, related to mechanisms of action of lithium and to genetic models of brain dysfunction. Experience desired in analytical methods for fatty acids and phospholipids (quantitative HPLC, GLC, TLC), Northern and Western blotting and other molecular biology techniques.

Correspondent: Dr. Stanley I. Rapoport, Chief, SBPM

Please mail a curriculum vitae including bibliography and three letters of recommendation to: National Institute on Aging, Building 10, Room 6C103, Bethesda, MD, 20892 Or e-mail (text or attached MS Word File) to: **E-mail: sir@helix.nih.gov**.

*** Epidemiology, Demography,
and Biometry Program**
www.nih.gov/nia/edb/edb.htm

The program is seeking a scientist to conduct research in statistical methodology applied to data relevant to the epidemiology and demography of aging, including physical and cognitive function, disability, Alzheimer's disease,

other health conditions and mortality. Experience in planning and conducting research projects in devising, developing or modifying methods to solve complex statistical problems is required as well as experience in applying appropriate analytic methods to large epidemiologic data sets using packages such as SAS, SPSS, SUDAAN, S-PLUS, and custom software. The position requires experience working on large scale research projects using statistical and epidemiologic techniques.

Correspondent: Dr. Dwight Brock

Please mail a curriculum vitae including bibliography and three letters of recommendation to: National Institute on Aging, Gateway Bldg., Suite 3C309, 7201 Wisconsin Avenue, MSC-9205, Bethesda, MD, 20892-9205 Or e-mail (text or attached MS Word File) to: **E-mail: BrockD@exmur.nia.nih.gov**.

To apply for a postdoctoral position at the Gerontology Research Center please send curriculum vitae with publication list and three letters of recommendation to the correspondent. If you are unable to contact the correspondent using e-mail, you may send the information to:

**National Institute on Aging
Gerontology Research Center
Attn: Correspondent's Name
5600 Nathan Shock Drive
Baltimore, MD 21224-6825**

Application deadline for all
postdoctoral positions is
October 15, 1999

**NIH is an Equal Opportunity
Employer**

Staff Scientist: Research Veterinarian Research Resources Branch

The National Institute on Aging (NIA) and the National Institute on Drug Abuse (NIDA) invite applications for a veterinarian to oversee the AAALAC International accredited animal care and use in the Intramural Research Programs of both Institutes. The Programs include primates, rodents and other species at the Bayview [Baltimore, Maryland] campus of the NIH. Candidate will oversee the staff of the current animal resources service of NIA and NIDA. The applicant will provide expert supervision in routine and molecular diagnostics, veterinary pathology, surgical support, immunohistochemistry and immunopathology. The candidate must possess experience with management and supervision of a transgenic breeding animal facility. Candidate must also be able to pursue independent research with extensive knowledge of current cell biology and molecular techniques.

The supervisory and regulatory responsibilities of this position require the applicant to hold a veterinarian degree (D.V.M., V.M.D., or equivalent degree). The qualified candidate must have experience in a supervisory role with oversight and maintenance of an AAALAC International accredited research animal program. Prior experience with a variety of nonhuman primates (*Macaca mulatta*, *Saimiri sciureus*) is essential. Applicants must have a record of scientific accomplishments, including excellence in laboratory research. Eligibility for ACLAM Board certification in laboratory animal medicine or veterinary pathology and a Ph.D. degree (in pathology or related field) are highly desirable.

Starting salary is commensurate with qualifications and experience.

Applicants should send curriculum vitae, bibliography of publications and 1,000 word overview of a proposed independent research program and arrange for three letters of reference, at least two from noncollaborators to: National Institute on Aging, Gerontology Research Center, Personnel Office-Box #26, 5600 Nathan Shock Drive, Baltimore, MD 21224-6825. Correspondent: Dr. Dennis Taub
E-mail: Taubd@grc.nia.nih.gov
Vacancy # AG 99-24 (please include the vacancy # on the application)

Application deadline for the Research Veterinarian position is October 1, 1999.

• **DIRECTOR** •

DIVISION OF DRUG MARKETING, ADVERTISING, & COMMUNICATIONS

The Food and Drug Administration (FDA) is seeking a Director for the Division of Drug Marketing, Advertising, and Communications, Office of Medical Policy, Center for Drug Evaluation and Research. Their mission is to assure that prescription drug information is truthful, balanced, and accurately communicated.

The Director will manage a multi-disciplinary scientific and administrative staff of approximately forty people who are responsible for monitoring and evaluating prescription drug promotions and advertising. As the Agency's expert on promotion and communication of information regarding pharmaceutical products, the director is responsible for proposing FDA policy in this area and for developing regulations to implement the advertising and promotional labeling provisions of the Federal Food, Drug and Cosmetic Act. This position is located at FDA's headquarters in Rockville, MD.

QUALIFICATIONS: Basic qualifications require a degree in the physical, life sciences or social sciences. Candidates should possess knowledge of a field or fields of medical science (e.g., pharmacology, chemistry, and pharmacy) and the use of

prescription drug products sufficient to enable evaluation of drug literature, advertising, labeling and marketing material. This permanent position can be filled as either Civil Service or U.S. Public Health Service Commissioned Corps., both require U.S. citizenship.

HIGHLY DESIRABLE: A doctorate degree with at least two years post-doctorate experience in a scientific discipline; a law degree; experience training in food and drug law; experience in advertising, communications, leadership; management abilities to direct complex scientific programs; and, the ability to deal effectively with high level government and pharmaceutical industry officials, and representatives of the scientific and academic communities.

SALARY RANGE: \$80,658 to \$104,851 per annum. The federal government offers an excellent benefit package.

HOW TO APPLY: Application for this position must be made on or before September 30, 1999. Please indicate that you are applying for the Director position. Submit curriculum vitae to:

FOOD AND DRUG ADMINISTRATION
Center for Drug Evaluation and Research
7520 Standish Place, MPN1, Rm. 225, HFD-64
Rockville, MD 20855
Attention: (SRC 99051)
Fax: (301) 827-2860

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New York University

**HEAD OF THE DIVISION
OF GROWTH AND
DEVELOPMENTAL SCIENCES**

New York University College of Dentistry (NYUCD), a member of the New York University system, seeks applications for the position of Head of the Division of Growth and Developmental Sciences. NYUCD, the third-oldest private dental college in the United States, is a large, highly diverse institution closely affiliated with the Mount Sinai-NYU Medical Center and Health System. This position offers a singular opportunity to guide the academic and clinical activities of the Departments of Pediatric Dentistry and Orthodontics, including both undergraduate and postgraduate programs; to enhance the Division's research activities in conjunction with a planned Clinical Research Center; and to develop and implement a Divisional strategic plan consistent with that of the College and University. The ideal candidate will exhibit a proven track record of organizational leadership, a successful history of developing faculty, and a demonstrated commitment to dental education, clinical care, and research. Applicants must have a DDS/DMD, MD, or equivalent degree; established credentials as an administrator; and demonstrated scholarly distinction appropriate to a tenured appointment at the Associate or Full Professor level in the College of Dentistry. The successful candidate will preferably have advanced training in pediatric dentistry and/or orthodontics, and hold a Ph.D. in a related field, such as Epidemiology, Oral Biology, Developmental Biology, or Genetics. Candidates with an affiliated medical background will be seriously considered. **Applicants should forward a cover letter and Curriculum Vitae, including names, addresses, and phone numbers of at least four references, no later than September 15, 1999, to: Dr. Robert Davidson, Chair, Search Committee, NYU College of Dentistry, Division of Basic Sciences, 345 East 24th Street, New York, NY 10010-4086.** An equal opportunity employer. NYU encourages applications from women and minority groups.

**The Department of Biology
at the University of Northern Iowa**

(www.bio.uni.edu) invites applications for two tenure-track assistant professor positions, one in **Science Education** and another in **Vertebrate/Wildlife Biology**, effective August 2000. The successful candidates will be expected to develop a research program that involves undergraduate and master's students, and includes the potential to collaborate with faculty colleagues. The successful candidates will also be expected to contribute to the general education and master's programs of the department, and to teach selected courses from among the following depending on the candidate's expertise:

Activity-Based Life Science (for Elem. Education majors)
Science Education methods classes
Natural History Interpretation
Wildlife/Natural Areas Management
Field Zoology of Vertebrates

A Ph.D. in a biological science, or doctorate in science education with equivalent of an M.S. in a biological science, is required. Candidates who will complete the Ph.D. or Ed.D. by the date of appointment are encouraged to apply. Applicants with prior teaching experience, either informal (parks, museum, etc.) or at the university or K-12 levels are preferred. Faculty members are expected to seek extramural funding. Applications must be received by October 15, 1999, to be given full consideration. Please submit a curriculum vitae, undergraduate or graduate transcripts, a statement of research interests and goals, a statement of teaching preferences including qualifications to teach courses from the above list, and have three letters of reference sent to:

Dr. Jill Trainer, Chair of Search Committee
Department of Biology
University of Northern Iowa
Cedar Falls, IA 50614-0421

Fax: (319)-273-7125, Email: jill.trainer@uni.edu

The University of Northern Iowa is an inclusive academic community, hospitable to all. The University of Northern Iowa is an equal opportunity educator and employer with a comprehensive plan for affirmative action. The department encourages applications from minority persons, women, Vietnam era veterans, and disabled persons.

Growth through Discovery



Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, has maintained an outstanding track record of innovation through scientific research to discover drugs for unmet medical needs. Focused on the future, we continue our global success in an environment that recognizes and rewards the individual and team contributions of our diverse colleagues. As we continue to experience rapid growth, we have the following opportunities to join our state-of-the-art research facility in ANN ARBOR, MICHIGAN:

INFECTIOUS DISEASES

Associate Scientist/Senior Associate Scientist Job Code: RJB-99674SC

Joining the ongoing antibacterial discovery program, you will assist in identifying and characterizing new molecular targets, and investigating the mechanisms of action of antibacterial compounds. To qualify, you must have a BS or MS degree in a scientific speciality related to microbiology, bacterial genetics or molecular biology and approximately 2-5 years of laboratory experience. Experience working with a gram positive bacterial system is helpful.

Senior Associate Scientist/Associate Scientist Job Code: RJB-99673SC

The qualified candidate will assist a Senior Investigator in the testing of novel inhibitors of virus replication and apply research skills in the area of molecular biology to characterize the mechanisms of action and antiviral compounds. In addition, you will be part of a team examining the mechanism of action of antiviral compounds in *in vitro* and *in vivo* models of viral pathogenesis and latency. To qualify, you must have a BS or MS degree in Microbiology, Virology or Molecular Biology. Requires a minimum of 2 years of postgraduate training and extensive experience in molecular biology and tissue culture. Some *in vivo* experimental protocol assistance will be required.

PHARMACOKINETICS DYNAMICS & METABOLISM

Assistant Scientist/Senior Assistant Scientist Job Code: RJB-99641SC

Assisting with the set-up and conduct of all phases of laboratory studies, you will be involved with the preparation and administration of test compounds. In addition, you will handle radiolabeled compounds, collect samples, perform surgery, and order and stock supplies and equipment. To qualify, you must have a BS degree in Biology, Animal Science, Pharmacology (or related discipline), and experience working with a variety of laboratory species, as well as performing or assisting in surgery. Requires excellent interpersonal skills, and experience working with computers (Word, Excel, databasing). Scheduled overtime (off-hours or weekend sample collection) will be expected.

NEUROSCIENCE

Research Associate Job Code: RJB-99643SC

Interacting with other scientists in Neuroscience Therapeutics, you will be involved with the development and characterization of novel transgenic models of Alzheimer's Disease (AD), identification of new targets for drug discovery in neurodegenerative diseases, and development of assays for advancing drug discovery in AD. To qualify, you must have a Ph.D. in molecular neuroscience/transgenic modeling and at least 2 years of postdoctoral experience. Preference will be given to candidates who are knowledgeable about the molecular pathology of AD and are able to generate and characterize transgenic models of the disorder. Candidates without transgenic experience, but with exceptionally strong programs in molecular and cellular pathogenesis of AD, may also be considered. Expertise in transgenic models and/or molecular biology of Alzheimer's disease and neurodegenerative diseases is essential.

BIOCHEMISTRY

Scientist/Senior Associate Scientist Job Code: RJB-99647SC

As part of the assay development group within Biochemistry you will be responsible for generating novel cell-based assays utilizing proprietary technologies for use in ultra high through-put screening. Familiarity with mammalian cell transfection, cloning and characterization is required. To qualify, you must have one of the following: a Ph.D. with 0-2 years experience; an MS degree with 3-6 years of experience; or a BS degree with 7-8 years of experience. All degrees to be in Cell Biology, Biochemistry or a related field.

CELL BIOLOGY

Postdoctoral Fellow Job Code: RJB-996126SC

The qualified candidate will participate in research directed toward the identification of pathways that regulate cardiac muscle-specific gene expression in the normal and diseased heart. To qualify, you must have a Ph.D. in one of the biological sciences and provide evidence of quality experience in molecular biology related to transcriptional regulatory mechanisms. Additional expertise in one or more of the following areas is preferred: integrative physiology, adenoviral vectors, and gene targeting by homologous recombination.

We offer competitive salaries, outstanding benefits, and an environment that's 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, 2800 Plymouth Road, Ann Arbor, MI 48105. Fax: (734) 622-7617. E-mail: humanresources.resume@wl.com.

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Utah State UNIVERSITY

HEAD

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Applications are invited for the position of Head of the Department of Chemistry and Biochemistry at Utah State University. Qualified applicants will have a Ph.D. in Chemistry, Biochemistry, or a related area, and will currently hold the rank of Professor. In addition, applicants should have an internationally recognized research program with excellent teaching credentials at the undergraduate and graduate levels, and an established record of university and professional service. Excellent administrative and leadership skills as needed to promote the development of a dynamic department with diverse research, teaching, and service responsibilities and goals are also required. A strong commitment to support scholarly activity in all areas of Chemistry and Biochemistry research and teaching is necessary. Applications from qualified women and minorities are strongly encouraged.

Utah State University is a Land Grant Institution with an enrollment of 16,000 undergraduates and 4,000 graduate students. The University is located in Cache Valley, 90 miles north of Salt Lake City, in the Wasatch Range of the Rocky Mountains. The Department of Chemistry and Biochemistry offers Ph.D. and M.S. degrees in Chemistry and Biochemistry and B.S. and B.A. degrees in Chemistry with several areas of emphasis. Over 130 classes are taught by faculty in the Department each year. The Department is currently composed of 18 tenure track faculty, one lecturer, 6 support staff, 54 graduate students, and 100 undergraduate majors.

The completion of a new \$25 million teaching and research facility is anticipated in December of 1999, which will bring the total space for the Department to 124,000 square feet. The Department has a strong record of attracting extramural support (currently approximately \$2 million per year). More information about the University and Department can be found at www.usu.edu/ and www.chem.usu.edu/.

The search committee will begin reviewing applications on September 30, 1999 and will continue until the position is filled. Applications for the position should include a complete vita, and the names, mailing addresses, phone numbers, and e-mail addresses of five references and should be sent to: **Department Head Search Committee, Department of Chemistry and Biochemistry, Utah State University, 0300 Old Main Hill, Logan UT 84322-0300.**

Further inquiries can be directed to Beth Blaser at blaser@cc.usu.edu or 435.797.1618.
Utah State University is an equal opportunity/affirmative action employer.

New York University

EXPERIMENTAL PHYSICAL/ BIOPHYSICAL CHEMISTRY DEPARTMENT OF CHEMISTRY

The Department of Chemistry at New York University invites applications for a tenure-track (or tenured) faculty position in experimental physical/biophysical chemistry to begin September 1, 2000, pending final administrative and budgetary approval. The department is undergoing a major development effort that includes multiple faculty appointments within the next three years, as well as major improvements in shared laboratory and instrumentation facilities. Newly hired faculty members will be able to participate in these efforts. Candidates should have a very strong research record and should be committed to teaching. Applications are sought from outstanding candidates at the Assistant Professor level or from candidates at the early tenure level. However, the appointment of distinguished candidates with an outstanding and proven track record in research and teaching will also be considered at a senior level. Please submit application including CV, three publications, a statement of research plans, and three letters of reference by **December 1, 1999** to: the Search Committee for Physical/Biophysical Chemistry, New York University, 100 Washington Square East, New York, NY 10003. Website: <http://www.nyu.edu/pages/chemistry/>.

NYU encourages applications from women and members of minority groups.

BECKMAN INSTITUTE FELLOWS PROGRAM

Applications are invited for postdoctoral fellowships at the Beckman Institute for Advanced Science and Technology at the University of Illinois at Urbana-Champaign. The Beckman Institute is a multi- and interdisciplinary research center that focuses on three main research themes: Biological Intelligence, Human-Computer Intelligent Interaction, and Molecular and Electronic Nanostructures (<http://www.beckman.uiuc.edu>).

The Beckman Institute Fellows Program provides an excellent opportunity for young scholars to initiate a post-Ph.D. career of independent research in a stimulating and supportive interdisciplinary environment. The fields of research encompassed by the fellowship program include the behavioral and biological sciences, chemistry, physics, and engineering.

Year 2000 Fellows will be appointed for up to 3 years, beginning as early as June 2000, and no later than December 2000. The stipend is \$44,000/year, plus benefits and a research budget. Selection of Fellows is based on evidence of professional promise, capacity for independent work, outstanding achievement to date, and interdisciplinary research interests corresponding to one or more of the Institute's programs. To be eligible, the Ph.D. must have been held for no more than 4 years (i.e., received no earlier than December 31, 1995).

APPLICATION PROCEDURE: Application packets should be requested from: bielefel@uiuc.edu or Kim Bielefeld at 217-244-5582. Please include your full mailing address.

DEADLINE: A postmark of no later than Friday, January 7, 2000. Announcement of Fellows on or about April 15, 2000.

The Beckman Institute Fellows Program is supported by funding from the Arnold and Mabel Beckman Foundation. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

2000

Postdoctoral Positions Biochemistry/Molecular Biology

The University of Michigan Medical School, Department of Dermatology is seeking highly motivated, creative scientists to fill postdoctoral fellowship positions. Research focuses on molecular mechanisms through which ultraviolet irradiation activates protein kinase signal transduction cascades leading to expression of gene products associated with destruction of connective tissue in human skin. These studies will also investigate the role of reactive oxygen species and cellular anti-oxidants as mediators of the ultraviolet irradiation response in human skin. Candidates with training in biochemistry, molecular biology and cell biology (immunohistology and in situ hybridization) are urged to apply. Selected applicants would join a 50-member multidisciplinary research team studying molecular mechanisms of skin repair. The ongoing comprehensive research effort provides a unique opportunity to study regulation of signal transduction and gene expression at the molecular level in a human organ *in vivo* (*Nature*, 379:335-339, 1996; *New England Journal Medicine* 337(20):1419-1428, 1997; *JCI* 101: 1432-1440, 1998; and *Nature Medicine* 5(4):418-422, 1999).

Send *curriculum vitae* and references to:

Dr. Gary Fisher, Department of Dermatology, University of Michigan, 1150 W Medical Center Drive, Med Sci I 6447, Ann Arbor, MI 48109-0609. FAX (734) 647-0076, e-mail: dianemch@umich.edu.

We encourage applications from candidates who will enrich and contribute to the cultural diversity of our University.

1.2 MILLION NEW CANCER CASES ARE DIAGNOSED ANNUALLY IN THE U.S. ALONE.

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Amgen, Inc., one of the world's leading biotechnology companies, has recently initiated a major effort in cancer research. We are now seeking to significantly expand our current cancer biology research group. This group is focused on the discovery and development of novel anticancer agents using the latest available information, techniques and approaches. In addition to state-of-the-art research facilities, Amgen has extensive in-house expertise in genomics, enabling full exploitation of our proprietary EST database.

CANCER RESEARCH SCIENTIST (Ad Code: 373)

Applications are encouraged from highly motivated, creative individuals who wish to participate in a rigorous research program in cancer therapeutics. Applicants must have knowledge and expertise in the molecular aspects of tumorigenesis, preferably in one of the following areas: signal transduction, growth control, immortalization/senescence, apoptosis, or cancer genetics. Candidates should be interested in utilizing novel techniques, including gene expression array analysis, high throughput screening, and genomics database searching. Skills and experience in tumor models (both in vitro and in vivo) are also required. Must be able to work effectively in a team environment and allocate resources towards the group's success. Good communication skills and a solid publication record are musts. Ph.D. and 2-4 years postdoctoral training in a related field essential. Excellent academic credentials preferred.

RESEARCH ASSOCIATE (Ad Code: 374)

This is an excellent opportunity to participate in a research program to develop cancer therapeutics. Our ideal candidate will have a Master's degree in biology or a related field, with 5+ years experience working in a productive research laboratory. Must have solid molecular and cell biology skills; experience and knowledge in cancer biology preferred. Good communication skills and a demonstrated ability for creative thinking essential.

At Amgen, you will find our approach to research as rewarding as it is effective. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center, and three weeks of vacation. Please mail your resume, indicating appropriate Ad Code, to: **Amgen Staffing, Ad Code _____, P.O. Box 2569, Thousand Oaks, CA 91319-2569** or e-mail in ASCII text to: **jobs@amgen.com**, Attn: Ad Code _____. Visit our website: **www.amgen.com**
EEO/AA Employer M/F/D/V

AMGEN®



Department of Biology

BIOINFORMATICS

The Department of Biology of the University of Waterloo invites applications for two **TENURE TRACK** positions. The successful candidates will help launch a new joint Computer Science – Biology undergraduate program in Bioinformatics and will contribute to our research strength in a relevant discipline such as molecular biology, molecular evolution, molecular genetics, molecular systematics, proteomics, or genomics. Appointments will be at the **ASSISTANT PROFESSOR** or junior **ASSOCIATE PROFESSOR** level. Applicants must have a Ph.D. and be prepared to establish an active research program. Duties will include research, teaching at the undergraduate and graduate levels, and graduate student supervision.

Salary will be commensurate with qualifications and experience. Applicants should send their curriculum vitae, the names of three individuals willing to furnish letters of reference, and an outline (1–2 pages) of their proposed research program to: **Dr. William D. Taylor, Professor and Chair, Department of Biology, Faculty of Science, University of Waterloo, Waterloo, Ontario, N2L 3G1 CANADA.** The closing date for applications is **September 30, 1999.**

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. These appointments are subject to the availability of funds. Additional information on the Department is available at <http://www.science.uwaterloo.ca/biology/biology.html>



University of Pennsylvania Department of Pathobiology

Applications are invited for a tenure track faculty position to work in the area of oncology. Research in the Department of Pathobiology is focused on cellular and molecular mechanisms of disease, and this position is broadly defined as someone working in tumor biology with a focus on disease mechanisms. The position could be filled by an individual who uses animal models of cancer and/or who applies molecular approaches to examine basic aspects of oncology. Areas of interest include signal transduction, host immunologic responses, cell cycle control, molecular manipulations of tumor cells such as gene therapy, mechanisms of neoplastic transformation, angiogenesis, genetics, tumor virology, or metastasis.

The individual chosen will have the opportunity to collaborate with basic scientists and clinical oncologists within the School of Veterinary Medicine as a member of the Mari Lowe Center for Comparative Oncology, and in the Abramson Cancer Center within the School of Medicine. There also are numerous opportunities to interact with faculty at the Wistar Institute, the Institute for Human Gene Therapy, and the Fox Chase Cancer Center. The individual selected will be expected to establish an independent extramurally funded research program, and will participate in the teaching of veterinary and graduate students. Candidates must have a PhD, a PhD/VMD, or a PhD/MD, or equivalent and have sufficient post-doctoral experience to demonstrate both significant accomplishments and outstanding promise. We anticipate this appointment to be at the Assistant Professor level but outstanding individuals could be considered for a more senior level position.

Send curriculum vitae, a statement of research interest and the names of 3 references by **October 15, 1999** to: Chair, Search Committee, Department of Pathobiology, School of Veterinary Medicine, University of Pennsylvania, 216 Rosenthal, 3800 Spruce Street, Philadelphia, PA 19104-6008.

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NRL • Naval Research Laboratory
Oceanographic Science and Technology

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When it comes to understanding and applying knowledge of the maritime environment, the U.S. Navy must remain at the forefront. The Naval Research Laboratory is the Navy's corporate laboratory performing basic research and applied development to meet Navy, Department of Defense and national needs in oceanography. We are seeking a dynamic scientific leader.

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- Provides executive direction for all affairs of the Division including personnel, programs, equipment, facilities, administration, etc.
- Applicants should have national/international recognition
- Applicants must have planned and executed difficult programs of national significance, and/or specified programs that show outstanding attainments in their field of research.

Please call 202-767-3030 to request a copy of the vacancy announcement and the Senior Executive Service Qualifications pamphlet to assist you in addressing the executive core qualifications. If you require further assistance, please call Mrs. Beverly Scott on (202) 767-3789. Refer to Announcement Number 98-01A when calling. For consideration, applications **must be postmarked** by 20 September 1999.



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www.nrl.navy.mil • 4555 Overlook Ave SW, Washington DC 20375

Faculty Positions in Skeletal Biology University of Connecticut Health Center

The School of Dental Medicine of the University of Connecticut Health Center is seeking candidates for tenure-track positions at the Associate Professor or Professor level with established research programs in skeletal biology. Appropriate research areas include:

- use of genetically engineered mice to study craniofacial growth and development
- human genetic diseases of the craniofacial skeleton/mouse models of the disease
- tissue specific gene regulation in craniofacial tissues
- cell and developmental biology of mineralized tissues (bone, cartilage, and tooth)
- stem cells, particularly as related to regeneration of teeth and tooth support tissues
- cell/biomaterial interactions or growth factor/gene therapy as related to regeneration of craniofacial skeletal tissues.

Candidates should lead nationally/internationally recognized research programs of distinction in areas of skeletal biology and have experience in a broad range of techniques of modern cell and molecular biology. Candidates should have a doctoral degree, a strong record of research and training accomplishments and an ability and interest in collaborating with other researchers. Interested individuals should send a letter expressing interest in the position, a current CV, a description of current research programs and the names of three references to:

Katherine Thompson
Department of BioStructure and Function
School of Dental Medicine
University of Connecticut Health Center
263 Farmington Avenue
Farmington, CT 06030-3705 USA

An Affirmative Action/Equal Opportunity Employer

**Director, Division of Neuroscience and Basic Behavioral Science
National Institute of Mental Health
National Institutes of Health**

The National Institute of Mental Health (NIMH) is seeking applications for the position of **DIRECTOR, DIVISION OF NEUROSCIENCE AND BASIC BEHAVIORAL SCIENCE**, a major component of the Extramural Program.

The Director of the Division of Neuroscience and Basic Behavioral Science (DNBBS) will provide leadership in the overall scientific administration of a comprehensive extramural research program in mental health; stimulate the expansion of resources for mental health research both nationally and internationally; and actively participate in determining program priorities and funding levels. The Director, DNBBS, will oversee a budget of approximately \$250 million per year and a staff of 50 employees.

As Director, DNBBS, the incumbent will be responsible for the development, direction, coordination and evaluation of grant programs and activities of the Division. The Division supports a wide range of basic and clinical neuroscience research, genetics and therapeutics research, basic behavioral research, research training, resource development, and research dissemination, to further understand the etiology, treatment and prevention of brain disorders.

The ideal candidate should possess: leadership and management experience in a basic, clinical, or behavioral research program of national standing; a M.D. or Ph.D. degree in Psychiatry, Psychology, Neuroscience, Psychobiology, or related field (or equivalent training); extensive knowledge of and experience in the neurosciences, behavioral sciences, or psychobiology and their relationship to mental illness and related brain disorders. Applicants should provide written documentation of how they meet the following requirements: 1) Knowledge and ability to lead a scientific program of national and international scope involving neuroscience and basic behavioral science; 2) Ability to provide leadership/management and vision to a large multi-disciplinary research program of national scope and complexity with extensive managerial and executive level responsibilities.

This position is located in the Headquarters of NIMH in Bethesda, Maryland, and is a tenured/permanent position in the Senior Executive Service (SES). Annual salary range is \$110,351 to \$125,900 per annum, depending on qualifications. Physicians may be eligible for a Physicians Comparability Allowance of up to \$20,000 per year. A recruitment bonus of up to 25% may be available to a non-Federal candidate selected for this position OR a relocation bonus of up to 25% may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. The full range of generous Federal benefits, retirement, and vacation are included.

HOW TO APPLY: Applicants must submit a curriculum vitae, resume, Application for Federal Employment, OF-612, or any other equivalent written format that address the requirements AND a bibliography. Application procedures and qualification requirements may be accessed on the NIH Web site at: <http://www1.od.nih.gov/ohrm/hrinfo/ses/vacancy>.

SEND APPLICATIONS TO: Ms. Margot Darby, NIMH Personnel Management Branch, 6001 Executive Boulevard, Room 8154, MSC 9661, Bethesda, Maryland 20892-9661 (domestic U.S. Mail); OR Rockville, Maryland 20852 (FedEx, UPS, etc.). Applications will also be accepted via e-mail and may be sent to mdarby@mail.nih.gov. If you need further information about this position you may contact Ms. Darby at 301-443-9094.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, political affiliation, marital status, disability, age, sexual orientation or membership or non-membership in an employee organization.

APPLICATIONS WILL BE ACCEPTED THROUGH SEPTEMBER 30, 1999.

NIH is an Equal Opportunity Employer

**University of Minnesota
Department of Pharmacology
Predoctoral, Postdoctoral &
Research Associate Positions**

The Department of Pharmacology, University of Minnesota Medical School, has Predoctoral and Postdoctoral openings in several fields. Our faculty members are well-funded and direct strong interdisciplinary research programs.

Areas of emphasis include:

Molecular biology, biochemistry, immunology, and neurobiology-neurochemistry

Molecular cloning of receptors and signal transduction

Regulation of Gene Expression (also use of transgenic and gene targeting technology)

Intracellular electrophysiology, ion channels

Biochemical/molecular pharmacology
Cancer chemotherapy, immunopharmacology, drug metabolism, enzymology, and anti-viral drugs

Interested applicants for predoctoral positions should write to the Director of Graduate Studies for more information. Postdoctoral applicants should send a curriculum vitae, statement of research interests, and names of three references to **Dr. Horace H. Loh, Professor and Head**. The address for predoctoral, postdoctoral and research associate applicants is: **Department of Pharmacology, University of Minnesota, 6-120 Jackson Hall, 321 Church Street SE., Minneapolis, MN 55455.**

The University of Minnesota is an equal opportunity educator and employer.

Amgen seeks an Associate Scientist to participate in drug-oriented R&D projects in the area of metabolic diseases. This position provides an exciting opportunity to enter the forefront of drug discovery research in the world's leading biopharmaceutical company. Selected individual will work on developing cell-free and cell-based assays for high throughput screening, performing experiments using in vitro and in vivo systems, and identifying novel therapeutic target genes using genomics - or proteomics-based approaches.

ASSOCIATE SCIENTIST

The successful candidate will possess extensive research experience in the area of molecular and cellular enzymology obtained in a competitive academic or industry setting. Requires an advanced degree (MS or Ph.D.) in molecular cell biology or enzymology and a proven record of scientific accomplishments, as supported by scientific publications or patents.

Hands-on experience in molecular cloning, cell-free enzymatic reaction assays and cell-based assays is preferred. Direct working experience in ubiquitination and proteolysis studies is highly desirable. Amgen is conveniently located in Southern California between Santa Barbara and Los Angeles. Salary and benefits are highly competitive and commensurate with experience.

To apply, please send resume to:
Amgen Staffing, Ad Code 375, P.O. Box 2569, Thousand Oaks, CA 91319-2569 or e-mail: jobs@amgen.com,
Attn: Ad Code 375.

Visit our website at www.amgen.com

EEO/AA Employer M/F/D/V Principals only, please.

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Postdoctoral Fellowships in Tissue Engineering

The Pittsburgh Tissue Engineering Initiative (PTEI), a non-profit academic consortium, announces an innovative two-year postdoctoral fellowship program in Tissue Engineering, supported by a major foundation grant. Two fellows will be selected this year. They will pursue training in one of seven focus areas: Artificial Organs, Bioimaging, Biomaterials, Bone and Muscle, Gene Therapy, Stem Cell Biology and Transplantation.

The PTEI is a unique consortium of all the major universities in Pittsburgh, Pennsylvania. It has links to many biotechnology companies in the southwestern Pennsylvania region. Potential training sites for fellows thus encompass all the programs and laboratories within this network.

Inter-institutional training sites for each focus area will be selected by the fellow and the PTEI program officers on an individualized basis. Each fellow will also learn aspects of intellectual property protection and product commercialization. At the end of the two-year fellowship, many attractive employment opportunities in the expanding biotechnology enterprise in southwestern Pennsylvania should be available.

We encourage both national and international applicants for the two fellowship positions offered this year. Persons with Ph.D., M.D., and related advanced degrees are eligible. Proficiency in written and spoken English is required. Starting dates will be between October 1, 1999 and April 1, 2000. A very competitive salary and benefits package will be provided.

For further information and application materials, please contact:

Anne Immekus, Administrator
Pittsburgh Tissue Engineering Initiative, Inc.
425 Sixth Avenue, Suite 1810 • Pittsburgh, PA 15219
Phone: 412-395-4200 • Fax: 412-395-4208
E-mail: aimmekus@ptei.org

PTEI is an equal opportunity employer.



PITTSBURGH TISSUE ENGINEERING INITIATIVE, INC.

ASSISTANT PROFESSOR FACULTY POSITIONS

The University of Texas M.D. Anderson Cancer Center, Science Park—Research Division, is entering a new recruitment phase and expanding into new laboratories. Applications are being accepted for several tenure-track positions at the Assistant Professor level from individuals with 3–5 years postdoctoral or independent research experience and strong publication records. Research at Science Park focuses on cellular and molecular mechanisms involved in carcinogenesis and mechanism driven cancer prevention.

For one position, we seek applicants working in the area of mechanism-based cancer chemoprevention/dietary intervention. For the other positions, preference will be given to applicants working in the general area of molecular and genetic mechanisms underlying cancer development. Candidates with expertise in genomics, proteomics and advanced gene targeting approaches are encouraged to apply; however, outstanding candidates with other areas of expertise will also be considered. Successful applicants will be expected to establish high-quality, independent research programs that complement our ongoing research activities. It is also expected that successful candidates will participate in our graduate training program.

The Science Park is located in a rural park-like setting in Smithville, Texas, just outside of the state capitol of Austin, in the beautiful Texas hill country. Ongoing research activities of the faculty are described in our website at <http://sciencepark.mdanderson.org/>. Excellent start-up funds, salary, and benefits package will be provided as well as access to numerous state-of-the-art equipment, communication, research and service facilities.

Submit curriculum vitae, two representative publications, a brief outline of current and future research plans, and three letters of reference by October 15, 1999 to: **Dr. Cheryl Walker, Chair, Search Committee, c/o Mrs. Mary Lou Fendley, University of Texas M.D. Anderson Cancer Center, Science Park - Research Division, P.O. Box 389, Smithville, TX 78957.**

Equal Opportunity/Affirmative Action Employer.



Post Doctorate Research Fellow

Staten Island University Hospital, a progressive, state-of-the-art facility, has a funded position for a motivated Ph.D. or MD, with U.S. citizenship or permanent Visa status, to join a newly developed program in gene therapy for Parkinson's disease. Experience in the ex vivo manipulation and cellular engineering of human cells, gene expression system, transfection, transduction and rat models of PD preferred.

We offer a competitive salary and outstanding benefits. For consideration, please e-mail, fax or send resume to: **Human Resources, Staten Island University Hospital, 475 Seaview Avenue, Staten Island, NY 10305. Fax: (718) 226-8255; E-mail: joy_barone@siuh.edu.** We are an equal opportunity employer with a smoke free work environment.



Mayo Clinic

Molecular Immunology

NIH supported postdoctoral positions are available to study:

- 1) Mechanisms of T-cell homeostasis in autoimmune disease
- 2) Expression and function of MHC Class I recognizing receptors in autoimmune disease
- 3) Mechanisms of arterial occlusion in inflammatory vasculopathies

Candidates should have a PhD or MD and have experience in cellular immunology and molecular biology. Applications, including curriculum vitae and names of three references, should be sent to:

Cornelia M. Weyand, MD or Jorg J. Goronzy, MD
Departments of Immunology
and Medicine/Rheumatology
Mayo Clinic
200 First Street SW
Rochester, MN 55905
e-mail: weyand.cornelia@mayo.edu
goronzy.jorg@mayo.edu

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



Postdoctoral Fellowship

The Laboratory of Gastrointestinal Oncology and New Drug Development at MSKCC is seeking a postdoctoral fellow to study the molecular mechanisms of chemotherapy induced apoptosis. These studies involve the use of cell cycle specific inhibitors which are currently in clinical development. Special consideration will be given to applicants with experience in silencing of gene expression by methylation and CHIP technology, involving isolation of differentially expressed genes. Applicants should have a Ph.D. degree with extensive experience in molecular and cellular biology. Previous postdoctoral research experience is desirable. Send C.V., bibliography, and names of three references to:

Dr. Gary K. Schwartz
Chief, Laboratory of GI Oncology
and New Drug Development
Memorial Sloan-Kettering Cancer
Center
1275 York Avenue
New York, NY 10021
Telephone: (212) 639-8324
FAX: (212) 717-3320
e-mail: Schwartzg@mskcc.org

Laboratory of Molecular and Developmental Biology, National Eye Institute, National Institutes of Health, has a postdoctoral position available for the study of glaucoma using molecular biology approaches. Research projects include identification and characterization of genes involved in glaucoma formation using animal models. A background in molecular/cellular/developmental biology is desirable. Applicants must be U.S. citizens or permanent residents. Applicants must have less than 5 years postdoctoral experience. Starting salary ranges from \$27,500 to \$38,000 per year depending upon experience. Please send curriculum vitae, bibliography, and the names and addresses of 3 references to:

Dr. Stanislav Tomarev
Laboratory of Molecular and
Developmental Biology
National Eye Institute
NIH, Building 6, Room 2A04
6 Center Drive MSC 2730
Bethesda, Maryland 20892-2730
Tel. 301-496-8524
Fax 301-496-8760
e-mail: tomarevs@intrane.nih.gov
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EMPLOYER



R&D PROFESSIONALS

**NEW PRODUCTS ARE
YOUR LIFEBLOOD.**

OURS TOO.

When we at Johnson & Johnson ask "what's new?", we're not speaking casually. We're reflecting a belief we all share —innovation is key. Because it is our ongoing innovation of products that help people, like Risperdal and Retin-A, that leads to the ongoing success of Johnson & Johnson, the world's leading health care company.

If you have an intense desire to make our next innovation your claim to fame, the opportunity is now open at the following operating company.



THE R.W. JOHNSON
PHARMACEUTICAL RESEARCH INSTITUTE

The R.W. Johnson Pharmaceutical Research Institute, located in Raritan, New Jersey, conducts pharmaceutical research in therapeutic areas including anti-infectives, central nervous system, dermatology and oncology.

Postdoctoral Fellow Drug Discovery

Cloning and expressing nuclear receptor coactivator proteins, your primary responsibilities will include creating and running receptor coactivator assays. Ideal candidates will have a Ph.D. in biological science and some Postdoctoral training. You must have working knowledge of molecular and cellular biology and expert knowledge of nuclear hormone receptors. This is a 2 year Postdoctoral assignment with an option for renewal for a third year based on performance. **Req #: 99665SCI**

Postdoctoral Scientists Signal Transduction in T-cell Activation and Innate Immunity

These positions are part of ongoing basic research projects investigating signalling from IL-1, TNF, LPS, and Toll-like receptors and from co-stimulatory receptors on T-cells. The projects are fundamental in nature, with publication of results expected. The Department offers a wide variety of expertise, technology and support.

The ideal applicant will be a Ph.D. candidate or recent Ph.D. graduate with 0-2+ years' postdoctoral experience in immunology, molecular biology, cell biology or a related discipline. Experience in basic molecular biological techniques and familiarity with signal transduction mechanisms are required. **Req #: 992639SCI**

Some recent publications regarding the research described above:

1. **IRAK requirement for optimal induction of multiple IL-1 signaling pathways and IL-6 production.** (1998) J. Exp. Med. 187: 2073-2079.
2. **Defective IL-18 mediated Th1 and NK response in IL-1 receptor associated kinase (IRAK) deficient mice.** (1999) J. Exp. Med. 189: 1129-1138.
3. **p38 alpha mitogen-activated protein kinase is activated by CD28-mediated signaling and is required for IL-4 production by human CD4+CD45RO+ T cells and Th2 effector cells.** (1999) J Immunol. 162: 7110-9.
4. **T cell activation signals up-regulate p38 mitogen-activated protein kinase activity and induce TNF-alpha production in a manner distinct from LPS activation of monocytes.** (1999) J Immunol. 162: 659-68.

As a valued team member, you'll receive a competitive salary and great benefits including medical/ dental, a 401(k), a pension plan and a comprehensive wellness program. We strongly encourage individuals to apply on-line at www.jnj.com or forward a scannable resume, noting **Req #**, to: Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597. We are an equal opportunity employer totally committed to diversity.

Johnson & Johnson

FOR FURTHER DETAILED INFORMATION REGARDING JOB RESPONSIBILITIES,
WE HIGHLY RECOMMEND YOU VISIT OUR WEB SITE.

www.jnj.com



The University of Texas at Austin

FACULTY POSITIONS

Developmental Genetics

Section of Molecular Cell and Developmental Biology and the Institute for Cellular and Molecular Biology

Positions are open for one or more faculty members who are using genetic model systems (*C. elegans*, *Drosophila*, mouse, zebrafish, *Arabidopsis*) for the analysis of development. Candidates must have a Ph.D. or similar degree. While we are primarily interested in candidates at the Assistant Professor level, exceptional applicants at other levels will also be considered. The successful candidates will be expected to build a vigorous, well-funded research program and to teach at the undergraduate and graduate levels. Generous start-up funds and salary are available. The ICMB provides state-of-the-art facilities for molecular biology.

The molecular biology community at The University of Texas at Austin is in an exciting phase of rapid growth. Recent MCDB/ ICMB hires include Mark Estelle and Paul Macdonald. Applications will be considered from October 15 until the positions are filled.

Austin is a beautiful, stimulating and highly livable city with natural springs, large lakes and green hill country.

To apply, please send a CV, a brief statement of research interests, representative publications and email addresses/phone numbers for at least three references to:

Dr. Janice A. Fischer, Chair, Developmental Genetics Recruitment Committee
Section of Molecular Cell & Developmental Biology, BIO 311
The University of Texas at Austin
Austin, TX 78712

Homepages • <http://www.icmb.utexas.edu>
<http://vize222.zo.utexas.edu/utcdb/mcdb.html>

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The University of Texas at Austin

FACULTY POSITION

Molecular Genetics and Microbiology and The Institute for Cellular and Molecular Biology

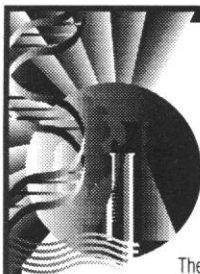
The Section of Molecular Genetics and Microbiology at The University of Texas at Austin, in partnership with the Institute for Cellular and Molecular Biology, invites applicants for a tenure-track faculty position at the Assistant Professor level. A second position may become available. We are a scientifically diverse faculty working in both prokaryotic and eukaryotic systems and are especially interested in applicants in the areas of molecular genetics, transcription, genomics, signal transduction, molecular pathogenesis and nucleic acid-protein interactions. Outstanding applicants in other areas and at more senior levels will also be considered. The position offered is highly competitive with regard to start-up funds, salary and laboratory space. Applications received prior to November 15, 1999 will be considered first.

Austin, located on the eastern edge of the Texas Hill Country, is widely recognized as one of America's most attractive and livable cities.

Please send curriculum vitae, list of publications, a short (1-2 page) research plan, and three letters of recommendation to:

Dr. Robert M. Krug
Section of Molecular Genetics and Microbiology and
The Institute for Cellular and Molecular Biology
The University of Texas at Austin
2500 Speedway
Austin, Texas 78712-1095

Homepages • <http://www.esb.utexas.edu/microbio> and <http://www.icmb.utexas.edu>
The University of Texas at Austin is an Equal Opportunity Employer.
Qualified women and minorities are encouraged to apply.



SUPPORT THE EXPLORATION OF NEW FRONTIERS IN SCIENCE AND TECHNOLOGY

The **Lawrence Berkeley National Laboratory** advances the frontiers of science and technology to build the foundations for America's future - exploring the complexity of energy and matter, advancing the science for affordable clean energy, understanding the structure and function of human biological systems, and operating the scientific, computing and information systems.

Scientific, technical and administrative support staff are needed to work directly with research teams labwide in these exciting frontiers. The Berkeley Laboratory offers excellent compensation and the University of California (UC) benefits such as UC retirement and investment plans; 15 days paid vacation accrued during the first year of employment; and many excellent career development opportunities, including tuition reimbursement, various training classes and seminars, reduced UC fee enrollment, library privileges, discounts and access to recreational facilities. The Berkeley Laboratory is also an affirmative action and equal opportunity employer committed to the recruitment and retention of a diverse workforce.

We currently have open positions across the Lab and interviews are in progress for:

Research Associates

Research Associate is a job series that has a career ladder of Research Associate, Senior Research Associate, Principal Research Associate and Staff Research Associate. For more details on open positions, please visit our website at www.lbl.gov/CJO.

Please submit one copy of your resume via email (our preferred method) to: employment@lbl.gov (no attachments, please). Reference job number **WF/JSCI** in your cover letter. Or mail to: **Lawrence Berkeley National Laboratory, One Cyclotron Road, MS 937-0600, Berkeley, CA 94720**. Or fax: **(510) 486-5870**. Visit our website at: www.lbl.gov. Berkeley Lab is an AA/EEO employer.



Faculty Positions Department of Biology University of Pennsylvania

The Department of Biology expects to make two tenure track appointments, one in **Ecology** and one in **Plant Biology**.

Ecology: we are seeking a broadly trained ecologist whose research has implications for understanding large scale processes and patterns in ecology. The ideal candidate will complement and interact with existing faculty whose strengths lie in population and community ecology and evolutionary biology.

Plant Biology: individuals using molecular, genetic, biochemical and/or biophysical approaches to study the mechanism(s) of basic plant processes are encouraged to apply. The successful candidate will also become an active member of the Plant Science Institute.

Candidates will be expected to teach at the undergraduate and graduate levels in addition to maintaining a vigorous, independent research program. While we expect that the two appointments will be at the Assistant Professor level, outstanding senior applicants will also be given serious consideration. Applicants should send a curriculum vitae, at least three letters of recommendation, and up to three reprints or manuscripts to:

Chair, Ecology or Plant Biology Search Committee
Department of Biology
University of Pennsylvania
Philadelphia, PA 19104-6018

Review of applications will begin on Oct. 1, 1999. Further information on the Department of Biology can be found at www.sas.upenn.edu/biology

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

Women and minorities are encouraged to apply.

ANNOUNCEMENT

RAPID ACCESS TO PREVENTIVE INTERVENTION DEVELOPMENT - "RAPID"

National Cancer Institute

The National Cancer Institute announces a new initiative: Rapid Access to Preventive Intervention Development (RAPID). RAPID will make available to academic investigators the preclinical and early clinical drug development contract resources of NCI's Division of Cancer Prevention. The goal of RAPID is the rapid movement of novel molecules and concepts from the laboratory to the clinic for clinical trials of efficacy. RAPID will assist investigators who submit successful requests by providing any (or all) of the preclinical and phase 1 clinical developmental requirements for phase 2 clinical efficacy trials. These include, for example, preclinical pharmacology, toxicology, and efficacy studies; bulk supply, GM manufacturing, and formulation; and regulatory and IND support and phase 1 clinical studies. Suitable types of agents for RAPID may range from single chemical or biological entities to defined complex mixtures with the potential to prevent, reverse, or delay carcinogenesis. For more detailed information, visit the web site, <http://dcp.nci.nih.gov/CB/>

Requests for RAPID resources are to be submitted as described in the web site. Written requests will be evaluated by a specially constituted RAPID panel, consisting of selected NCI staff and outside experts from academia and industry. Requests must be received on or before November 1, 1999. Applications should be submitted directly to the office listed below. Inquiries are encouraged, and the opportunity to clarify issues or questions is welcome. See also NIH Guide, release date April 29, 1999. Please contact:

RAPID

James A. Crowell, Ph.D.
Division of Cancer Prevention, NCI
Executive Plaza North, Suite 201
6130 Executive Blvd.
Bethesda, MD 20892

Rockville, MD 20852 (for express/courier service)
telephone (301) 594-0459
fax (301) 402-0553, (301) 594-2943
email: jc94h@nih.gov

Associate Director

for the Development of Research Technologies, NIAID, NIH

The National Institute of Allergy and Infectious Diseases (NIAID), Division of Intramural Research (DIR), NIH seeks a dynamic individual to provide the vision of technology development required to support the future goals of the DIR and to develop plans to ensure the availability of technologies needed to serve the approximately 125 DIR investigators. The individual will be responsible for supervising Division-wide shared research support resources, overseeing and coordinating the implementation of accounting procedures for services provided, overseeing the development, management and monitoring of contracts for the shared technical support services, and serving as the DIR liaison to NIAID and NIH committees and boards concerned with the advancement and delivery of technology support to research groups. Preference will be given to qualified candidates with experience directing and managing an active research technology program for the Federal Government, academic or other research or commercial organization. Salary will depend upon experience and qualifications. Interested persons may contact Dr. Karyl Barron, Deputy Director, DIR, NIAID at kbarron@nih.gov for additional information about this position. A curriculum vitae, bibliography, three letters of reference and a statement of qualifications and interests must be submitted by **October 15, 1999** to Ms. Dorothy Mellott, Office of Human Resources Management, NIAID, 31 Center Drive, MSC 2520, Bethesda, MD 20892-2520. Please reference vacancy announcement number AI-99-127. U.S. Citizenship is not required.

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MOUNT SINAI
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Faculty Positions

Physiology and Biophysics

The Department of Physiology and Biophysics at Mount Sinai School of Medicine is seeking outstanding candidates for tenure-track positions. Successful candidates will use modern techniques to address fundamental problems in any area of physiology and biophysics within the context of an integrated biological system. They will be expected to establish externally-funded research programs, and to contribute to the graduate and medical educational programs of the department. The academic rank is open, from assistant professor to full professor, with ample resources commensurate with rank and experience.

The Department of Physiology and Biophysics includes programs in Theoretical & Molecular Biophysics, Structural Biology, Sensory Control Mechanisms & Development, Integrative Neuroscience, and Cellular Neurophysiology & Neural Plasticity. Our diverse interests are enhanced by productive interactions among investigators working in these various areas. More information is available at: <http://www.mssm.edu/physbio/>

Mount Sinai School of Medicine is in the midst of a major expansion of basic research. Major interdepartmental recruitment efforts are underway in several areas of modern biology that will complement and strengthen our own department. These include Neurosciences, Genomics & Bioinformatics, Structural Biology, and Signal Transduction. Mount Sinai provides a superior research environment that includes modern core facilities and a new research building that has nearly doubled the research space in the institution.

For consideration, send C.V., three letters of support, a summary of research accomplishments and future research plans to: **Drs. Margolskee & Kaplan, Co-Chairs, Integrative Physiology Search Committee, Department of Physiology & Biophysics, Box 1677, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.**

Robert F. Margolskee, M.D., Ph.D.	Ehud Kaplan, Ph.D.
Associate Professor	Jules & Doris Stein RPB Professor
Depts. of Physiology & Biophysics, Pharmacology	Depts. of Ophthalmology, Physiology & Biophysics
Associate Investigator	
Howard Hughes Medical Institute	Mount Sinai School of Medicine
margolskee@msvax.mssm.edu	kaplane@rockvax.rockefeller.edu

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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.



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/

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



Genomics, Bioinformatics and Computational Biology

The Lawrence Berkeley National Laboratory (LBNL) and the University of California, Berkeley (UCB) are seeking to jointly recruit up to five principal investigator scientists over a two-year period in the broad areas of genome-wide biology, bioinformatics and computational biology. LBNL and UCB have a long and distinguished legacy of successful collaboration in interdisciplinary science, including such related areas as biological imaging and structural biology. LBNL and UCB seek to build on our existing expertise in the biological, physical and engineering sciences by developing a highly interdisciplinary program to address biological problems that require acquisition and analysis of large-data sets. This program is being developed in conjunction with the Health Sciences Initiative currently taking shape at UCB. Candidates will be considered from across all levels of post-doctoral experience. These individuals will hold scientist positions at LBNL and adjunct faculty appointments in an appropriate department on the UCB campus. The recruits and their programs will reside in the new Genome Science Laboratory at LBNL, situated on a hilltop immediately adjacent to UCB.

Please send, by November 30, 1999, CV, cover letter, names, addresses and telephone numbers of three references and a description of past research and plans for future research to: **Dr. Edward Rubin, M.D., Ph.D., Search Committee Chair (reference Job #LS010906/JSCI), One Cyclotron Road, MS84-171, Berkeley, CA 94720. E-mail: EMRubin@lbl.gov. FAX: 510-486-4229.** You may see the full position description and qualification requirements on our LBNL website: <http://www.lbl.gov/CJO>. Berkeley Lab is an Equal Opportunity Employer committed to the development of a diverse work force.



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POSTDOCTORAL FELLOWSHIP CNS/Blood-Brain Barrier Penetration

We seek a Ph.D. for this 2-3 year Postdoctoral Fellowship to study how to integrate data from lead optimization screens (e.g., permeability, metabolism, protein binding, physiochemical properties) in order to predict in vivo central nervous system (CNS) disposition of new drug candidates. Duties will also include the generation and interpretation of in vitro and in vivo data and collaborating with company representatives and academic colleagues to develop/validate computational models for estimation of in vivo CNS disposition.

This position requires a recent Ph.D. graduate in Biology, Neuroscience, Pharmacology, Physiology, or a related discipline, with an interest in pharmacokinetics, computational modeling and bioanalysis. Experience with in vivo small animal and in vitro cell culture work is preferred, as is knowledge of chemistry and CNS physiology. Must be able to work independently and have excellent presentation and writing skills.

Glaxo Wellcome offers competitive salaries and a comprehensive benefits package. In addition, our location in Research Triangle Park, NC, the world's largest planned research center, offers access to three major universities, outstanding cultural activities and a superb quality of life.

For more information and to apply online, please visit our web-site at www.glaxowellcome.com Search for Job ID #7668 under career opportunities. If you do not have Internet access, or if you experience technical difficulties, call 1-888-825-5249, Monday thru Friday 8:00AM-8:00PM ET. (No agency referrals please) An Equal Opportunity Employer M/F/D/V

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NATIONAL CANCER INSTITUTE

HIV DRUG RESISTANCE PROGRAM

The National Cancer Institute is paving the way for new programs and discoveries at the Frederick Cancer Research and Development Center (NCI-FCRDC). Under the direction of Dr. John Coffin, we are creating a world-class center for retrovirology research in a highly collaborative environment dedicated purely to research with very strong support services. Our emphasis is on basic and translational research related to genetic diversity and drug resistance.

The NCI-FCRDC is recruiting for two positions, which will be filled by Senior Investigators (Senior Biomedical Service and/or Medical Officer with potential physician special pays) or Tenure-Track Investigators. These individuals must be self-directed scientists with an M.D., Ph.D., or equivalent degree who will undertake independent, investigator-initiated studies in the area of virus populations in patients for the patterns of response to antiviral therapies; genetic structure and evolution of virus populations; development of new paradigms for drug discovery and development; study of the genetics and pathogenesis of HIV in the context of antiviral therapeutic trials; and translation of the basic studies into therapeutic strategies. At least one of the positions will be filled by an investigator qualified to direct clinical studies in HIV-infected patients. There are opportunities for extensive collaboration within and outside of the NCI community.

A fully equipped laboratory will be provided along with technical support, as well as support for clinical studies. Total annual compensation will be commensurate with experience, accomplishments, and education. A detailed description of research interests should be submitted along with five (5) letters of recommendation and curriculum vitae and bibliography to:

Ms. Lori Holliday, Administrative Officer, Office of Management, NCI, NCI-Frederick Cancer Research and Development Center, Building 576, Room 112, Frederick, MD 21702.

The Search Committee will begin reviewing completed applications after December 1, 1999. For consideration, all applications must be postmarked by November 15, 1999. Applications may also be faxed to (301) 846-6053. If you need additional information, please call Ms. Lori Holliday, Search Committee Executive Secretary, at (301) 846-1414.

Selection of these positions will be based on merit, without discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or non-membership in an employee organization.

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OPPORTUNITY EMPLOYER*

POSITIONS OPEN

FACULTY POSITIONS IN MICROBIAL PATHOGENESIS PURDUE UNIVERSITY

Applications are encouraged from those with research interests in the broad area of the physiology of microbial pathogens. We are especially interested in studies on the molecular basis of pathogenicity with an emphasis on interactions with host cells. Investigators in the area of eukaryotic microbial pathogenesis, the study of protozoal and fungal pathogens, are also invited to apply. The positions will include highly competitive compensation packages, research space, and start-up packages.

The life science programs at Purdue, including the Department of Biological Sciences, will be hiring a substantial number of tenure-track faculty in the next few years. These appointments will generally be at the **ASSISTANT PROFESSOR** level, but may be filled at the **ASSOCIATE** or **FULL PROFESSOR** levels. The department has excellent research facilities, including access to a plant and microbial genomics center funded through the National Science Foundation. We also have an outstanding teaching program, anchored by a \$1.6 million award from Howard Hughes Medical Institute. Successful candidates should have a Ph.D. in an appropriate discipline, significant post-doctoral experience and are expected to develop a vigorous, extramurally funded research program and to participate actively in the teaching program of the department. Applicants should send a curriculum vitae, a statement of research and teaching experience and goals, and the names and addresses of three references to: **Search Committee Chair, Department of Biological Sciences, Purdue University, Lilly Hall, West Lafayette, IN 47907-1392**. Review of candidates will begin on September 1, 1999, and continue until the positions are filled.

Purdue University is an Equal Opportunity/Affirmative Action Employer.

CARDIOVASCULAR TENURE-TRACK FACULTY POSITIONS

The Children's Hospital of Philadelphia

Several **ASSISTANT/ASSOCIATE PROFESSOR**-level faculty positions (M.D./Ph.D.) at the University of Pennsylvania School of Medicine, Department of Pediatrics are available to study the cellular and molecular control of the extracellular matrix in cardiovascular development and disease. The main projects in the laboratory focus on tenascin C and its promoter in cardiac valve disorders, molecular mechanisms of cardiac arrhythmias, and gene delivery systems. Experience in the molecular biology of tenascin C regulation, signal transduction, and cell culture is helpful. All strong candidates will be considered. Please send a curriculum vitae, a summary of research interests, and the names of three references to:

Robert J. Levy, M.D., Director
Cardiovascular Research Laboratories
The Children's Hospital of Philadelphia, and
Abramson Pediatric Research Center—1107
Philadelphia, PA 19104-4399
E-mail: levyr@email.chop.edu

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

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**.

POSITIONS OPEN

SENIOR FACULTY POSITION BIOCHEMISTRY AND MOLECULAR BIOLOGY

An opening for a **FULL PROFESSOR** is now available as part of our Program of Eminence in Molecular Recognition in Biological Systems. Applicants must have a national reputation, a proven ability to attract extramural funds, and a vigorous, productive research program, preferably in the areas of structural biology, macromolecular assemblies, or eukaryotic molecular genetics. Other areas, particularly those involving multidisciplinary research, will also be considered. Applicants should be willing to participate in graduate and undergraduate teaching, having appropriate experience in an academic setting, and be eager to assume a leadership role commensurate with this rank. Generous start-up package and laboratory space are available. Review of applications will begin as soon as complete materials are received and will continue until the position is filled. Interested applicants should send a complete curriculum vitae, research prospectus, three representative publications, and the names and addresses (including e-mail) of four references to: **Dr. Gerald M. Carlson, Head, Division of Molecular Biology and Biochemistry, School of Biological Sciences, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499**. An Affirmative Action/Equal Opportunity Employer.

BIOCHEMISTRY FACULTY POSITIONS UNIVERSITY OF COLORADO, BOULDER

The Department of Chemistry and Biochemistry invites applications for two tenure-track faculty positions in the Biochemistry Division, one at the **ASSISTANT PROFESSOR** level and the second could be at **ASSISTANT PROFESSOR** or **HIGHER**. Candidates must have a Ph.D. degree and enthusiasm for teaching biochemistry at undergraduate and graduate levels, and will be expected to develop an innovative research program in biochemistry. All areas of research will be considered, although we particularly encourage applicants with interests in signal transduction and cellular regulation.

Applicants should submit a curriculum vitae and statement of research interests and arrange to have three letters of reference sent to: **Mable Stewart, Biochemistry Search Committee, Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO 80309-0215**. For full consideration, applications should be received by November 1, 1999, although applications will be accepted until the positions are filled. *The University of Colorado at Boulder is committed to diversity and equality in education and employment.*

FACULTY POSITION IN NEUROBIOLOGY

The Department of Neurobiology at Duke University Medical Center invites applications from outstanding individuals with strong training and interest in using modern vertebrate genetic models to investigate neurological disease, neural development, or integrative neuroscience. Applications at both **ASSISTANT PROFESSOR** and more **SENIOR** levels will be considered. The successful applicant is expected to establish a vigorous research program within a highly interactive, diverse department with strengths in cognitive and systems neuroscience, synaptic physiology, and molecular neurobiology. Applicants should send a curriculum vitae, a description of current and projected research, and the names of three references to: **Lawrence C. Katz, Chair, Neurobiology Search Committee, Department of Neurobiology, Box 3209, Duke University Medical Center, Durham, NC 27710**.

Duke University is an Equal Opportunity/Affirmative Action Employer.

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.

TENURE-TRACK FACULTY POSITION

The Department of Biology, University of Dayton invites applications for a tenure-track **ASSISTANT PROFESSOR** position. We particularly seek candidates who use modern molecular genetic, cellular, or developmental approaches in the study of physiology. The successful candidate will be expected to build a strong research program and successfully compete for outside funding to support his/her research. Primary teaching responsibilities will be in the area of animal physiology and mentoring of undergraduate and Ph.D. students. Applicants should have completed a Ph.D. or equivalent degree, relevant postdoctoral experience, and have a record of excellence in research. Applications should include a curriculum vitae, statements of research goals and teaching philosophy, summary of current research activities, and at least three letters of recommendation. Applications will be accepted until October 15, 1999. Address all correspondence to: **Dr. Jeffrey Stavenhagen, Chairman, Physiology Search Committee, Department of Biology, University of Dayton, 300 College Park, Dayton, OH 45469-2320**. E-mail: physio@udayton.edu. *The University of Dayton is an Affirmative Action/Equal Opportunity Employer. Women, minorities, individuals with disability, and veterans are strongly encouraged to apply. The University of Dayton is firmly committed to the principle of diversity.*

ASSISTANT PROFESSOR in nutrition. The University of Texas at Austin. The Division of Nutrition within the Department of Human Ecology invites applications for a full-time, academic-year, tenure-track position. Candidates will be expected to establish/maintain an extramurally funded research program and teach undergraduate and graduate nutrition courses. Applicants must possess a Ph.D. or equivalent degree in nutrition or related field. Please send curriculum vitae, summary of research interests, and a minimum of five letters of reference to: **Dr. Jeanne Freeland-Graves, Department of Human Ecology, The University of Texas at Austin, Austin, TX 78712**. Telephone: 512-471-0657; website: http://www.utexas.edu/depts/he/nutr_science/. Review of applications will begin on October 15, 1999. *The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.*

Postdoctoral Positions

Ernest Gallo Clinic and Research Center, a biomedical research institution affiliated with The University of California, San Francisco, seeks innovative and dynamic individuals for the following positions:

Signal Transduction

Postdoctoral position is available immediately to study receptor- and ethanol- mediated PKC signal transduction cascades with emphasis on PKC anchoring/scaffolding proteins. Exciting opportunity for highly motivated candidates with background in molecular biology. Experience in signal transduction and protein-protein interaction (Yeast two hybrid) is a plus. Send Curriculum Vitae and names of three references to: **Dorit Ron Ph.D.**

Biochemical Study ~**Alcohol Tolerance & Dependence**

A postdoctoral position is available to study the biochemical mechanisms in alcohol tolerance and dependence. A strong background in cell biology and/or molecular biology of signal transduction is desired.

Please send curriculum vitae and names of three references to: **Dr. Adrienne Gordon & Dr. Ivan Diamond; c/o D. Henderson.**

We are an equal opportunity employer committed to workforce diversity.



**The Ernest Gallo Clinic
& Research Center**

University of California, San Francisco,
1001 Potrero Avenue, Building 1, Room 101,
San Francisco, CA 94110,
Tel: (415) 648-7111, x 364,
Fax: (415) 648-7116.

Visit our website at: <http://gallo.ucsf.edu>

Research Investigators

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DRUG METABOLISM - These positions will be part of a team responsible for the design, implementation and interpretation of ADME and PK studies with pharmaceuticals. They will serve as liaison with contract laboratories performing *in vivo* and *in vitro* biotransformation studies, developing analytical methods for the quantitation of drugs and metabolites, and analyzing biological samples. Selected individuals will also independently perform PK analyses of data from clinical studies and supervise PK projects conducted at contract labs. A Ph.D. degree with 1+ years experience in drug metabolism/PK is required. A Master's degree with 2+ years of experience or a Bachelor's degree with 5 years of experience in a relevant area would also be considered for some positions. **Reference Code ADJ/LM/MET.**

PHARMACOLOGY - This position will be part of a team responsible for executing preclinical pharmacology studies on assigned TAP compounds. Duties include designing and managing efficacy pharmacology studies at outside laboratories. Position also involves participation on project teams. We are seeking candidates with a Ph.D. degree and 1+ years of experience in endocrinology or a Master's/Bachelor's with 10+ years experience. Experience in whole animal physiology is a plus. **Reference Code ADJ/LM/SCI.**

For both positions, excellent oral and written communication skills required. Independent worker with the ability to thrive in a team-oriented environment is essential. Minimal travel required.

We offer a competitive compensation and benefits package. TAP invites you to learn more about the exceptional career environment available at our headquarters in suburban Chicago by visiting our website at www.tapholdings.com. For immediate consideration, please respond to our resume processing center with reference code indicated above and fax or e-mail your resume to: TAP Holdings Inc. 781-663-2456. E-mail: adw@tapcareers.com. Resumes without reference codes can not be processed. Equal Opportunity Employer.



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As part of UMD's mission to provide increasing expertise and leadership in the area of cell and molecular biology, the College of Science and Engineering is seeking applicants for an Associate or Full Professor position in **environmental cell biology**. We are seeking an experienced person with an interdisciplinary focus whose experimental research addresses environmental aspects and applications of cellular structure, development, functioning, regulation, or interaction.

Working within the Research Center for Cell and Molecular Biology (a partnership of the College of Science and Engineering and the UMD School of Medicine), the successful candidate is expected to have and maintain a vigorous, externally funded research program which will involve undergraduate and graduate students and generate international recognition. In addition, opportunities exist to build collaborations with scientists in the University's Natural Resources Research Institute, as well as the EPA's Mid-Continent Freshwater Ecology Laboratory in Duluth.

The successful candidate is expected to participate in teaching and to develop specialized upper division courses and graduate seminars related to cell and molecular biology. We are looking for exceptional candidates who will not only participate in the continued growth of the cell and molecular biology programs at UMD but who can also take leadership roles in the development of new research or graduate programs.

Candidates must possess an earned doctorate in a biological or biomedical science directly related to cell and molecular biology, research interest in environmental aspects and applications of cell biology, communications skills to support quality teaching, proven success in developing a strong externally funded research program, a record of publication in refereed journals, and at least three years (and preferably five) in a postdoctoral, teaching, and/or research position, including at least one year of teaching experience. Candidates for the full Professor position must have demonstrated research leadership skills in a collaborative setting and at least ten years in a postdoctoral, teaching, and/or research position, including at least one year of teaching experience. Evidence of quality teaching is desirable for both positions.

The position is a tenured or tenure track nine-month appointment at the rank of Associate Professor or Full Professor. The earliest starting date is January 1, 2000, but is negotiable.

Applications must include a letter of application which includes statements of the candidate's interests and goals in research and teaching, a current resume, and the names, addresses, and phone numbers of three references who may be contacted. The committee will begin its review of completed applications on October 4, 1999, and will continue until the position is filled.

Completed applications must be mailed to:

Dr. Randall Hicks, Head/Department of Biology/10 University Drive/University of Minnesota Duluth/
Duluth, MN 55812-2496. Questions may be sent via e-mail to rhicks@d.umn.edu

The University of Minnesota is an equal opportunity educator and employer.

POSITIONS OPEN

FACULTY POSITION IN CARDIOVASCULAR BIOLOGY DEPARTMENT OF PHYSIOLOGY Michigan State University

The Department of Physiology invites applications for a full-time tenure-track appointment at the **ASSISTANT/ASSOCIATE PROFESSOR** level. The successful candidate will be expected to develop an independent research program in an area of cardiovascular biology. Individuals whose research exploits modern molecular, transgenic, and/or spectroscopic imaging methods to investigate angiogenesis or other cardiovascular adaptations to disease are particularly encouraged to apply. Candidates must hold a Ph.D. or equivalent Doctoral degree, have postdoctoral experience, and demonstrate potential for developing a vigorous externally funded research program and outstanding teaching in the department's educational program. Interested individuals should provide a complete curriculum vitae, a brief statement of research interests, and copies of key publications. Applicants should also request letters of recommendation from three individuals who can evaluate their accomplishments and future potential for research and teaching. Review of applications will begin October 15, 1999, and continue until the position is filled.

Applications should be sent to:

Ronald A. Meyer, Ph.D.
Chairperson, Cardiovascular Physiology
Search Committee
Department of Physiology
Michigan State University
East Lansing, MI 48824-1101

Michigan State University is an Equal Opportunity/Affirmative Action Employer. Disabled persons have the right to request and receive reasonable accommodation.

TENURE-TRACK FACULTY POSITIONS IN MICROBIAL PATHOGENESIS

The newly created Center for Microbial Pathogenesis at the University of Connecticut Health Center is seeking individuals with an outstanding background in microbial pathogenesis for positions at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level. We are seeking individuals with M.D., M.D.-Ph.D., or Ph.D. degrees who are interested in adopting innovative, interdisciplinary approaches to problems within their respective fields. Faculty will be expected to establish independent research programs that will attract extramural funding and to actively contribute to a rich scientific environment. A desire to interact with Clinical Investigators is also highly desirable. The emphasis of the search will be on vector-borne pathogens, *Chlamydia trachomatis*, and human papilloma virus; however, applications will be carefully considered from individuals working in other areas of microbial pathogenesis. Center faculty will enjoy superb resources including generous start-up funds and space in a newly constructed state-of-the-art research building. There also are state-of-the-art core facilities for nucleic acid sequencing, flow cytometry, confocal, fluorescence and electron microscopy, mouse transgenics, and ES cell manipulation. Candidates may apply by submitting two copies of a complete curriculum vitae, names of three references, and a brief statement of research interests/goals to: **Dr. Justin Radolf, Director, Center for Microbial Pathogenesis, The University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3710.**

The University of Florida seeks applicants for a full-time, tenure-track position as an **ASSISTANT/ASSOCIATE PROFESSOR** in the Department of Medicine, Division of Gastroenterology. M.D., Board-eligible/Board-certified in gastroenterology. Duties will include, but are not limited to, endoscopic procedures and outreach efforts with inpatient and resident education. Salary and benefits commensurate with experience. Recruiting deadline: September 7, 1999. Anticipated start date: September 30, 1999. Please reply with curriculum vitae to: **Garish Mishra, M.D., Assistant Professor, P.O. Box 100277, JHMHC, Gainesville, FL 32608.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN



DIRECTOR DIVISION OF LABORATORY ANIMAL RESOURCES University of Pittsburgh

The University of Pittsburgh is seeking a qualified, motivated, and experienced candidate to serve as the Director of the Division of Laboratory Animal Resources (DLAR). The successful applicant will provide leadership as the Director of a very large, modern, diverse, research resource accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC).

The Director will assure compliance with all federal, state, and local animal welfare statutes and regulations. Responsibilities include operation of the DLAR, maintenance of accredited standards, development and implementation of policies regarding the humane care and use of laboratory animals, space management, resource allocation, and budget oversight. The DLAR has an operating budget of \$2.5 million and supports approximately \$40 million in animal-related research. The University of Pittsburgh ranks 12th in the country in NIH funding.

Candidate successful candidate must possess a graduate degree such as M.D., Ph.D., or D.V.M. (ACLAM Board-certified or -eligible) from an accredited institution and also possess comprehensive knowledge of federal regulations governing the care and use of animals in research, excellent leadership ability, strong interpersonal and communication skills, and a track record of excellence as an administrator in laboratory animal science. Demonstrated ability to work effectively with faculty, DLAR staff, academic administrators, and affiliated constituencies in a culturally diverse climate is essential.

The University of Pittsburgh provides excellent tuition benefits for employees and dependents and attractive medical benefits and retirement package. Salary is competitive and commensurate with qualifications and experience.

Applicants are invited to send a letter of interest, curriculum vitae, and the names, addresses, and telephone numbers of five references to: **Dr. Ronald B. Herberman, Chair, Search Committee, 3471 Fifth Avenue, Suite 201, Pittsburgh, PA 15213.** Review of applications by the Search Committee will begin immediately and continue until a suitable candidate is identified and the position filled. *The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR MOLECULAR BIOLOGY AND BIOCHEMISTRY

A tenure-track Assistant Professor position is now available in a strong and growing program. Special consideration will be given to candidates with expertise in molecular recognition; however, qualified applicants in other research areas will also be considered. Applicants must have several years of postdoctoral experience and good written and oral communication skills. The person hired will be expected to develop a vigorous, extramurally funded research program and to participate in graduate and undergraduate teaching, including cell biology. Salary, space, start-up funds, and facilities are competitive and the program is well equipped with modern instrumentation. Review of applications will begin on October 18, 1999, and continue until the position is filled. Applicants should forward a complete curriculum vitae and research prospectus, and arrange to have three letters of recommendation sent to: **Dr. Gerald M. Carlson, Head, Division of Molecular Biology and Biochemistry, School of Biological Sciences, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

TWO FACULTY POSITIONS IN ORGANISMAL BIOLOGY

Tenure-track positions. One at **ASSISTANT PROFESSOR** level, one at **ASSISTANT/ASSOCIATE** level. Joint applications from professional couples will be considered. Teaching for one position is in human anatomy. The second position will support genetics. We also expect advanced courses in the applicants' area of expertise. Research areas for the first position might include functional or comparative anatomy, evolution, behavior, or ecology. Research interests for the second position might include genetic approaches to systematics, conservation biology, or any of the areas mentioned above; may focus on plants or animals; and should utilize molecular or other modern techniques. The Ph.D. and significant research accomplishments are required; postdoctoral experience is preferred. We expect continuing excellence in both teaching and funded research with M.S./M.A. and Ph.D. students. Candidates should submit a curriculum vitae, concise statements of teaching and research interests, up to three publications, and have at least four letters of references sent to: **Dr. G. S. Bakken, Search Committee, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809.** E-mail: lsgsb@scifac.indstate.edu; FAX: 812-237-4480. Duties begin August 20, 2000. Applications received by October 1, 1999, will be guaranteed consideration. Applicants should e-mail: lsgsb@scifac.indstate.edu with "positions" as the subject, and visit website: <http://biology.indstate.edu/dls/> for more information. *ISU is an Affirmative Action/Equal Opportunity Employer and encourages women and minority candidates to apply.*

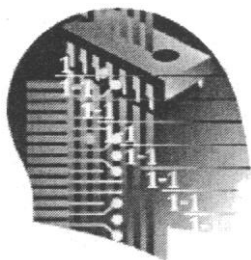
TENURE-TRACK FACULTY POSITION IN STRUCTURAL BIOLOGY

The School of Biological Sciences, University of Missouri-Kansas City (UMKC), invites applications for a tenure-track faculty position (**ASSISTANT or ASSOCIATE PROFESSOR**) in X-ray crystallography. Consideration will be given to applicant research areas compatible with, but not limited to, existing lines of the School's research focus on molecular recognition, including macromolecular assembly. We seek an outstanding scholar with demonstrable achievements in research, teaching experience in an English-language institution, and exemplary communication and supervisory skills. Teaching activities will involve participation in at least two of the following disciplines: biophysics, biochemistry, molecular biology, cell biology. State-of-the-art research facilities, including membership in the SER-CAT at APS (Argonne), start-up funds, competitive salary and fringe benefits are available. Review of applications will begin immediately and will continue until the position is filled. Submit curriculum vitae with summary of present and future research interests, and request that three letters of recommendation be forwarded to: **CBB Search Committee, Division of Cell Biology and Biophysics, School of Biological Sciences—BSB 403, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499.**

Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR YALE UNIVERSITY SCHOOL OF MEDICINE Section of Neurobiology

The Section of Neurobiology at Yale University School of Medicine is seeking to fill the position of Assistant Professor. The candidate is expected to develop independent, externally funded research and to participate in departmental interdisciplinary research programs in the excitability and synaptic properties of dendrites. Desirable skills include dual patch recordings from distal dendrites, two-photon microscopy, and application of compartmental modeling techniques. Send curriculum vitae and résumé by November 1, 1999, to: **Chairman, Section of Neurobiology, Yale University School of Medicine, P.O. Box 208001, New Haven, CT 06520-8001.** *Yale University is an Affirmative Action/Equal Opportunity Employer.*



**The Cold Spring
Harbor Laboratory and
The State University
of New York at
Stony Brook—
SICN Fellowships for
Interdisciplinary
Research in Neuroscience**

The Swartz Initiative for Computational Neuroscience announces a program to promote collaborative studies between researchers in computational neuroscience, mathematics, physics, engineering and computer sciences. The goal is to understand the algorithms and implementations that underlie brain functions. To this end, SICN intends to foster the growth of interdisciplinary research in brain theory. SUNY at Stony Brook has strong departments in neurobiology, mathematics, physical sciences and technology. CSHL has a strong program in cellular neurobiology and has made a growing commitment in theoretical neuroscience. Scientists will be hired at the post-doctoral level to work in association with faculty or, if deemed appropriate, independently. The salary will be highly competitive and those selected will be eligible for continuing support from SICN. Candidates should submit a one-page summary of their research interests and goals, CV and the names of three academic references. For full consideration, applications should be received by October 15th, 1999. Send applications and requests for further information to:

Jonathan Wallach, Ph.D.
The Swartz Foundation
535 Life Sciences
SUNY at Stony Brook
Stony Brook, NY 11794-5230
email: wallach@swartzneuro.org
telephone: 516 632 4179

Visit the Swartz Foundation web site at www.swartzneuro.org for complete information about this program.

The Swartz Foundation

Research and Postdoctoral Opportunities

The Center for Agricultural Biotechnology University of Maryland Biotechnology Institute

The Center for Agricultural Biotechnology (CAB) is one of five interdisciplinary research centers of the University of Maryland Biotechnology Institute. Housed in the new Plant Sciences Building on the University of Maryland College Park campus, CAB's location facilitates scientific interactions with University of Maryland and Johns Hopkins faculty, as well as governmental scientists (NIH, USDA, NIST). Investigators also benefit from collaborations with scientists from the dynamic and expanding commercial biotechnology sector in Maryland.

Research and Postdoctoral positions are available throughout CAB. Applicants should possess the requisite background in molecular biology, virology, genetics, plant biology, modeling, or polymer chemistry appropriate to the specific laboratory. Additional information is available at the CAB web site (www.umbi.umd.edu/~cab).

RESEARCH OPPORTUNITY

Senior scientist position available to conduct and supervise research on viruses that reduce virulence of the chestnut blight fungus and signal transduction processes underlying fungal pathogenesis. Qualifications include a Ph.D. and three years postdoctoral experience in a related field. (A3-0029)

POSTDOCTORAL OPPORTUNITIES

Plant-Microbe Interactions

Studying how a highly conserved class of DNA-binding factors governs plant target gene expression in response to hormone and defense cues. (R3-0066)

Investigating the molecular mechanisms involved in virus-plant interactions. Areas of study include the role of virus structure in mediating host resistance and the development of methods to understand and improve pathogen-derived resistance strategies. (R3-0067)

Insect Biotechnology

Applying protein-encoding nuclear gene sequences, modern computer methods, and extensive taxon sampling to resolve deep-level relationships within arthropod lineages. Current interests are relationships among arthropod subphyla and among crustacean classes, and the taxonomic position of insects. (R3-0138)

Studying steroid regulation of development. *Drosophila* is used as a model system to determine the genetic mechanisms underlying hormone-activated programmed cell death and cell differentiation. (R3-0070)

Using recently developed insect germline transformation vectors, an enhancer trap system for *Aedes aegypti* is being developed. This system will be used to investigate the molecular genetics of host/pathogen interactions in insects. (R3-0137)

Investigating molecular mechanisms of host defense against pathogens. The power of *Drosophila* genetics is being used to dissect signaling pathways, conserved in insects and mammals, that underlie innate immune responses. (R3-0141)

Poultry and Fish Viruses/Vaccines

Using reverse genetics system for birnavirus using synthetic transcripts derived from cloned cDNA. This system is used to study the molecular basis of viral pathogenesis and virulence and for production of recombinant vaccines. (R3-0069)

Bioprocess Engineering

Developing new techniques for efficient synthesis of recombinant proteins in *E. coli*, insect cells, and insect larvae. New molecular tools (e.g., differential display, genomic analysis) are used to analyze expression patterns to optimize synthesis in host cells and intact insects using a variety of modeling techniques. (R3-0139)

Developing chemical and enzymatic methods for modifying the natural polymer, chitosan. Chemical characterization by IR and NMR are augmented with rheological measurements. Strong industrial collaboration for capturing emerging large volume markets. (R3-0140)

Send curriculum vitae and letter of interest referencing the position ID# to:

Center for Agricultural Biotechnology
Position ID#
University of Maryland Biotechnology Institute
5115 Plant Sciences Building
College Park MD 20742-4450

Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

ANIMAL PHYSIOLOGY

The Department of Biological Sciences, University of Alberta, in the Faculty of Science is a broadly based biology department with a strong research interest group in physiology and cell biology. We invite applications for a strong research interest group in physiology and cell biology. We invite applications for a tenure-track position in animal physiology at the level of **ASSISTANT PROFESSOR**. Preference will be given to applicants with research interests in neurobiology that complement or build upon our existing strengths in neuroendocrinology; evolutionary, developmental, and molecular neurobiology; and inter- and intracellular signaling in vertebrate and invertebrate systems. Applicants should have a broad range of research expertise that encompasses multiple levels of organizational complexity, and have outstanding potential for excellence in teaching and research. The research of our 68 faculty members and 260 graduate students is supported by excellent facilities including extensive controlled environment and aquatic facilities, molecular biology service laboratories, and a fully equipped microscopy unit. For additional information about the Department see **website: www.biology.ualberta.ca/**. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered.

Candidates should forward a curriculum vitae, list of publications, reprints of their three most significant publications, a brief research plan, and statement of teaching interests to: **Dr. S. E. Jensen, Chair, Department of Biological Sciences, CW 405 Biological Sciences Building, University of Alberta, Edmonton, Alberta T6G 2E9 Canada**. Applicants must also arrange for three letters of reference to be sent to the Chair. Closing date: October 15, 1999. The effective date of employment will be July 1, 2000. *The University of Alberta is committed to the principle of Equity in Employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disability, and members of visible minorities.*

ASSISTANT PROFESSOR. Molecular or cellular physiology (MCP1). Tenure-track faculty position. Seeking exceptional faculty with strong potential for establishing extramurally funded research program in molecular or cellular physiology of higher organisms compatible with a research environment emphasizing molecular recognition and cellular response at its broadest definition. The successful candidate must have a congruent interest in teaching at the undergraduate and graduate levels. At least two years of postdoctoral experience and interests in related areas of scholarship (bioinformatics or environmental issues highly desirable) are expected.

ASSISTANT PROFESSOR. Nutritional/metabolic control of genetic regulation (MG99-2). The School of Biological Sciences invites applications for a tenure-track position at the Assistant Professor level. Qualifications include at least two years of postdoctoral experience. Preference will be given to candidates with expertise in the study of genetic control of metabolic regulation in any organism model except warm-blooded vertebrates. Other aspects of cell biology complementary to existing research will also be considered. The successful candidate is expected to develop an independent extramurally funded research program in this field and to participate in teaching at the graduate and undergraduate levels in courses adopted by the school.

We offer competitive salary and start-up packages, as well as state-of-the-art facilities (see **website: <http://sgi.bls.umkc.edu/>**). Applications for both positions are due by November 2, 1999, but will be considered until the position is filled. Send curriculum vitae, statement of future research, and three letters of recommendation to: **Search Committee, Position (specify MCP1 or MG99-2), School of Biological Sciences, University of Missouri-Kansas City, 5007 Rockhill Road, Room 114 BSB, Kansas City, MO 64110**.

An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION IN ASTROBIOLOGY UNIVERSITY OF COLORADO AT BOULDER

The University of Colorado Department of Geological Sciences and Center for Astrobiology has an opening for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level, to begin in the fall semester 2000. Possible research interests include the paleontological record of early life on Earth, study of modern environments relevant to the origin or early history of life on Earth, or geomicrobiology including life in extreme environments. The successful candidate will have a strong interest in the applications of their research to the broader field of astrobiology, will complement the teaching and research interests of the department, and will teach courses at all levels. The University of Colorado is a member of the NASA Astrobiology Institute, and the candidate will play a role in developing the interdisciplinary program in astrobiology. More information on our programs can be found on our websites, for the department at **website: <http://www.colorado.edu/GeolSci/>** and for astrobiology at **website: <http://argyre.colorado.edu/life/>**. Applications deadline: 1 November 1999.

Candidates should submit a one- to two-page description of their research and teaching interests, a curriculum vitae, and the names of three references to: **Prof. Bruce Jakosky, Astrobiology Search, Department of Geological Sciences, Campus Box 399, University of Colorado, Boulder, CO 80309**. *The University of Colorado at Boulder is committed to diversity and equality in education and employment.*

ASSISTANT PROFESSOR INORGANIC CHEMISTRY

The Department of Chemistry, University of Louisville, invites applications for a tenure-track Assistant Professor position in inorganic chemistry to start August 2000. Applicants must have a Ph.D. degree; postdoctoral or other experience preferred. Teaching duties for the position will include courses in inorganic (graduate and undergraduate) and general chemistry. The candidate is expected to develop a vigorous research program and should be prepared to work with graduate and undergraduate research students. The desired areas of research are any inorganic biochemical or clinical aspect including research with metalloenzymes, metalloproteins, or other inorganic macromolecules; inorganic medicinals, diagnostics, radiotherapeutics, radiodiagnostics, etc.; other xenobiotic inorganic roles such as toxins; or other related areas. Other aspects of bioinorganic chemistry will also be considered. Applicants should send a letter of introduction, a curriculum vitae, a list of publications, a summary of research plans, and arrange for three letters of recommendation to be sent. Deadline for applications is October 12, 1999, and should be directed to: **Inorganic Search Committee, Dr. Robert M. Buchanan, Department of Chemistry, University of Louisville, Louisville, KY 40292**. Department information is available at **website: www.louisville.edu/a-s/chemistry**. *Applications from women and minority candidates are encouraged. Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSORSHIPS IN INORGANIC, ORGANIC, AND PHYSICAL CHEMISTRY

**Harvard University
Department of Chemistry and Chemical Biology**

Applicants are invited to apply for Assistant Professorships in inorganic, organic, and physical chemistry. Applicants should arrange to have three letters of recommendation sent independently and should provide a curriculum vitae, a list of publications, and outlines of two future research projects. Applications and supporting materials should be sent to: **Professor James Anderson, Chairman, Department of Chemistry and Chemical Biology, Harvard University, 12 Oxford Street, Cambridge, MA 02138-2902**. *Harvard University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minority group members.*

POSITIONS OPEN

DEPARTMENT OF MICROBIOLOGY MICHIGAN STATE UNIVERSITY MOLECULAR PATHOGENESIS

The Department of Microbiology at Michigan State University (MSU) intends to make a tenure-track appointment at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the broad area of medical microbiology, beginning August 2000. Applicants are sought with demonstrated expertise in the molecular mechanisms of microbial pathogenesis (bacterial, viral, fungal, or parasitic). Responsibilities include developing an independent externally funded research program, with national visibility and limited teaching duties within our graduate, professional school, and/or undergraduate programs. The Department of Microbiology at MSU is among the largest and most diverse in the nation, celebrating our Centennial in 2000, with research emphasis areas in molecular pathogenesis, microbial diversity and evolution, cell growth and differentiation, and functional and comparative genomics. As of 2002, the Department will move into a new Biomedical and Physical Science Building, now under construction. Additional information about the department is available at **website: <http://www.msu.edu/unit/mic/www-mic.html>**. Requirements include a Doctoral degree in microbiology or a related discipline, at least two years of postdoctoral research experience, and a strong record of research accomplishment. Applicants should send a curriculum vitae including a complete publication list, a statement of current and future research plans, and reprints of recent publications, and should arrange to have three letters of reference sent to: **Dr. Martha H. Mulks, Molecular Pathogenesis Search Committee, Department of Microbiology, Giltner Hall, Michigan State University, East Lansing, MI 48824**. FAX: 517-353-8957. Curricula vitae may be submitted via e-mail: **micmail@msu.edu**. To ensure full consideration, complete applications should be received by October 15, 1999. *Michigan State University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are particularly encouraged to apply.*

MOLECULAR ECOLOGIST

As part of its aggressive development initiative in environmental marine biology, the Marine Sciences Program at the University of North Carolina at Chapel Hill invites applications for the first of three tenure-track (**ASSISTANT** or **ASSOCIATE PROFESSOR**) faculty positions. This position is in molecular ecology and will be at the Institute of Marine Sciences in Morehead City, North Carolina. The Institute has excellent access to diverse estuarine and coastal environments, and a strong research focus on coastal ecological, physical, and biogeochemical processes and resources. We are seeking a Ph.D.-level colleague capable of developing and applying molecular and genetic approaches to characterize, understand, and integrate ecological and evolutionary processes that affect structural and functional linkages among marine populations and communities and their environment. Individuals having a broad synthetic perspective and wishing to participate in multidisciplinary studies of environmental/biological interactions in the coastal zone are encouraged to apply. The applicant is expected to develop a strong, externally funded research program that takes advantage of the Institute's coastal location and ties to the Departments of Marine Sciences, Biology, Environmental Sciences and Engineering, and the Carolina Environmental Program located in Chapel Hill.

Send curriculum vitae, a description of research and teaching interests, and the names, addresses, and e-mail addresses of four references to: **Molecular Ecology Search Committee, University of North Carolina at Chapel Hill, Institute of Marine Sciences, 3431 Arendell Street, Morehead City, NC 28557**. For full consideration, applications should be received by October 15, 1999, but will be accepted until the position is filled. *The University of North Carolina at Chapel Hill is an Equal Opportunity Employer. Minority and female candidates are encouraged to apply.*

POSTDOCTORAL FELLOWSHIP

The Laboratory of Skin Biology at NIH, is seeking a postdoctoral fellow to work in the developmental and molecular aspects of epidermal differentiation. Transgenic and knock-out mice are being utilized to assess the function of structural epidermal genes and of transcription factors regulating skin differentiation. **Applicants should have extensive experience in molecular and cellular biology. Interested candidates with a Ph.D., M.D., or equivalent degree and that have had less than 5 years of post-doctoral experience should send a current C.V., list of publications, and three references to:**

Dr. Peter Steinert
Dr. Maria Morasso
NIH, NIAMS, Lab of Skin Biology
Building 6 Room 134
6 Center Drive MSC 2790
Bethesda, MD 20892
Telephone: (301) 402-2888
FAX: (301) 402-2886
e-mail: pemast@helix.nih.gov
morasso@nih.gov



NIH is an Equal Opportunity Employer

CORNELL UNIVERSITY

WEILL GRADUATE SCHOOL OF MEDICAL SCIENCES

Graduate Study Toward the Ph.D. Degree in the Biomedical Sciences

The Weill Graduate School of Medical Sciences of Cornell University is composed of faculty drawn from the Weill Medical College of Cornell University and the Sloan-Kettering Institute. Programs of study in *Biochemistry and Structural Biology, Cell Biology and Genetics, Immunology, Molecular Biology, Neuroscience, Pharmacology, and Physiology, Biophysics and Molecular Medicine* lead to a Ph.D. degree. A Master's degree for health care professionals is also awarded in the program of *Clinical Epidemiology and Health Services Research*.

Generous graduate stipends of \$22,880 per year together with full tuition fellowships, subsidized university housing, travel stipend and a comprehensive student health plan are awarded to all doctoral students.

The Weill Graduate School of Medical Sciences of Cornell University is an integral component of one of the world's outstanding centers for biomedical research, education and medical treatment. Located on Manhattan's fashionable Upper East Side, the research complex includes the Weill Medical College of Cornell University, Memorial Sloan-Kettering Cancer Center, New York Presbyterian Hospital, and The Hospital for Special Surgery.

The Weill Graduate School of Medical Sciences of Cornell University is committed to the successful recruitment and training of qualified women and members of under-represented minority groups. Cornell University is an Equal Opportunity/Affirmative Action Employer.

To receive additional information and an application kit, call or write to:

Weill Graduate School of Medical Sciences of Cornell University
445 East 69th Street, New York, NY 10021
tel: 212-746-6565; fax: 212-746-8906
E-mail: gsms@mail.med.cornell.edu
Also visit our WEBSITE: <http://www.med.cornell.edu/gradschool>

New York University School of Medicine Postdoctoral Program

Research Opportunities in:

- *Cellular and Molecular Biology
- *Developmental Biology/Genetics
- *Immunology
- *Medical and Molecular Parasitology
- *Microbiology
- *Molecular Oncology
- *Molecular Pathogenesis
- *Molecular Pharmacology & Signal Transduction
- *Neurosciences and Physiology
- *Structural Biology

Program Features:

- *Actively maintained website
with links to a number of important resources
- *Organized Research Seminars
- *Semi-annual Career Fair
and monthly career option seminars
- *Postdoctoral Council dedicated to developing
new programs and making recommendations to the Dean
- *Social Events

For more information please contact:
Ms. Laurie Bartell at (212) 263-8569 or bartel01@popmail.med.nyu.edu
or view the Postdoctoral Program website:
<http://www.med.nyu.edu/sackler/postdoc/postdoctoralprogram.htm>

New York University School of Medicine is an Equal Opportunity Employer.
Women and Minorities are encouraged to apply.



NATIONAL INSTITUTES OF HEALTH NATIONAL EYE INSTITUTE

Job Opportunities

The National Eye Institute Intramural Program at the NIH campus, Bethesda, MD., is seeking highly qualified Postdoctoral Fellows, Research Associates and Staff Scientists in the following areas:

- Molecular Biology
- Cell Biology
- Immunology
- Psychophysics
- Biochemistry

Salaries range from \$27,500 to \$118,400 per annum, based on experience and type of appointment.

NEI offers an extensive benefits package that you may be eligible for, depending on the appointment mechanisms: Health Benefits, Life Insurance, Retirement Benefits, Annual and Sick Leave, Formal Training Program, Recruitment Bonus, Retention Allowance, Relocation Allowance, Loan Repayment Program, and Travel Benefits.

Candidates interested in specific job opportunities at the NEI may visit the NEI web site at <http://www.nei.nih.gov/> listing the most current positions available.

NIH/NEI is an Equal Opportunity Employer

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF MICROBIOLOGY THE UNIVERSITY OF IOWA Bacterial Pathogenesis

The Department of Microbiology at The University of Iowa is seeking applicants for a tenure-track faculty position at the Assistant or Associate Professor level in the research area of bacterial pathogenesis. Investigators with interests in the bacterial inflammatory response and/or intracellular mechanisms of infection are encouraged to apply. The Department of Microbiology consists of faculty with research efforts in diverse areas, including bacterial pathogenesis, bacterial physiology and genetics, immunology, and virology. Applicants should possess a Ph.D. or M.D. and have several years of postdoctoral experience. The successful candidate will have a record of productivity and peer-reviewed publications and the potential to develop a strong extramurally funded research program. The selected applicant will participate in graduate, undergraduate, and health professions teaching of microbiology. Competitive salary and start-up funds will be provided. Applicants should submit a current curriculum vitae, statement of research plans, and names of three references to:

Chair, Search Committee (F1653)
Department of Microbiology
University of Iowa
College of Medicine
Iowa City, IA 52252-1109

For best consideration, please send materials by October 31, 1999. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.

DEPARTMENT OF ANATOMY AND CELL BIOLOGY EAST CAROLINA UNIVERSITY School of Medicine

Tenure-track faculty position at the ASSISTANT/ASSOCIATE PROFESSOR level to begin July 1, 2000. Candidates must have a Ph.D. or equivalent with expertise in molecular/cell biology or related field and a record of excellence in research. The Department seeks applicants of outstanding potential with a demonstrated interest in developmental, cellular, and/or molecular biology. Development of an extramurally funded research program and team-teaching of medical/allied health neurobiology and Doctoral-level graduate courses are expected. Academic rank and salary are commensurate with credentials. For more information, visit our website: anatomy.med.ecu.edu. Send curriculum vitae, description of research and teaching experience and goals, and addresses of three references by October 18, 1999, to: Dr. Jack E. Brinn, Chair, Department of Anatomy and Cell Biology, School of Medicine, East Carolina University, Greenville, NC 27858. Affirmative Action/Equal Employment Opportunity Employer. Accommodates individuals with disability.

CELL BIOLOGIST LOUISIANA STATE UNIVERSITY

The Department of Biological Sciences at Louisiana State University invites applications for a tenure-track ASSISTANT PROFESSOR position in cell biology available August 14, 2000. Candidates should have Ph.D. or equivalent degree and postdoctoral experience with outstanding research accomplishments and strong teaching interests. The successful candidate will be expected to teach courses at the undergraduate and graduate levels. Applicants should submit a curriculum vitae, statements of research and teaching interests, and have three letters of recommendation sent to: Cell Biologist Search, c/o Dr. Richard Bruch, Department of Biological Sciences, 508 Life Sciences Building, Louisiana State University, Baton Rouge, LA 70803, Ref. Log #0049. Review of applications will begin October 1, 1999, and will continue until the position is filled. Information about the Department is available at website: <http://biosci.biosci.lsu.edu>. Inquiries may be sent to e-mail: rbruch@lsu.edu.

POSITIONS OPEN

BACTERIAL GENETICS

The Department of Biological Sciences, University of Alberta, in the Faculty of Science is a broadly based biology department with strong research interest groups in microbiology and molecular genetics. We invite applications for a tenure-track position in bacterial genetics at the level of ASSISTANT PROFESSOR. Applicants with an interest in simple eukaryotes will also be considered. Applicants should have a broad range of research expertise addressing questions of fundamental biological importance, and have outstanding potential for excellence in teaching. The research of our 68 faculty members and 260 graduate students is supported by excellent facilities including extensive controlled environmental, aquatic, and fermentation facilities; a molecular biology service unit; and a fully equipped microscopy unit. For additional information about the Department see website: www.biology.ualberta.ca. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered. Candidates should forward a curriculum vitae, list of publications, reprints of their three most significant publications, a brief research plan and statement of teaching interests to: Dr. S. E. Jensen, Chair, Department of Biological Sciences, CW 405 Biological Sciences Building, University of Alberta, Edmonton, Alberta T6G 2E9 Canada. Applicants must also arrange for three letters of reference to be sent to the Chair. Closing date: October 29, 1999. The effective date of employment will be July 1, 2000. The University of Alberta is committed to the principle of Equity in Employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disability, and members of visible minorities.

University of Oklahoma. The Department of Chemistry and Biochemistry invites applications for a tenure-track faculty position at the rank of ASSISTANT PROFESSOR in the area of biochemistry, beginning August 2000. Candidates must have a Ph.D. degree, postdoctoral experience, the ability to develop a productive research program, and a commitment to teaching excellence. Interests in all areas of biochemistry will be considered, but Investigators working in the areas of nucleic acids, enzyme mechanisms, membrane biochemistry, or protein structure and function are especially encouraged to apply. Applicants should submit a complete curriculum vitae, a two-page description of ongoing work and future research plans, and should request three letters of reference sent to: Dr. Phillip E. Klebba, Ph.D., Biochemistry Search Committee Chairman, Department of Chemistry and Biochemistry, University of Oklahoma, 620 Parrington Oval, Room 208, Norman, OK 73019. Review of the applications will begin on October 15, 1999. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. OU is responsive to the needs of dual-career couples.

ASSISTANT/ASSOCIATE PROFESSOR BRAIN MICRO-TUMOR RESEARCH PROGRAM

The Division of Neurosurgery at Harvard Medical School and Brigham and Women's Hospital invites applications for tenure-track faculty positions in a new Micro-tumor Research Program. We seek applicants who will take a creative approach to the attack of microscopic brain tumor (any kind of residual or disseminated tumor in the brain, including any tumor that is too small to be imaged or accessed by conventional means). Applicants from a variety of disciplines will be considered. Productivity, NIH funding history (or strong potential), and teaching experience are important. To apply, please briefly describe previous research interests and approach you would take to brain micro-tumor research, and send with curriculum vitae, up to three reprints, and names of three references to: Dr. Lois Lampson, Division of Neurosurgery, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.

POSITIONS OPEN

TENURE-TRACK POSITION IN CHEMISTRY, BOSTON COLLEGE

Applications are invited for a tenure-track position, effective September 2000. The areas of interest are biological chemistry and experimental physical chemistry. Biological chemistry is defined to include biochemistry as well as bioorganic, bioinorganic, and biophysical chemistry. Experimental physical chemistry is broadly defined to include traditional physical chemistry and chemical physics, as well as materials science, biophysics, physical inorganic, and physical organic chemistry. The Department is housed in an award-winning new research facility in Boston, and includes nearly 100 Doctoral students and an internationally recognized faculty. The successful applicant is expected to maintain a prominent, externally funded research program. Applicants are sought at the entry ASSISTANT PROFESSOR level, although outstanding applications for more senior levels are also welcome. Applicants at the beginning Assistant Professor level should send a résumé and a summary of research plans, and should arrange to have four letters of reference transmitted. Established Investigators should send a letter of application and appropriate supporting materials. All materials for biological chemistry applicants should be sent to Marc Snapper and all materials for physical chemistry applicants should be sent to Paul Davidovits at: Department of Chemistry, Boston College, Chestnut Hill, MA 02467. Applications should be completed by October 1, 1999. Website: <http://chemserv.bc.edu>; FAX: 617-552-2705. Boston College, a university of 14 schools and colleges, is an Equal Opportunity Employer and supports Affirmative Action.

The University of California, San Diego, Department of Chemistry and Biochemistry invites applications for tenure-track and tenured faculty positions in biochemistry at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR level. Candidates must have a Ph.D. and a demonstrated ability for creative research and teaching at the undergraduate and graduate levels. Applicants will be considered in all areas, but the Department is particularly interested in candidates with new experimental approaches in supramolecular structure determination, protein engineering, or genomic analysis. Salary commensurate with qualifications and based on University of California pay scale. Candidates should send a curriculum vitae, list of publications, reprints of up to five representative papers, and a summary of research plans to: Chair, Biochemistry Search Committee 3-617 (S), University of California, San Diego, Department of Chemistry and Biochemistry, La Jolla, CA 92093-0332. Candidates should also arrange to have three letters of reference sent under separate cover. The deadline for applications is October 1, 1999, but until positions are filled, all applications received will be assured full consideration. UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

The Department of Psychology at the University of Pennsylvania plans to hire a tenure-track ASSISTANT PROFESSOR in the area of animal behavior. We are particularly interested in individuals addressing fundamental issues in the evolution of social behavior, behavioral ecology, cognition, or communication in natural populations of animals. The successful applicant must show evidence of a vigorous research program, promise of leadership in his or her field, and a commitment to both undergraduate and graduate education. Teaching will include contributions to Penn's undergraduate programs in psychology and the biological basis of behavior. Please provide a curriculum vitae including a statement of research interests, a description of teaching interests and experience, up to three recent publications, and three letters of reference to: Animal Behavior Search, Department of Psychology, University of Pennsylvania, 3815 Walnut Street, Philadelphia, PA 19104-6196. Applications will begin to be reviewed on October 31, 1999. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

Canji, Inc., a San Diego-based subsidiary of Schering-Plough Research Institute, is actively seeking research professionals in the areas of ocular gene therapy and molecular biology. Available positions include:

Research Opportunities

Senior Scientist, Molecular Biology and Biochemistry

The selected individual will develop new systems for regulated gene expression in adenoviral vectors and other delivery systems. Ph.D. in molecular biology, biochemistry or related field as well as experience with gene expression and regulation, tissue-specific gene expression, structure of viral and cellular transcriptional activators and transcription factors required.

Senior Scientist, Ocular Gene Therapy

The selected individual will work closely with a team of investigators to develop preclinical models for evaluation of gene therapy in ocular diseases. Ph.D. or M.D. with postdoctoral training in ophthalmology required. Strong interest in the molecular basis of ocular disease and in developing gene-based therapies for diseases of the eye desired.

Research Associate, Ocular Gene Therapy

Selected candidate will work closely with senior investigators to design and conduct preclinical experiments that evaluate the potential for ocular gene therapy. B.S./M.S. in biology or related discipline with 1-3 years' experience with animal models required. Background in ophthalmology and experience with rodent and rabbit studies desired.

Postdoctoral Position, Cytokine Gene Therapy

Ideal candidate will work closely with a scientific team to explore and develop cytokine gene therapy strategies *in vivo* for autoimmune and cancer therapies. Ph.D. or M.D. with training in immunology required. Experience with gene therapy and *in vivo* studies desired with emphasis on cytokine biology, autoimmunity, and cancer therapy.

Canji, Inc. provides a highly competitive compensation package, excellent benefits, and an environment that promotes individual excellence and advancement. For consideration, please send/fax resume, indicating position of interest, to: **Human Resources, Canji, Inc., 3525 John Hopkins Court, San Diego, CA 92121; Fax (760) 741-3737.** Canji, Inc. is an equal opportunity employer.



Developmental Biology Postdoctoral Research Positions

Develop your independent research career at one of the nation's top pediatric medical centers with faculty members who give you freedom and guidance to develop a meaningful research project, produce results and publish your contributions.

The goal of the Division of Developmental Biology is to uncover the cellular and molecular mechanisms underlying both normal and abnormal development to understand the basic processes that are required for embryogenesis and fetal maturation and how these might go awry and be corrected or prevented. Applicants should have previous research experience in genetics, biochemistry, or molecular biology.

Send CV to: **Ms. Maureen Huschart**
Division of Developmental Biology
Children's Hospital Research Foundation
TCHRF 2013
3333 Burnet Avenue, Cincinnati, OH 45229

Visit our website at www.cincinnatichildrens.org
Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.



At Novartis Agribusiness Biotechnology Research, Inc., located in Research Triangle Park, North Carolina, our mission is to make discoveries that enable the creation of novel seeds, new methods of protecting crops, and new animal health products.

Fungal Molecular Biologist

Our Fungal Targets Group has an opening for a Ph.D. level molecular biologist who will lead technology development for functional analysis of plant pathogenic fungal systems. You will also be involved in the management of target identification and validation projects. Requirements for this position include a thorough understanding of the principles of molecular genetics and a demonstrated ability to accomplish and clearly present the results of technical objectives. **Position 9954-SM-BRI**

Novartis offers a competitive salary, a comprehensive benefits package, and an environment conducive to professional development. Qualified candidates, please paste your resume, followed by your cover letter, into the body of an e-mail and send it to: novartisbiotech@hiresystems.com. Indicate Position 9954-SM-BRI in the subject area of the e-mail. An Equal Opportunity Employer.

For more information about Novartis, visit our website at: www.novartis.com

POSITIONS OPEN

TENURE-TRACK ASSISTANT/ ASSOCIATE PROFESSOR Immunology/Molecular Pathogenesis

The Department of Medical Microbiology and Immunology at Southern Illinois University School of Medicine invites applications from exceptional Investigators in the broadly defined field of immunology and/or molecular pathogenesis. Two tenure-track faculty positions are available at the rank of Assistant/Associate Professor. Applicants with a Ph.D. and/or M.D., at least two years of postdoctoral experience, and an excellent publication record are invited to apply for these positions, which carry a fully state-supported competitive salary and start-up package. The position requires teaching in the medical and graduate program and development of a competitive research program. The rank of Associate Professor will be considered for individuals who have an established research program and significant extramural research funding. Candidates with interests that complement departmental research in mucosal immunology, neuroimmunology, tumor immunology, and molecular pathogenesis are especially encouraged to apply. Review of applications will begin on September 15, 1999, and continue until both positions are filled. Candidates should forward a curriculum vitae, names and addresses of three references, representative publications, and a summary of research plans to: **Search Committee, Department of Medical Microbiology and Immunology, Southern Illinois University School of Medicine, P.O. Box 19626, Springfield, IL 62794-9626. Website: www.siumed.edu/mmi.** SIU is an Equal Opportunity/Affirmative Action Employer.

CALIFORNIA STATE UNIVERSITY, LONG BEACH

The Department of Biological Sciences invites applications for three full-time, tenure-track positions at the ASSISTANT or ASSOCIATE PROFESSOR level starting August 2000: microbial pathogenesis; developmental biology; and microbial ecology/environmental microbiology.

Candidates must have a Ph.D. in the biological sciences with training and research in the specified field. Candidates must have a strong commitment to teaching at the undergraduate and M.S. levels and participate in introductory core courses in an ethnically and culturally diverse campus community. Must have a record of published research and show potential for developing and sustaining an independent, externally funded research program involving students. Postdoctoral or other professional research experience preferred. Submit a letter of application, curriculum vitae, a detailed statement of research and teaching interests, and three letters of recommendation to: **Dr. Laura Kingsford, Chair, Attn: Developmental Biology Search, Microbial Pathogenesis Search, or Microbial Ecology/Environmental Microbiology Search, Department of Biological Sciences, California State University, Long Beach, CA 90840-3702. Telephone: 562-985-4807; e-mail: ssuetsug@csulb.edu; websites: <http://www.csulb.edu>, <http://www.csulb.edu/~cnsn/physics>.** Screening will commence October 15, 1999. *California State University, Long Beach is an Equal Opportunity/Affirmative Action Employer.*

Botany. ASSISTANT/ASSOCIATE PROFESSOR. Full-time, tenure-track. Alma College seeks a person with a Ph.D. plus combined strength in teaching and research, and a commitment to research with undergraduates. Teaching responsibilities will include lectures and laboratories in botany, a contribution to the departmental introductory biology course and an upper-level course and a seminar in the individual's specialty. Participation in the environmental studies program is desirable. Applicants should provide a current curriculum vitae, a statement of teaching and research interest, and arrange for official graduate transcripts and three letters of reference to be sent by November 15, 1999, to: **Dr. Lawrence Wittle, Department of Biology, Alma College, 614 West Superior Street, Alma, MI 48801. Telephone: 517-463-7282; e-mail: wittle@alma.edu.**

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOCHEMISTRY MOLECULAR BIOLOGIST University of California, Riverside

The Department of Biochemistry invites applications for a tenure-track position of Assistant Professor of Biochemistry. Qualifications for the position include a strong potential for imaginative research in molecular biology. Individuals are sought with scholarship in the areas of signal transduction, transcriptional regulation, apoptosis, or cell cycle regulation. Individuals with expertise in preparing transgenic animals are encouraged to apply. A commitment to teaching excellence at both undergraduate and graduate (M.S. and Ph.D.) levels is required. Applicants must hold a Ph.D. or equivalent degree and have postdoctoral experience. Salary will be commensurate with education and experience. Submit a curriculum vitae, bibliography (including three reprints), and a brief description of proposed research interests. Request that three to five original letters of reference be sent separately to: **Chair of Search Committee, Department of Biochemistry, University of California, Riverside, CA 92521-0129.** Applications may also be sent by FAX: 909-787-4774 followed by a hard copy sent by mail. Evaluation of applications will begin on or about October 15, 1999, but the position will be open until filled. Visit our website: <http://www.biochem.ucr.edu> for more information. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

PLANT BIOLOGIST. Tenure-track ASSISTANT PROFESSOR beginning 1 July 2000. The successful candidate will maintain plant biology as a central component of our curriculum at all levels. Essential qualifications include a Ph.D. (by May 2000), excellence in teaching, and development of an active research program in plant biology that will involve undergraduates and complement existing research interests in the department. Information about the department is available at website: <http://www.mtholyoke.edu/acad/biol/>.

Send statements of teaching and research interests (including descriptions of possible courses), curriculum vitae, copies of publications, list of relevant courses taught, transcripts, and three letters of recommendation to: **Plant Biologist Search Committee, Department of Biological Sciences, Mount Holyoke College, South Hadley, MA 01075-6418. E-mail: biology@mtholyoke.edu.** Applications received by September 24, 1999, are assured full consideration.

Mount Holyoke College, a liberal-arts college for women and a partner in a Five-College Consortium, is committed to fostering cultural diversity and multicultural awareness among its faculty, students, and staff, and is an Affirmative Action/Equal Opportunity Employer. Women and minorities are especially encouraged to apply.

TENURE-TRACK ASSISTANT PROFESSOR VANDERBILT UNIVERSITY MEDICAL CENTER

As part of an expansion of the signal transduction program in the Department of Molecular Physiology and Biophysics at the Vanderbilt University School of Medicine, we invite applications for a tenure-track faculty position at the Assistant Professor level. Preference will be given to candidates who address fundamental questions on cell signaling in mammalian cells, and whose interests complement those of existing programs. (Visit our website: <http://www.mc.vanderbilt.edu/vumcdpt/mpb/>.)

Interested applicants should forward a curriculum vitae, a short summary of research plans, and three letters of recommendation by November 1, 1999, to:

**Search Committee (c/o Roland Stein, Head)
Department of Molecular Physiology
and Biophysics
Vanderbilt University School of Medicine
708 Light Hall
Nashville, TN 37232**

Vanderbilt University is an Affirmative Action/Equal Opportunity Employer committed to increasing the representation of women and minority groups on its faculty.

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR AND CELLULAR PATHOGENESIS

The University of Tennessee (UT) Department of Microbiology and Immunology invites applications for two tenure-track positions at the level of Assistant Professor. A candidate is expected to have two to five years of postdoctoral research experience in the molecular and cellular biology of pathogenic bacteria and to develop a high-quality research program with long-term growth potential. Teaching responsibilities, which emphasize quality rather than quantity, include medical, dental, and graduate students. The Department is located in a major medical complex and offers a highly interactive intellectual environment with strong extramural research support. State-of-the-art research facilities within the Department and the UT Molecular Resource Center provide cutting-edge research support services and reagents.

The review of applicants will begin the end of September and will continue until the positions are filled. Applications should consist of curriculum vitae, copies of several recent publications, a brief statement of future research goals, and three letters of reference to be sent to:

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

Detailed information about the Department may be obtained on the World Wide Web at website: <http://microbiology.utmc.edu>.

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

ASSISTANT PROFESSOR OF BIOCHEMISTRY PLANT MOLECULAR BIOLOGIST University of California, Riverside

The Department of Biochemistry invites applications for a tenure-track position of Assistant Professor of Biochemistry. Qualifications for the position include a strong potential for imaginative research in plant molecular biology. Individuals whose scholarship is broadly in the areas of the biochemistry and molecular genetics of signal transduction, gene expression, cell differentiation, or environmental stress response are strongly encouraged to apply. A strong commitment to teaching excellence at both undergraduate and graduate (M.S. and Ph.D.) instruction is required. The position also includes appointment in the Agricultural Experiment Station. Applicants must hold a Ph.D. or equivalent degree and have postdoctoral experience. Salary will be commensurate with education and experience. Submit a curriculum vitae, bibliography (including three reprints), and a brief (limit of 500 words) description of proposed research interests. Request that three to five original letters of reference be sent separately to: **Chair of Search Committee, Department of Biochemistry, University of California, Riverside, CA 92521-0129.** Applications may also be sent by FAX: 909-787-4774 followed by a hard copy sent by mail. Evaluation of applications will begin October 1, 1999, but the position will be open until filled. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE INVESTIGATOR. The Molecular Cardiology Institute, a nonprofit small organization committed to outstanding research in heart and brain mitochondrial biogenesis and bioenergetics, is seeking a motivated Ph.D. with strong background in biochemistry and molecular biology. Experience in cell culture and protein analysis essential. Small animal instrumentation experience desirable. The candidate must be willing to work after hours and weekends. Track record of productivity; excellent writing and communication skills. *U.S. citizenship/permanent resident required.* Send résumé, publications, and three references to: **Dr. J. Marin-Garcia, Director, 75 Raritan Avenue, Highland Park, NJ 08904. FAX: 732-220-2992; e-mail: tmci@worldnet.att.net.**



MAYO CLINIC

Postdoctoral Positions are available immediately to study the biochemical and molecular aspects of breast/ovarian cancer and the roles of tumor suppressor genes p53, BRCA1 and BRCA2. A strong background in molecular and cellular biology is essential. Prior experience in working with mice is preferred. Please send curriculum vitae and the names of three references to:

Junjie Chen, Ph.D.
Department of Oncology
Guggenheim 13
Mayo Clinic
200 First St. ~ W
Rochester, MN 55905

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 opportunity employer and
 educator*



New York University

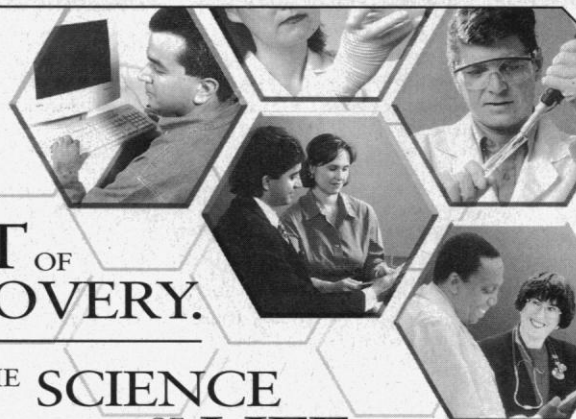
EXPERIMENTAL ORGANIC/ BIOORGANIC CHEMISTRY DEPARTMENT OF CHEMISTRY

The Department of Chemistry at New York University invites applications for a tenure-track (or tenured) faculty position in experimental organic/bioorganic chemistry to begin September 1, 2000, pending final administrative and budgetary approval. The Department is undergoing a major development effort that includes multiple faculty appointments within the next three years, as well as major improvements in shared laboratory and instrumentation facilities. Newly hired faculty members will be able to participate in these efforts. Candidates should have a very strong research record and be committed to teaching. Applications are sought from outstanding candidates at the Assistant Professor level or from candidates at the early tenure level. However, the appointment of distinguished candidates with an outstanding and proven track record in research and teaching will also be considered at a senior level. Please submit application including CV, three publications, a statement of research plans, and three letters of reference by **December 1, 1999** to: the Search Committee for Organic/Bioorganic Chemistry, New York University, 100 Washington Square East, New York, NY 10003. Website: <http://www.nyu.edu/pages/chemistry/>.

NYU encourages applications from women and members of minority groups.

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What if you could be on the threshold of some of the greatest scientific advances of our time, developing new treatments for cancer, AIDS and other serious diseases? At Agouron Pharmaceuticals, you can. Agouron is a fully integrated pharmaceutical company in San Diego, CA, providing opportunities from Research to Commercial Affairs. We encourage and promote creativity, innovation and leadership in each individual. If you enjoy both autonomy and collaboration in a dynamic environment, consider joining our team.

Agouron has several opportunities in a variety of disciplines throughout our departments. For detailed information regarding additional opportunities, access our Website at: www.agouron.com

RESEARCH SCIENTIST, BIOCHEMISTRY

We have an immediate opening for a PhD in Biochemistry or related discipline to join our Biochemistry department. The successful candidate will contribute to our expanding drug discovery pipeline with the investigation of new therapeutic targets in the area of oncology. We are seeking highly motivated individuals with hands-on experience in enzyme kinetics, assay development, protein purification and enzyme characterization. Good written and verbal communication skills, good organization skills, and the ability and desire to work in a multi-disciplinary team environment are essential. Code 135/CL

SOFTWARE ENGINEER, CRYSTALLOGRAPHY

We have an immediate opportunity for a programmer to join our Crystallography group. The successful candidate will design, implement and test innovative algorithms for crystallographic structure determination, as well as manage the computing resources for the group. Requires expertise in C/C++ programming; facility in UNIX scripting languages and HTML; working knowledge of Fortran; experience in UNIX system administration; strong mathematical skills. A background in biology, chemistry or physics is preferred. Code 110/CK -

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Pharmaceuticals, Inc.
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Agouron offers competitive salaries and excellent benefits such as paid medical and dental as well as 401(k). Please submit your resume referencing code to: Agouron Pharmaceuticals, Inc., Code (see above), 10350 N. Torrey Pines Rd., La Jolla, CA 92037; email: jobs@agouron.com. EOE

www.agouron.com

POSITIONS OPEN

MOLECULAR BIOLOGIST

Baylor University, a private, comprehensive university of 12,000 students, seeks a Molecular Biologist for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning summer 2000. Applicants must have a Ph.D. and use current molecular approaches to examine biological processes. Position responsibilities: (1) Teach an upper-level course using molecular biology in organismal, cellular, or microbial biology (developmental biology preferred). (2) Teach introductory biology for majors. (3) Establish a research program involving undergraduate and graduate students. (4) Participate in departmental and university service activities. Baylor is renowned for excellence in teaching, balanced with quality faculty/student research. To ensure full consideration a complete application should be received by October 8, 1999. Applications will be reviewed beginning October 15, 1999, and will be accepted until the position is filled. A complete application consists of application letter, statements of teaching philosophy and research interests, curriculum vitae, graduate and undergraduate transcripts, and names and addresses of three references. Send materials to: **Dr. Dave Eldridge, Search Committee Chair, Department of Biology, Baylor University, Waco, TX 76798-7388. Telephone: 254-710-2911; FAX: 254-710-2969; e-mail: david_eldridge@baylor.edu; website: http://www.baylor.edu.** Baylor University is a Baptist university affiliated with the Baptist General Convention of Texas. *As an Affirmative Action/Equal Employment Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disability to apply.*

ASSISTANT PROFESSOR BIOCHEMISTRY/MOLECULAR BIOPHYSICS

The Johns Hopkins University

The Department of Biology, The Johns Hopkins University invites applications for a tenure-track faculty appointment in the field of biochemistry/molecular biophysics. Regardless of area of research, we are only interested in applicants of the very highest caliber with a demonstrated outstanding record of research. The successful candidate will be expected to establish a vigorous research program and to participate in graduate and undergraduate teaching.

Information about the Department's faculty, research interests and resources may be obtained at the Department's homepage, **website: http://www.bio.jhu.edu/**.

Applicants should submit a curriculum vitae (including the names and addresses of three referees) together with a statement of current and planned research, and arrange to have three letters of recommendation sent to:

**Chair, Search Committee
in Biochemistry/Molecular Biophysics
Department of Biology
The Johns Hopkins University
3400 North Charles Street
Baltimore, MD 21218**

Deadline for receipt of applications is October 31, 1999.

The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are especially encouraged to apply.

ORNITHOLOGIST ILLINOIS NATURAL HISTORY SURVEY

Ornithologist (ASSISTANT RESEARCH SCIENTIST, grant-supported) to conduct avian surveys on Illinois Department of Transportation project areas and to establish a research program in avian molecular genetics or systematics. Ph.D. in appropriate discipline and proficiency in censusing birds required. Located on the University of Illinois Urbana campus. Access to campus facilities and affiliate university appointments. Salary: \$38,000 to \$40,000. **Telephone: 217-244-7790** to request a copy of the position announcement and application requirements. *The Illinois Natural History Survey is an Equal Employment Opportunity/Affirmative Action/ADA Employer.*

POSITIONS OPEN

TENURE-TRACK POSITION IN COMPUTATIONAL TISSUE/ CELL MECHANICS

The Department of Biomedical Engineering at Tulane University invites applications for a tenure-track faculty position that will be available as early as December 1, 1999.

The position is the second of two funded by a newly awarded Whitaker Special Opportunity Award, "Establishing Excellence in Computational Tissue Mechanics." We seek a faculty member whose focus includes computational cell and tissue biomechanics research. The position will allow for continued expansion of the department's focus—which already includes macro-scale biomechanics work in biosolids and biofluids and experimental cell and tissue engineering—to include micro-scale investigations of cell and tissues.

The department, founded in 1977, presently has 11 full-time faculty members, an ABET-accredited undergraduate program with approximately 200 undergraduate majors and 50 graduate students. Applicants must have an earned Doctorate, and will be expected to teach undergraduate and graduate courses and develop an externally funded research program.

We plan to begin interviews with the top candidates by October 1, 1999. However, the search will continue until the position is filled.

Send a curriculum vitae, a brief description of research and teaching interests, and names and addresses of three references to:

**Richard T. Hart, Ph.D.
Faculty Search Committee
Department of Biomedical Engineering
Boggs Center, Suite 500
Tulane University
New Orleans, LA 70118-5674**

More information about the Department of Biomedical Engineering can be found at **website: http://www.bmen.tulane.edu.**

Tulane University is an Affirmative Action/Equal Opportunity Employer.

AQUATIC ECOLOGIST

Applications are invited for a tenure-track position in plant or animal aquatic/marine ecology at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Candidates must have postdoctoral training. The appointee will be expected to develop an active research program, acquire external funding, participate in graduate training, and teach courses in ecology and/or genetics and advanced courses in area of specialization.

Review of applications will begin 1 November 1999 and continue until position is filled. Send curriculum vitae, statement of interests, and names of three references to:

**Daniel D. Jones, Ph.D.
Department of Biology
CH 109
1530 3rd Avenue South
Birmingham, AL 35294-1170**

The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ENTOMOLOGIST/RESEARCH MOLECULAR BIOLOGIST. GS-414/401-12/13. The USDA, Agricultural Research Service, Northern Plains Agricultural Research Laboratory in Sidney, Montana is seeking a Pathologist to conduct research on the biological control of grasshoppers. A Ph.D. in entomology, microbiology, pathology, or related science with knowledge of invertebrate pathology is desired. This is a permanent appointment and U.S. citizenship is required. Salary is commensurate with experience (\$47,891 to \$74,035 per annum). For more information contact: Ms. Charlotte Anderson, Telephone: 406-482-9432; e-mail: canderso@sidney.ars.usda.gov. Or see the vacancy announcement (#ARS-X9W-9406) on our website: **http://www.ars.usda.gov**. Applications must be postmarked by September 24, 1999. *The USDA is an Equal Opportunity Provider and Employer. Women and minorities are encouraged to apply.*

POSITIONS OPEN

CENTER FOR AGING, GENETICS, AND NEURODEGENERATION MASSACHUSETTS GENERAL HOSPITAL

The new Center for Aging, Genetics, and Neurodegeneration at Massachusetts General Hospital and Harvard Medical School is recruiting for three positions: (1) High-Throughput Drug Screening Laboratory. New **FACULTY** or **RESEARCH SCIENTIST** to direct the development of high-throughput microassays that can be used to screen for new therapies for neurodegenerative disorders. (2) Protein Neurochemistry Laboratory. New **FACULTY** or **RESEARCH SCIENTIST** to develop a protein chemistry laboratory. The purpose of this new laboratory is to advance our understanding of abnormal protein behavior (e.g., expression, folding, and trafficking) in the neurodegenerative diseases. (3) Transgenic Animal Facility for Neurodegenerative Diseases. New **FACULTY** or **RESEARCH SCIENTIST** to develop transgenic animal approaches to neurodegenerative diseases including behavioral and molecular assessments. Each Center laboratory will interact closely with other laboratories and scientists investigating the basic neurobiology of neurodegenerative diseases. Applications with curriculum vitae and the names and addresses of three professional references familiar with the candidate's qualifications should be submitted by September 15, 1999, to:

**Anne B. Young, M.D., Ph.D.
Chief, Neurology Service, Vbk-9
Massachusetts General Hospital
Boston, MA 02114**

Salaries and academic appointments will be commensurate with experience. *The Massachusetts General Hospital is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR IN MOLECULAR BIOLOGY/GENETICS OF COMPLEX CARBOHYDRATES IN PLANTS

The University of Georgia Complex Carbohydrate Research Center (CCRC) is seeking an Assistant Professor for a tenure-track position in molecular biology and/or molecular genetics of complex carbohydrates in plants. We seek a faculty member who will develop an innovative research program using molecular techniques to investigate the roles of oligo- and polysaccharides in plant growth and development and/or host-pathogen interactions. Demonstrated research creativity, teaching excellence, and a willingness and ability to participate in a multidisciplinary environment are essential. The successful candidate will occupy laboratory and office space in the CCRC building and have access to outstanding analytical facilities and expertise. Applications received by October 1, 1999, are assured of consideration. Salary negotiable. Applicants should send a letter of interest, a curriculum vitae and publication list, a description of research interests, and the names and addresses of four referees to: **Dr. Peter Albersheim and Dr. Alan Darvill, Directors, Complex Carbohydrate Research Center, University of Georgia, 220 Riverbend Road, Athens, GA 30602-4712 USA.** Inquiries can be sent by e-mail: **palbersh@ccrc.uga.edu** or **adarvill@ccrc.uga.edu**. *An Affirmative Action/Equal Employment Opportunity Institution.*

ASSISTANT RESEARCH SCIENTIST UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

To study developmental biology of primate fetal adrenal particularly on mechanisms of growth, differentiated function, and parturition. Expertise in molecular biology and participation in training Postdoctoral Fellows essential. Send curriculum vitae and three references to: **Robert Jaffe, Center for Reproductive Sciences, University of California, San Francisco, 505 Parnassus, San Francisco, CA 94143-0556. E-mail: jaffer@obgyn.ucsf.edu.**

UCSF is an Affirmative Action/Equal Opportunity Employer. The University undertakes Affirmative Action to assure Equal Employment Opportunity for underutilized minorities and women, persons with disability, Vietnam-era veterans, and special disabled veterans.

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

**POSTDOCTORAL RESEARCH
POSITION**

Starting Salary Range: \$30,000
Commensurate with experience/
present salary

The Laboratory of Infectious Diseases, Epidemiology Section, seeks a Postdoctoral Fellow with three years or less of postdoctoral experience in virology, molecular biology, or protein chemistry to study the mechanism of rotavirus dsRNA replication. Potential areas of research include indentifying cis-acting signals in viral mRNA that promote dsRNA synthesis, locating RdRP- and protein-binding sites in the mRNA template, and characterizing the structure and role of accessory proteins in genome replication and packaging. Candidates must be U.S. citizens or permanent residents and have a Ph.D. or M.D. degree. Please send curriculum vitae and three references to:

Dr. John T. Patton
Laboratory of Infectious Diseases, NIAID
Bldg. 7, Room 117
7 Center Drive, MSC 0720
Bethesda, MD 20892
FAX: (301) 496-8312
E-mail: jpatton@niaid.nih.gov

NIH is an Equal Opportunity Employer

ANNOUNCEMENT

**DOES THIS SOUND LIKE YOU OR SOMEONE
YOU KNOW?**

"I have long been interested in science, and in helping people. During my training, I had a number of clinical experiences which convinced me that I wanted to specialize in immunology at the bench, but still have patient contact."

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Has your interest always been to pursue medical research? Do the realities of staggering educational debt appear to prevent you from realizing your dreams? NIH offers a variety of clinical and basic science postdoctoral training fellowships that can be combined with educational loan repayment incentives. You owe it to yourself to know about these programs (or share the information with someone in need!) as you make your career decisions. You owe it to yourself to learn more about what NIH can do for you.

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NIH, the world's leading biomedical research facility, has trained thousands of qualified students in neuroscience, pathology, immunology, molecular genetics, developmental biology, cell biology, molecular biology, virology, and structural biology, to name only a few areas in our intramural research program.



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**<http://www.training.nih.gov> and
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NIH is dedicated to building a diverse community in its training and employment programs.



**UNIVERSITY OF CALIFORNIA, IRVINE
MAJOR INITIATIVE IN THE CHEMISTRY
AND PHYSICS OF MATERIALS**

As part of a major new multidisciplinary initiative in materials chemistry and physics, the School of Physical Sciences at the University of California, Irvine, invites applications for at least five new faculty openings at all levels. Applications are encouraged from candidates in all areas of materials chemistry and physics, including but not limited to the areas of biomaterials, nanomaterials, electronic, photonic and magnetic materials, polymers, ceramics, atomic scale manipulation, novel applications of materials to technology, and theoretical work related to these topics. At the Assistant Professor level we are seeking outstanding Ph.D.s who will establish vigorous research programs in areas that will complement existing strong programs in both the Department of Chemistry, and the Department of Physics and Astronomy. The ability to effectively teach chemistry or physics at the undergraduate and graduate levels is required.

Applicants for Assistant Professor positions should send their curriculum vitae, a list of publications and a research proposal to **Dean Ronald Stern, Materials Search Committee, School of Physical Sciences, University of California, Irvine, California, 92697-4675**. Applicants should also arrange to have three letters of recommendation submitted on their behalf. Candidates for the senior faculty openings should submit their curriculum vitae including a short description of their present research activities, and a list of potential references to the address above. To ensure full consideration during the 1999/2000 academic year, applications and all supporting materials should be received by November 15, 1999.

*The University of California is an Equal Opportunity Employer
committed to excellence through diversity.*

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.

POSITIONS OPEN

SENSORY NEUROBIOLOGY POSITION WAKE FOREST UNIVERSITY SCHOOL OF MEDICINE

The Department of Neurobiology and Anatomy is initiating a search for a tenure-track faculty member working in sensory neurobiology. While all Researchers studying sensory systems are encouraged to apply, preference will be given to candidates studying chemosensory systems and addressing questions regarding sensory integration. The selected candidate will interact with a large and cooperative group of Sensory Neurobiologists that direct funded projects spanning the visual, auditory, and somatosensory systems as well as training grant and program-project grants emphasizing integrative function and development. Candidates should have a Doctoral degree, at least two years of postdoctoral research, a strong record of research accomplishments, and a commitment to developing an independent as well as collaborative research program. Teaching responsibilities will be commensurate with experience and background. A competitive recruitment package will include salary and fringe benefits, set-up funds, laboratory space, and shared equipment facilities.

Applications should include full curriculum vitae and a statement of research interests. Applicants should also arrange for three letters of recommendation to be sent to the Search Committee. The earliest start date for the position is January 1, 2000; applications will be accepted until a suitable candidate is recruited. Information about the position, individual faculty and research interests, and graduate programs can be found at [website: http://www.wfubmc.edu/nba/nba.html](http://www.wfubmc.edu/nba/nba.html). All application materials should be sent to: **Faculty Search Committee, Department of Neurobiology and Anatomy, Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1010.** *Affirmative Action/Equal Opportunity Employer.*

PALEOECOLOGY ECOSYSTEM PROCESSES BIOGEOCHEMISTRY

The University of Pennsylvania seeks an Earth Scientist with research interests in the interface between the terrestrial biosphere and geosphere. The candidate will fill a **TENURE-TRACK POSITION** in The Department of Earth and Environmental Science. Possible areas of focus may include, but are not limited to, paleoecology, ecosystem dynamics, and biogeochemical processes. Preference will be given to candidates who have a strong established research program that (ideally) addresses both modern and ancient ecosystems. We are also particularly interested in candidates who use the modern tools of geochemistry in their work and who can interact with related departmental interests in forest ecosystems, quaternary geology and paleoclimatology, paleontology, paleobotany, and isotope geochemistry. A competitive start-up package will be made available as part of this appointment. Applicants should send a curriculum vitae; reprints; statements of research and teaching interests; and a list of at least three references with addresses, e-mail address, and telephone and FAX numbers to: **Arthur H. Johnson, Geobiology Search Committee, Department of Earth and Environmental Science, 240 South 33 Street, University of Pennsylvania, Philadelphia, PA 19104-6316.** E-mail: ahj@sas.upenn.edu. The search will continue until the position is filled. *The University of Pennsylvania is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

RESEARCH ASSOCIATE

NIH-funded Postdoctoral position to study macrophage-active biomimetic oligopeptides, post-ligation signaling, and phenotypic development in a biomaterial/bioengineering laboratory. Send curriculum vitae, statement of research interests, and three reference letters to: **Prof. W. John Kao, School of Pharmacy, 425 North Charter Street, University of Wisconsin-Madison, Madison, WI 53703 USA.** E-mail: wjkao@pharmacy.wisc.edu. *UW-Madison is an Equal Opportunity Employer.*

POSITIONS OPEN



RESEARCH LEADER USDA NATIONAL ARBORETUM BELTSVILLE, MARYLAND

The USDA National Arboretum is accepting applications for a highly qualified individual with an established research record who will serve as Research Leader of the Floral and Nursery Plants Research Unit. Responsibilities include identifying high-priority research programs, obtaining support from the government and industry in diverse areas of genetics, physiology, pathology, entomology, systematics, and germplasm development. As Research Leader, the incumbent supervises a staff of approximately 47 employees that includes about 14 Ph.D. scientists in four locations. Applicants must have demonstrated their ability to guide and provide leadership to diverse research programs. The Research Leader is responsible for conducting a personal research program related to nursery and floral plants and coordinating research among the scientists. Applicants require a degree in a field of science that is related to horticulture/botany such as genetics, plant pathology, systematics, or physiology. Salary is commensurate with experience and ranges from \$68,570 to \$104,851 per year. *This is a full-time permanent position and applicants must be U.S. citizens.* For application procedures and qualification requirements, applicants **MUST** request a complete copy of the government vacancy announcement (announcement number ARS-X9E-9405), contact **Telephone: 301-504-1351** or by downloading the full text announcement from the ARS **website: http://www.ars.usda.gov**. Applications must be postmarked by November 22, 1999. *USDA is an Equal Opportunity Employer.*

TENURE-TRACK ASSISTANT PROFESSOR

The Department of Physiology, University of Florida College of Medicine, invites applications for a full-time tenure-track Assistant Professor position. The successful candidate will be a Mammalian Physiologist who will develop an extramurally funded independent research program and participate in departmental teaching and educational programs. Initial support will be provided by the Howard Hughes Medical Research Program for Medical Schools. Applicants must have a Ph.D., M.D., or equivalent degree, as well as postdoctoral experience. The successful applicant will complement current departmental and college strengths in the areas of gene therapy for hypertension, signal transduction, fetal/maternal physiology, neuroendocrinology, membrane transport and ion channels, developmental genetics, and other interests described at our **website: http://www.med.ufl.edu/phys/index.html**. Submit a curriculum vitae, including a statement of research plans, and have three letters of reference sent to: **Dr. Bruce R. Stevens, Search Committee Chair, Department of Physiology, College of Medicine, University of Florida, P.O. Box 100274, Gainesville, FL 32610-0274.** Salary is negotiable. Application deadline is October 15, 1999. Anticipated start date is April 1, 2000. *The University of Florida is an Equal Employment Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available in human genetics. Projects include analysis of association and linkage between genetic markers and behavioral traits such as ADHD and delinquency. Candidates should have a Ph.D. in molecular biology or related field. Preference given to applicants with strong writing skills, expertise in PCR methods, and interest in psychiatry/behavior. This two-year position starts February 1, 2000, with some flexibility. Send curriculum vitae and three letters to: **Professor David C. Rowe, P.O. Box 210033, University of Arizona, Tucson, AZ 85721.** E-mail: dcro91@ag.arizona.edu. *UA is an Affirmative Action/Equal Opportunity Employer. Minorities/Women/Disabled/Veterans.*

POSITIONS OPEN

POULTRY SCIENTIST/ MICROBIOLOGIST/PHYSIOLOGIST/ RESEARCH LEADER

The U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Poultry Production and Product Safety Research Unit, Fayetteville, Arkansas has a permanent full-time vacancy responsible for leading a multidisciplinary team of research scientists. The mission of the Unit is to develop ways to reduce the impact of significant problems in turkey and broiler production, ensure a wholesome poultry meat product for the consumer, and reduce the negative environmental impacts associated with poultry production in the United States. Candidates must have a degree in animal science (poultry), microbiology, or physiology (poultry). In addition to meeting basic requirements, applicants must have directly related education or specialized experience in poultry science, microbiology, physiology, or immunology, and have the ability to plan and conduct research and report results on methods for reducing the impact of poultry production problems and/or ensuring the microbiological food safety of poultry meat products. Salary will be commensurate with experience (\$67,298 to \$102,907) per annum. *Candidates must be U.S. citizens.* For application information call: **Edna Taylor, Telephone: 409-260-9443**; indicate announcement number ARS-X9S-9360. Incomplete applications will not receive consideration. Applications must be postmarked by September 24, 1999. Full text vacancy announcement may be obtained via Internet (**website: www.ars.usda.gov**). *USDA/ARS is an Equal Opportunity Employer.*

RESEARCH ASSOCIATE and POSTDOCTORAL TRAINING opportunities are periodically available with the College of Biological Sciences at the University of Minnesota. Positions may be available in the Departments of Biochemistry, Molecular Biology, and Biophysics; Ecology, Evolution, and Behavior; Plant Biology; and Genetics, Cell Biology, and Development. Positions may also be available in the following research programs: the Biological Process Technology Institute, the Lake Itasca Forestry and Biological Station, and the Plant Molecular Genetics Institute. The Research Associate positions are for independent research. To be considered, applicants must hold a Ph.D. degree or foreign equivalent and at least two years of postdoctoral experience. Applicants are encouraged to secure salary support from an external granting agency. Multiple positions may be available, depending upon space and facilities, availability of funding, as well as faculty research interests. The postdoctoral training positions require a Ph.D. or foreign equivalent and appointments are limited to three years. Applications must indicate which position is of interest and must include a personal curriculum vitae, a brief statement of research interests and experience, and names, addresses, and telephone numbers of three references. Closing date for applications is August 27, 2000. Direct applications to: **Administrator, (Department Name), College of Biological Sciences, 123 Snyder Hall, 1475 Gortner Avenue, St. Paul, MN 55108.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*

RESEARCH FELLOWSHIPS for qualified Ph.D., M.D., or equivalent in molecular medicine at the University of Pennsylvania. Positions are available immediately for U.S. citizens/permanent residents in an NIH-funded program. Candidates have a choice of 10 established laboratories in several departments. The research focus is transcription/translational control, gene therapy, protein trafficking, exo/endocytosis, developmental biology, cell membrane receptors, cell signaling, immunotargeting, oxidant injury, and related areas. We provide full benefits and stipend supplementation.

Website: <http://www.med.upenn.edu/ifem/pep.htm>. Applications may be submitted electronically, **website:** <http://www.med.upenn.edu/ifem/nrschoice.htm>.

Qualified women and minority candidates are especially encouraged to apply. Affirmative Action/Equal Opportunity Employer.

Biochemistry and Cell Biology Faculty Positions

The Department of Biochemistry and Cell Biology, at the State University of New York at Stony Brook, invites applications for two tenure-track faculty positions.

One of these positions will be a junior or intermediate level position. The second will be at the intermediate or senior level.

We seek applicants with interests in fundamental problems in biochemistry, broadly defined, using plant, animal, fungal or microbial systems.

Please send by October 15, 1999, a cover letter, curriculum vitae, and a summary of research interests. Applicants for the junior position should also have three letters of reference sent.

All material should be mailed to:
Chair, Faculty Search Committee
Department of Biochemistry and Cell Biology
450 Life Sciences Building
SUNY/Stony Brook
Stony Brook, NY 11794-5215

Stony Brook is
an affirmative
action/equal
opportunity
educator and
employer.



UNIVERSITY OF HAWAII AT MANOA DIRECTOR, INSTITUTE FOR ASTRONOMY (Search reopened)

The University of Hawaii at Manoa solicits applications for the position of Director, Institute for Astronomy. This is an Executive/Management (E/M) position, but also carries with it a tenurable faculty position. The Institute is headquartered on the Manoa campus of the University, in Honolulu, and operates observatories and manages the astronomical sites on Haleakala (Maui) and on Mauna Kea (Big Island of Hawaii). The Institute staff totals about 209, including 50 faculty. The Director has responsibility for the health and development of the research program of the Institute, for operation of the University's observational facilities, and for liaison with and support of other organizations sited on Haleakala and Mauna Kea. The Director represents the scientific concerns of the University of Hawaii in discussions with other astronomical groups interested in Hawaii, prepares and presents testimony to Legislative committees, and is responsible to the University for providing leadership with respect to the use of Haleakala and Mauna Kea for astronomical purposes. The Director interacts with the media and community groups on issues involving the Haleakala and Mauna Kea astronomical sites. **Minimum Qualifications:** A Ph.D. in Astronomy, Physics, or related discipline, and attainment of professorial rank or comparable professional experience prior to appointment. Applicants should have a distinguished record of achievement in astronomical or related scientific research and in working with funding agencies; a demonstrated ability for administration of scientific research programs; a demonstrated ability to work effectively with faculty, administrators, students, staff, and external agencies. **Desirable Qualifications:** Experience to work within a culturally diverse environment and University. Application dossiers should contain the following information: 1) A detailed letter explaining the candidate's interest in the position and specifying how the minimum and desirable qualifications for the position are met; 2) a detailed resume including list of publications and other relevant information such as extramural research funding, work on national and international advisory committees, etc; and 3) the names, addresses, telephone and fax numbers and e-mail addresses of at least three persons from whom professional references can be obtained. Applications should be sent to Chair, IfA Search Committee, 105 Bachman Hall, University of Hawaii at Manoa, 2444 Dole Street, Honolulu, Hawaii 96822.

Application deadline is November 30, 1999. Further details may be obtained from Dr. Klaus Keil, Chair of the Search Committee (phone 808-956-8761; fax 808-956-3188; e-mail keil@pgd.hawaii.edu).

The University of Hawaii is an Equal Opportunity/Affirmative Action institution.



Department of Biology

GENETICIST IMMUNOLOGIST

The Department of Biology of the University of Waterloo invites applications for two **TENURE TRACK** positions at the **ASSISTANT PROFESSOR** level, one in **GENETICS** and one in **IMMUNOLOGY**. Applicants should have a Ph.D. and postdoctoral experience, and be prepared to establish an active research program. Duties will include research, teaching at the undergraduate and graduate levels, and graduate student supervision.

For the genetics appointment, we are seeking a person who will establish an innovative research program in eukaryotic molecular genetics and offer introductory and advanced courses in genetics.

For the immunology appointment, we are seeking someone to establish a research program in immunology, offer an undergraduate course in immunology, and contribute to our teaching in one of animal physiology, environmental toxicology, microbiology or molecular biology.

Salary will be commensurate with qualifications and experience. Applicants should send their curriculum vitae, the names of three individuals willing to furnish letters of reference, and an outline (1-2 pages) of their proposed research program to: **Dr. William D. Taylor, Professor and Chair, Department of Biology, Faculty of Science, University of Waterloo, Waterloo, Ontario, N2L 3G1 CANADA.** The closing date for applications is **September 30, 1999.**

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. These appointments are subject to the availability of funds. Additional information on the Department is available at <http://www.science.uwaterloo.ca/biology/biology.html>

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.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR EXTRACELLULAR MATRIX BIOLOGY UNIVERSITY OF DELAWARE Department of Biological Sciences

Two tenure-track faculty positions at the Assistant/Associate Professor level are available for individuals utilizing molecular approaches to study extracellular matrix biology. Interests may include developmental biology, signal transduction, neurobiology, microbe-host interactions, or regulation of matrix assembly in adult tissues. Requirements: Ph.D. or equivalent and a minimum of three years of postdoctoral experience. Outstanding candidates are sought with a strong commitment to both research and education at the graduate or undergraduate level and a record of extramural funding. Contact: Submit a complete curriculum vitae, a description of research interests, and the names of three references to: **Dr. Daniel Carson, Faculty Search Committee, Department of Biological Sciences, University of Delaware, Newark, DE 19716-2590.** Review of applications will begin upon receipt and will continue until the position is filled. The starting date for these positions is September 1, 2000. For additional information contact **web-site: <http://www.udel.edu/bio>**. Deadline: October 31, 1999.

The University of Delaware is an Equal Opportunity Employer and encourages applications from minority group members and women.

ASSISTANT PROFESSOR BIOPHYSICAL CHEMISTRY UNIVERSITY OF DELAWARE Chemistry/Biochemistry

The Department of Chemistry and Biochemistry, University of Delaware, invites applications for a tenure-track position at the rank of Assistant Professor in biophysical chemistry, effective September 1, 2000. A Ph.D. in chemistry or a related area is essential, and postdoctoral experience is an asset. The research area can be in any area of modern biophysical chemistry, broadly defined, that complements the expertise of the current faculty. The successful candidate will be expected to teach effectively at the undergraduate and graduate level and to initiate a well-funded, vigorous research program. Applicants must submit a curriculum vitae and a detailed description of the proposed research program and must arrange to have at least three letters of recommendation sent on their behalf. Review of applications will commence on October 15, 1999, and will continue until the position is filled. Send application materials to: **Professor Steven Brown, Chairman, Department of Chemistry and Biochemistry, University of Delaware, Newark, DE 19716.**

The University of Delaware is an Equal Opportunity Employer and encourages applications from minority group members and women.

POSTDOCTORAL POSITIONS in biomolecular NMR available to study the relationship between the structure/dynamics of bacterial response regulatory proteins and their function. Candidates with knowledge in any (or all) of the following areas desired: multidimensional NMR, structure/dynamics calculations, protein expression/purification, molecular biology techniques. Send curriculum vitae and the names of three references to: **Prof. John Cavanagh, Department of Chemistry, Purdue University, West Lafayette, IN 47907.** E-mail: johncc@purdue.edu.

Purdue University is an Equal Opportunity Employer, and encourages women and minorities to apply.

A POSTDOCTORAL POSITION is available immediately to study the pathophysiology of phosphorylase phosphatases in the development and progression of cancer. A M.D. or Ph.D. with experience in molecular or cellular biology is required. Please send your curriculum vitae and names of three references to: **Mark A. Dayton, M.D., Ph.D., Feist-Weiller Cancer Center, Louisiana State University Medical Center, P.O. Box 33932, Shreveport, LA 71130-3932.** E-mail: mdayto@lsu.edu. *LSUMC is an Affirmative Action Employer.*

POSITIONS OPEN

SCIENCE CENTER DIRECTOR. Trinity College seeks a Director of its Center for Interdisciplinary Science. As Trinity's program center for advancing science education, the Center for Interdisciplinary Science represents the College's science departments and programs including biology, chemistry, computer science, engineering, mathematics, physics, and the interdisciplinary neuroscience program. The Director coordinates all programs of the Center, including the Interdisciplinary Science Program (ISP), a special two-year honors-level program for prospective science majors.

The Director works with the Admissions office to recruit students for the ISP program, plans its curriculum, teaches several of the ISP seminars, and coordinates the placement of ISP students in Research Apprenticeships with participating faculty. The Director is also responsible for the development and coordination of science-based outreach programs targeted at the Hartford community (working closely with the Science Director of the new Learning Corridor) and for the design and implementation of noncurricular on-campus programs for science students, with emphasis on groups underrepresented in the sciences. The Director will be expected to work closely with the Director of Corporate and Foundation Relations and the Faculty Grants Office in securing external funding for the College's diverse science programs.

Undergraduate science teaching experience, public communication skills, and the ability to work collaboratively with diverse groups of people are required. A track record in scientific research is highly desirable. The Director is expected to have a terminal degree in a science field and some administrative experience. This is a 12-month administrative position reporting to the Office of the Dean of Faculty. The search will continue until the position is filled. Starting salary is commensurate with qualifications and experience; excellent benefits. Please submit a résumé, cover letter (including salary requirements), and the names, titles, and telephone numbers of three references to: **Donna D. Willson, Director of Human Resources, Trinity College, 300 Summit Street, Hartford, CN 06106.**

POSTDOCTORAL POSITION to study immune responses to microbial superantigens, with emphasis on T cell-B cell interactions. Pathogenetic role in murine models of lupus to be addressed. Supported by NIH and Arthritis Foundation grants. M.D. and/or Ph.D. required. Preference given to candidates with experience in *in vivo* murine models. Applicants must be conversant in English. Send curriculum vitae with names, e-mail addresses, and telephone and FAX numbers of three references to: **William Stohl, M.D., Ph.D., University of Southern California, 2011 Zonal Avenue, HMR 711, Los Angeles, CA 90033.** FAX: 323-442-2874; e-mail: stohl@hsc.usc.edu. *Affirmative Action/Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.*

POSTDOCTORAL POSITION to study transcriptional regulation of intestinal and pancreatic endocrine cell differentiation. *In vitro* and transgenic mouse models will be used to characterize how terminal differentiation is coordinated with cell cycle arrest (*Genes Dev.* 12:820, 1988; *Genes Dev.* 11:2323, 1997). Experience in molecular biology and/or transgenic mouse models is essential. Send curriculum vitae and the names of references to: **Andrew B. Leiter, M.D., Ph.D., Gastrointestinal Division #218, New England Medical Center, 750 Washington Street, Boston, MA 02111.** E-mail: andy.leiter@es.nemc.org. *Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS in bacterial pathogenesis. Two positions available to study the molecular pathogenesis of *Chlamydia trachomatis*. Genomic-level focus to investigate host-microbial interactions, including attachment and invasion of mammalian cells and role of host immune response in immunity and disease. Recent Ph.D. or M.D. graduates with productive research background in microbiology, cell biology, and/or immunology are encouraged to apply. Send curriculum vitae and names of references to: **Dr. Richard S. Stephens, Box 0412, University of California, San Francisco, CA 94143-0412.**

POSITIONS OPEN

SENIOR ECOLOGIST DEPUTY DIRECTOR

The Platte River Whooping Crane Trust, a non-profit Trust that protects and maintains habitat for cranes and other migratory birds in central Nebraska, seeks a Deputy Director. The Deputy Director assists the Director with administration of the Trust and is primarily responsible for administering the Trust's research and science program. Oversee operation of the research center, administer grants and contracts, and assist with preparation of publications and reports. Advanced degree in wetland, avian, or plant ecology or closely related field. Five-plus years with a non-profit or government agency; supervisory experience; experience with field research and habitat monitoring; strong communication skills; and a commitment to conservation required. Experience with grassland and cropland management, endangered and threatened species conservation, and cranes, waterfowl, and other migratory birds highly desired. Ability to work with people with diverse backgrounds and interests. Send a cover letter, résumé, salary history, and names of three references to: **Dr. Paul J. Currier, Platte River Trust, 6611 West Whooping Crane Drive, Wood River, NE 68883.** For more information contact: **The Trust, Telephone: 308-384-4633; FAX: 308-384-7209; e-mail: trust@whoopingcrane.org.** Closing date October 15, 1999, or when the position is filled.

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.*

POSTDOCTORAL POSITION available immediately for qualified M.D. or Ph.D. to study ion channels, cell calcium and rhythmic electrical activity of pancreatic islet cells (see: **Kinard et al., *Biophys. J.* 76:1423-1435, 1999**). Must have experience with electrophysiology. Experience with fura-2 or channel molecular biology helpful. Please send a curriculum vitae and name/contact information for three references to: **Dr. L. S. Satin, Department of Pharmacology and Toxicology, Medical College of Virginia Campus, Virginia Commonwealth University, P.O. Box 980524, Richmond, VA 23298-0524.** E-mail: lsatin@hsc.vcu.edu.

POSTDOCTORAL POSITIONS in developmental biology available to study the biochemical machinery responsible for coordinating cell growth and differentiation during the development of the inner ear (*Development* 126:1581-1590, 1999). A strong cell and molecular biology background is required. Excellent salary and benefits. Send curriculum vitae and three references to: **Dr. Neil Segil, Department of Cell and Molecular Biology, House Ear Institute, 2100 West 3rd Street, Los Angeles, CA 90057.** E-mail: nsegil@hei.org; website: <http://www.hei.org/htm/cmbcgrw.htm>.

UNIVERSITY OF MINNESOTA

Postdoctoral Opportunities at the
University of Minnesota
College of Veterinary Medicine

Mitchell Abrahamsen (abrah025@tc.umn.edu) Mucosal immunology, immunogenetics, molecular parasitology

Lee Alexander (alexa039@tc.umn.edu) Isolate and map porcine microsatellites

Craig Beattie (cbeattie@tc.umn.edu) Structural and functional genomics of multiple species

David Brown (brown013@tc.umn.edu) Pharmaconeuroimmunology

Kay Faaberg (kay@lenti.med.umn.edu) Molecular biology, pathogenesis of viruses

Alice Larson (larso011@tc.umn.edu) Growth factors and transmitters in pain transmission

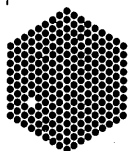
Michael Murtaugh (murtaugh@biosci.cbs.umn.edu) Swine immunology, mechanisms of disease resistance and disease pathogenesis

Albert Paszek (pasze001@tc.umn.edu) Structural and functional genomics of multiple species

Lawrence Schook (schoo009@tc.umn.edu) Porcine genomics, animal health

Bruce Walcheck (walch003@tc.umn.edu) Leukocyte adhesion and recruitment

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EMBL

Hamburg Outstation

SHAPE DETERMINATION OF BIOLOGICAL
MACROMOLECULES IN SOLUTION AND
RELATED TOPICS

A workshop on this topic supported in part by the EU TMR grant ERBFMGECT980134

"Access to Large scale facilities" will be held at the
EMBL Outstation on the DESY site in Hamburg on November
26 - 27, 1999

Invited lectures will be given by: J.M. Andreu, J. Bordas, J. Garcia De La Torre, J. G. Grossmann, R. Kahn, P. Mariani, R. May, S.J. Perkins, J. Trehwella, H. Tsuruta, J. Skov-Pedersen, H.B. Stuhmann, D. Svergun, P. Vachette, V. Volkov.

Applications, including a short CV, a short description of your current research and the reason why attendance to this workshop is important to you should be received by October 1st, 1999. Young researchers are requested to provide a letter of recommendation from a senior scientist. The number of places is restricted to 25. The participation fee (EUR 125) covers accommodation and meals during the workshop. Limited funds are available to support travel for citizens from the EU member and associated states.

For further information, please consult the EMBL Hamburg WWW pages (<http://www.embl-hamburg.de>) or contact M. Koch (koch@embl-hamburg.de) or D. Svergun (svergun@embl-hamburg.de). Please send CV and application to shape99@embl-hamburg.de or to "Shape 99", EMBL c/o DESY, Notkestrasse 85, D-22603 Hamburg, Germany, FAX: +49 40 89902 149.

EUROPEAN OPPORTUNITIES



CBG

Max Planck Institute
of Molecular Cell Biology
and Genetics

The Max Planck Institute of Molecular Cell Biology and Genetics (CBG) in Dresden is seeking qualified candidates for independent

group leaders

Research at the institute is focussed on the molecular basis of cellular organization and how cellular architecture and function changes during development. We are especially interested in candidates working on the cell biology of tissue organization. We are also seeking candidates developing methodology for post-genomic research. Initial contracts are 5 years and salaries according to the BAT tariff. Interested candidates can check our web site (<http://www.mpi-cbg.de>). Further information can be obtained from Kai Simons (jobs@mpi-cbg.de). Applications containing a CV, publication list and research plan should be submitted to the administration by November 1, 1999. Three letters of recommendation should be sent separately by the application deadline.

CBG actively encourages female applicants.

Max Planck Institute
of Molecular Cell Biology and Genetics
Administration
Im Eichwald 18/33
D-69126 Heidelberg
Germany

EXECUTIVE DIRECTOR
WORLD CLIMATE RESEARCH PROGRAMME
(WCRP)

The World Meteorological Organization (WMO), the Intergovernmental Oceanographic Commission (IOC) of UNESCO, and the International Council for Science (ICSU) are soliciting applications for Executive Director of the World Climate Research Programme (WCRP). The incumbent will be responsible for the international co-ordination, planning and organization of scientific research programmes and projects contributing to the goals of the WCRP.

Applicants should have an advanced scientific degree (Doctorate) in a relevant field of geosciences, such as meteorology, climatology, oceanography or space research. The following skills will also be required:

- Wide experience in climate studies and global change research; International recognition as a research scientist or university professor;
- Extensive professional experience (10 years minimum) in the planning and organization of large scientific projects and/or management of a scientific institute;
- Familiarity with the procedures of international organizations;
- Excellent knowledge of English or French and a good knowledge of another of the four WMO working languages: English, French, Russian and Spanish.

Deadline for application is 15 October 1999 and commencement of duty 1 November 1999 or as soon as possible thereafter. The duty station is WMO headquarters in Geneva. Please visit WMO website: www.wmo.ch for a full description of the position under vacancy notice number 1454.

Applications should be submitted on WMO Personal History Forms which may be obtained from the WMO Secretariat on request (Tel: 41 22 730 81 11; Fax: 41 22 730 81 81) and should be addressed under confidential cover to: The Secretary General, World Meteorological Organization, Case Postale No 2300, 1211 GENEVA 2, Switzerland.

POSITIONS OPEN

POSTDOCTORAL POSITION is available to study protein folding, quality control, and degradation in the cell. Program aims include defining the maturation and degradation processes of model proteins using live cells, isolated organelles, and *in vitro* systems (*JCB* 139:613-623; *PNAS* 94:6210-6215; *Cell* 81:425-433). Candidates should have a strong background in biochemistry or molecular biology. Send curriculum vitae, reprints, a description of research experience, and the names of three references to: **Dr. Daniel N. Hebert, Department of Biochemistry and Molecular Biology, University of Massachusetts, Amherst, MA 01003. E-mail: dhebert@biochem.umass.edu.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL ASSOCIATE and RESEARCH SCIENTIST positions available for studies of nuclear receptors/coactivators/corepressors in cancer biology and embryonic development. Experimental systems include primary tumors, embryonic stem cell cultures, and transgenic mice. At least three years of research experience in protein chemistry and purification is required. Send curriculum vitae and names of three references to: **Dr. Li-Na Wei, Department of Pharmacology, 6-120 Jackson Hall, University of Minnesota, 321 Church Street S.E., Minneapolis, MN 55455. E-mail: weix009@maroon.tc.umn.edu; FAX: 612-625-8408.** *The University of Minnesota is an Equal Opportunity Educator and Employer.*

POSTDOCTORAL POSITION available immediately to study fundamental aspects of biomaterials science and engineering. Research will focus on single-molecule optical microscopy on polymer-supported bio-artificial membranes. Motivated individuals with an interdisciplinary interest in polymer research, biophysics, and materials science of soft matter are encouraged to apply. Experience in state-of-the-art video microscopy techniques desirable but not necessary. Send curriculum vitae and names of three references to: **Dr. Christoph A. Naumann, Department of Chemistry, Indiana University-Purdue University Indianapolis, 402 North Blackford Street, Indianapolis, IN 46202-3274. E-mail: naumann@chem.iupui.edu.**

POSTDOCTORAL POSITIONS available immediately to study molecular aspects of cancer initiation and metastasis. Projects include the identification and characterization of hereditary prostate cancer genes, and of genes involved in breast cancer metastasis using GeneChip expression profiling. Ph.D., publications, and expertise in molecular biology are required. Send curriculum vitae and names of three references to: **Dr. Graham Casey, Ph.D., Department of Cancer Biology, NB40, The Lerner Research Institute, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. FAX: 216-445-6269; e-mail: casey@ccf.org.**

POSTDOCTORAL POSITION

A NIH-funded Postdoctoral position is available immediately in my laboratory to study the molecular mechanism of the regulation of protein synthesis at the level of posttranslational modifications. Candidate with recent Ph.D. degree in biochemistry or molecular biology must apply with three letters of reference to: **Dr. Bansidhar Datta, Department of Chemistry, University of Nebraska at Lincoln, 606 Hamilton Hall, Lincoln, NE 68588.**

POSTDOCTORAL POSITION in NSF-funded study of visual perception and cognition using fMRI and psychophysical methods; see [website: http://darkwing.uoregon.edu/~prd](http://darkwing.uoregon.edu/~prd) for details. Send curriculum vitae, reprints, and three references by September 15, 1999, to: **P. Dassonville, Psychology Department, 1227 University of Oregon, Eugene, OR 97403-1227. E-mail: prd@darkwing.uoregon.edu.** *The University of Oregon is an Equal Opportunity/Affirmative Action institution committed to cultural diversity and compliance with the Americans with Disabilities Act.*

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS in molecular basis of microbial pathogenesis funded by an NIH training grant are available at the University of Colorado Health Sciences Center in Denver, Colorado. *Candidates must be United States citizens or permanent residents.* Training is available in molecular biology of bacterial infections (with **Ferric Fang, Randall Holmes, Helene Marquis, and Michael Vasil**), viral infections (with **David Barton, Robert Garcea, Donald Gilden, Kathryn Holmes, Daniel Kuritzkes, Jerome Schaack, Aleem Siddiqui, Eric Simoes, or Kenneth Tyler**), and cytokine responses to infections (with **Charles Dinarello**). Additional information on the faculty and their research interests is available at [website: www.uchsc.edu/sm/microbio](http://www.uchsc.edu/sm/microbio). Basic scientist candidates must have the Ph.D. or an equivalent degree with experience in microbiology, bacteriology, virology, immunology, molecular biology, genetics, biochemistry, or cell biology. Clinical scientist candidates must have the M.D., D.O., or D.V.M. degree and a demonstrated interest in laboratory research. Stipend is determined by years of postdoctoral experience. Submit curriculum vitae, bibliography, and names of three references by mail to: **Dr. Randall Holmes, Department of Microbiology B-175, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262. E-mail: randall.holmes@uchsc.edu.** *The University of Colorado Health Sciences Center is committed to Equal Employment Opportunity and Affirmative Action.*

POSTDOCTORAL POSITIONS IN RADIATION ONCOLOGY AND GENE THERAPY

A unique opportunity exists for outstanding candidates to investigate the molecular mechanisms of signal transduction, cell proliferation and apoptosis underlying tumor radioresistance, and to apply novel approaches to radiation treatment using drugs and gene therapeutic tools. This highly interactive, multidisciplinary program is supported by a P01 grant from the National Cancer Institute.

Please mail, FAX, or e-mail your curriculum vitae and names of three references to: **Kristoffer Valerie, Ph.D., Virginia Commonwealth University, Department of Radiation Oncology, Richmond, VA 23298-0058. FAX: 804-828-6042; e-mail: kvalerie@hsc.vcu.edu; website: http://views.vcu.edu/mcvro/.**

VCU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION ENDOTHELIAL CELL APOPTOSIS SIGNAL TRANSDUCTION

A position is available to investigate the role of endothelial cell apoptosis in the progression of renal disease. Applicants should have an M.D. or Ph.D. and three to four years of experience in the field of molecular and cellular biology. *Must be a U.S. citizen or permanent resident.*

Please send curriculum vitae, a summary of research experience, and the names of three references to: **Mark Segal M.D., Ph.D., University of Florida, Department of Nephrology, Hypertension and Transplantation, P.O. Box 100224, Gainesville, FL 32610.**

POSTDOCTORAL POSITION to study the function and structure of the hyperpolarization-activated pacemaker channels. Research involves patch clamp studies of the cloned HCN family of pacemaker channels expressed in cell lines and biochemical analysis of interactions of pacemaker channels with signal transduction cascades. The role of pacemaker channels in neuronal oscillatory activity is also studied in hippocampal slices. Experience in patch clamp recording or protein biochemistry is necessary. Send curriculum vitae and names of three references to: **Dr. Steven A. Siegelbaum, Center for Neurobiology and Behavior, Columbia University, 722 West 168th Street, New York, NY 10032. E-mail: sas8@columbia.edu; FAX: 212-795-7997.** *We take Affirmative Action toward Equal Employment Opportunity.*

POSITIONS OPEN

POSTDOCTORAL POSITION IN IMMUNOTOXICOLOGY, UCLA

A position is available immediately to delineate the physical and chemical attributes of diesel exhaust particles and other air pollutants responsible for their asthmogenic properties, and to study the mechanism(s) whereby these agents exacerbate asthma, using a mouse model. Expertise in immunology and experimental experience with mice are essential. The salary will range from \$30,000 to \$36,000 depending on experience. Send application, including curriculum vitae, and names, postal and e-mail addresses, and telephone numbers of three references to: **Oliver Hankinson, Ph.D., Department of Pathology and Laboratory Medicine, University of California, Los Angeles, Center for Health Sciences, Box 951732, Los Angeles, CA 90095-1732. FAX: 310-794-9272; e-mail: ohank@mednet.ucla.edu.**

UCLA is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION M. D. ANDERSON CANCER CENTER

A NIH-funded position is available immediately in the area of mammalian recombinational DNA repair. Studies will focus on identifying factors and elucidating mechanisms in the recombinational repair of interstrand crosslinks. Expertise in biochemistry and molecular biology required. Salary is competitive and commensurate with experience. Send curriculum vitae and three reference names to: **Dr. Randy Legeriski, Department of Molecular Genetics, M. D. Anderson Cancer Center, Houston, TX 77030. E-mail: rlegerisk@mdanderson.org.**

POSTDOCTORAL POSITION available to study mechanisms of cell death in oligodendrocytes. Tissue culture models of oxidative stress, excitotoxicity, and cytokine-evoked cell death in oligodendrocytes are currently under investigation in the setting of a new NIH-funded program project to study the pathogenesis of cerebral palsy. Send curriculum vitae, a letter describing research background and interests, and the names and telephone numbers of three references to: **Dr. Paul A. Rosenberg, Division of Neuroscience, Department of Neurology, Children's Hospital, 300 Longwood Avenue, Boston, MA 02115. FAX: 617-355-3636.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study the regulation of apoptosis by erythropoietin during differentiation of erythroid progenitors into erythrocytes. Experience with molecular biology methods and a background in cell biology are preferred. *Applicants should be U.S. citizens or U.S. residents (permanent).* Send curriculum vitae and the names of three references to: **Maurice Bondurant, Ph.D., Vanderbilt University Medical Center, Room 548 MRB II, 2220 Pierce Avenue, Nashville, TN 37232-6305. E-mail: maurice.c.bondurant@vanderbilt.edu.**

Three **POSTDOCTORAL POSITIONS** to investigate the regulation of serotonin receptor signaling by antidepressants. The three NIH-funded projects address (1) SSRI-estrogen interactions (**Van de Kar**), (2) prepubescent SSRI exposure (**G. Battaglia**), (3) RGS proteins (**N. A. Muma**), using *in vitro* molecular to *in vivo* transgenic animal models. Contact: **L. D. Van de Kar, Department of Pharmacology, Loyola University Chicago, Medical Center, 2160 South First Avenue, Maywood, IL 60153. Telephone: 708-216-3263; e-mail: lvandek@luc.edu.**

POSTDOCTORAL FELLOWSHIP available to study the cell biology of Alzheimer's disease with an emphasis on presenilins, amyloid precursor protein, and signal transduction. Send letter, curriculum vitae, and contact information for three referees to: **Benjamin Wolozin, M.D., Ph.D., Department of Pharmacology, Loyola University Medical Center, Building 102, Room 3634, 2160 South 1st Avenue, Maywood, IL 60163. E-mail: bwolozin@luc.edu.**

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**Consulting Services in Environmental Science, Health,
Economics and Engineering for the
United Nations Compensation Commission**

The United Nations Compensation Commission (UNCC) was established in 1991 by Security Council resolution 692 to process claims against the Republic of Iraq for loss, injury or damage which arose as a direct result of Iraq's unlawful invasion and occupation of Kuwait in 1990-1991.

Currently, there are 56 claims for environmental damages and depletion of natural resources, with a total asserted value of approximately US\$48 billion. The environmental claims before the UNCC, submitted by or on behalf of governments or corporations, raise several complex issues which include, *inter alia*, the following: monitoring, assessing and valuing the impacts of oil spills and oil fires on marine, coastal, wetland and desert ecosystems, as well as on forestry, agriculture, rangelands, fisheries, livestock, and cultural artifacts and antiquities; monitoring the impact of oil spills and oil fires on human health; assessing the extent of oil and soot contamination to land, groundwater, air and water as well as valuing the remediation of such contamination or the depletion of the affected resource; assessing the extent of environmental damage or natural resource depletion due to the impacts of refugees; and assessing the extent of ordnance contamination and valuing the remediation of such contamination.

The UNCC is seeking individual experts who have substantial professional experience and stature in specific areas of environmental science, health, economics and engineering to assist with analyzing issues before it, generating required additional information and documentation, and evaluating the merits of the specific claims. The immediate demand is for experts in the following fields:

- Environmental damage analysis (all environmental media);
- Remediation of environmental damage (all environmental media);
- Modelling migration of pollutants in air, water, soil and groundwater;
- Analysis of existing and projected human health impacts from environmental damage (including impacts at molecular and cellular levels);
- Ecological and health risk prioritization.

The UNCC invites individual experts or groups of experts that consider themselves capable of providing perspective and background on the technical issues in their fields to express their interest in participating in this work programme. It is anticipated that the experts will have specialized knowledge in only one of the fields identified, and respondents must identify that field, or fields, precisely. Experts associated with academic and other non-profit institutions are encouraged to reply, as are experts associated with other organizations. Those found to be qualified by the UNCC to meet its specific needs will be subsequently sent relevant Requests for Proposal as they are developed or will otherwise be contacted.

Interested experts or groups of experts should submit a sealed application to the following address, marked:

"EXPRESSION OF INTEREST - UNCC CONSULTING SERVICES"

Mr K. Ward, Executive Officer
United Nations Compensation Commission
Villa la Pelouse
Palais des Nations
CH-1211 Geneva 10 Switzerland
Fax no.: (41 22) 917.03.82

Applications must be received by **15 October 1999**, accompanied by the following documents:

- A brief description of your relevant background and a detailed CV (for a group of experts a CV for each individual expert must be included);
- A brief description of the specific services that you can provide in the above-mentioned areas;
- A brief indication of completed or on-going consulting activities and reference projects in the above areas;
- A description of the organisation by which you are currently employed;
- A disclosure of circumstances that may create conflict of interest (e.g. work for Kuwait, Iraq, or other countries in these matters).

POSITIONS OPEN

POSTDOCTORAL POSITION IN GENE REGULATION

Postdoctoral positions are available in the Eukaryotic Transcriptional Regulation Section, Division of Basic Sciences, National Cancer Institute-Frederick Cancer Research and Development Center (NCI-FCRDC), Frederick, Maryland. This section studies the function and regulation of C/EBP transcription factors. Projects include analysis of C/EBP protein function and expression *in vivo* using transgenic and gene targeting approaches, mechanisms of target promoter specificity, protein-protein interactions, and posttranslational regulation of C/EBP activity. Excellent core facilities for animal studies are available at the NCI-FCRDC. Candidates should have a strong background in molecular biology, biochemistry, or molecular genetics. Additional information about the laboratory is available at website: <http://nmrweb.ncifcrf.gov/abl/mhcl/johnson.html>.

Please forward a curriculum vitae and three letters of recommendation to: **Dr. Peter F. Johnson, Transcription Regulation Section, Division of Basic Sciences, NCI-FCRDC, P.O. Box B, Building 539, Room 122A, Frederick, MD 21702-1201.**

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 nonmerit reasons such as race, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization.

POSTDOCTORAL ASSOCIATE DEPARTMENT OF PATHOLOGY

The Division of Neuropathology, Department of Pathology at the University of Miami, School of Medicine is seeking a **RESEARCH ASSOCIATE**. An advanced degree (Ph.D.) with postdoctoral experience in one or more of the following areas: cellular biology, enzymology, immunohistochemistry, *in situ* hybridization, imaging techniques (for measuring intracellular pH and Ca^{2+}), signal transduction, receptor kinetics, and molecular biology. Candidate will be expected to participate and establish scientific collaborations.

Interested individuals should send curriculum vitae and write directly to:

Michael Norenberg, M.D.

Professor

Department of Pathology

University of Miami School of Medicine

P.O. Box 016960

Miami, FL 33101

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

POSTDOCTORAL FELLOWSHIPS

NIH Training Grant positions are available immediately. Research areas include extracellular matrix signaling, calcification, cardiac valve disease, arrhythmias, and gene therapy. Please send a curriculum vitae, research summary, and the names of three references to:

Robert J. Levy, M.D.

Director, Cardiovascular Research

Children's Hospital of Philadelphia

34th and Civic Center Boulevard

Philadelphia, PA 19104

E-mail: levyr@email.chop.edu

FAX: 215-590-5454

The Children's Hospital of Philadelphia, an affiliate of the University of Pennsylvania, is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION AUTOIMMUNITY

Study basic mechanisms of systemic autoimmunity and tolerance (*J. Clin. Invest.* 97:2063, 1996; *J. Exp. Med.* 187:367, 1998; *J. Immunol.* 162:5775, 1999). Expertise in cellular immunology required. Send résumé to: **Dr. Syamal K. Datta, Ward 3-315, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.**

POSITIONS OPEN

POSTDOCTORAL AWARDS IN IMMUNOLOGY LOYOLA UNIVERSITY CHICAGO Stritch School of Medicine

We are seeking Postdoctoral Fellows to participate in our NIH Training Grant in experimental immunology. Research areas include B lymphocyte development and generation of antibody repertoire, **Katherine L. Knight**; B lymphocyte development and aging, **Pamela L. Witte**; T lymphocyte activation and differentiation, **Thomas M. Ellis**; human thymic epithelial cells in T cell development, **Phong T. Le**; T lymphocyte response to viral infections, **Daniel G. Quinn**; mechanisms of virus entry into mammalian cells, **Thomas M. Gallagher**; cancer immunotherapy, **W. Martin Kast**; host response to fungal infections, **Herbert L. Mathews**; immunology of skin disorders, **Brian J. Nickoloff**; neuromodulation of the immune response, **Virginia M. Sanders**; immune cells in wound healing, **Luisa A. DiPietro**; mechanisms of cell senescence and leukemogenesis, **Manuel O. Diaz**; development of a mucosal vaccine to treat CEA⁺ tumors, **Liang Qiao**.

In addition to providing an invigorating and cooperative research environment, the program emphasizes an interdisciplinary approach. Trainees are provided regular opportunities to present the results of their research.

Please send curriculum vitae and names of three references to: **Dr. Katherine L. Knight, Department of Microbiology and Immunology, Loyola University Medical Center, 2160 South First Avenue, Maywood, IL 60153.** Applicants must be citizens or permanent residents of the United States. For more information see Training Grant at website: <http://www.meddean.luc.edu/lumen/DeptWebs/microbio/micro.htm>.

POSTDOCTORAL RESEARCH TRAINING for M.D.'s and Ph.D.'s in neuroscience, developmental psychobiology, and psychopathology at the University of Colorado Health Sciences Center, Denver. Funded by NIMH, training emphasizes the neuroscience research tools (molecular, behavioral and psychiatric genetics, neuroimaging, cognitive and behavioral analyses) needed to understand complex behavioral disorders. Deadline is December 31, 1999, for one- to two-year positions starting July 1, 2000. Write for brochure: **Postdoctoral Training Program, University of Colorado Health Sciences Center, Department of Psychiatry, Box C268-68, 4200 East 9th Avenue, Denver, CO 80262.** E-mail: martin.reite@uchsc.edu. Or visit our home page at website: <http://www.uchsc.edu/sm/psych/postdoc/postdoc.htm> for application details. Women and minorities are encouraged to apply. The University of Colorado is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

University of California, San Francisco

Postdoctoral position available immediately to work on immunoglobulin hypermutation/heavy chain class switch.

Interested candidates should send a curriculum vitae and arrange for letters of references to be sent to:

Matthias Wabl, Ph.D.

University of California, San Francisco

San Francisco, CA 94143-0670

E-mail: mutator@itsa.ucsf.edu

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study regulation of development of Trypanosomes. Experiences in molecular biology and cell biology are required. Must have a recent Ph.D. and/or M.D. degree. Send curriculum vitae and names of three references to: **Dr. C. C. Wang, Department of Pharmaceutical Chemistry, University of California, San Francisco, San Francisco, CA 94143-0446.** FAX: 415-476-3382; e-mail: ccwang@cgl.ucsf.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION. The Department of Pediatrics, Section of Gastroenterology/Nutrition, at the University of Arizona is urgently seeking a research-oriented faculty member at the Postdoctoral level for a **RESEARCH ASSOCIATE** position. The individual will be involved in molecular biological research associated with two NIH grants in the laboratory of **Fayez K. Ghishan, M.D.** Minimum qualification is a Ph.D. or equivalent degree in the biomedical sciences with experience in molecular biology/genetics. Preferred qualifications are experience in studying gene regulation *in vitro* and in transgenic mice. Come join a highly successful research team with extensive resources and equipment (confocal microscope, molecular imaging system, etc.). Salary negotiable with faculty benefits. Please reference Job # 995488 and submit curriculum vitae to: **AHSC Human Resources, 1501 North Campbell Avenue #2233, Tucson, AZ 85724-5010.** For further information, contact: **James F. Collins, Ph.D., e-mail: jcollins@peds.arizona.edu; Telephone: 520-626-4040.** Review of application materials begins September 24, 1999, and continues until position is filled. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minorities/Women/Disabled/Veterans.

MOLECULAR IMMUNOLOGISTS

The Receptor Cell Biology Section of NIAID, NIH is recruiting for **POSTDOCTORAL FELLOWS** for studies on natural killer cell receptor expression and function, and the roles that $\beta 1$ integrins and the hemochromatosis protein HFE play in the immune response. Salary commensurate with credentials and research experience.

Qualified and interested candidates should send curriculum vitae and three letters of references. For more information regarding these positions, contact:

John E. Coligan, Ph.D.

Laboratory of Allergic Diseases

Receptor Cell Biology Section

NIAID/NIH/Twinbrook II, Room 205

12441 Parklawn Drive

Rockville, MD 20852 USA

Telephone: 301-496-8247

FAX: 301-480-9094

E-mail: jcoligan@niaid.nih.gov

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POSTDOCTORAL POSITIONS in signal transduction and regulation of gene expression are available at the University of California. One position is to study pathophysiology of cardiovascular diseases, the effects of mechanical loading; the second is to study transcription mechanisms with emphasis on p53-dependent transcription; the third is to study the mechanism of action of orphan nuclear receptor HNF4, which is involved in diabetes, hemophilia, and atherosclerosis. A Ph.D. degree with a strong background in molecular and cellular biology is required. Send a curriculum vitae and three references to: **Dr. John Shyy, Division of Biomedical Sciences, e-mail: john.shyy@ucr.edu (first position); Dr. Xuan Liu, Department of Biochemistry, e-mail: xuan.liu@ucr.edu (second position); or Dr. Frances Sladek, Department of Neuroscience, e-mail: frances.sladek@ucr.edu (third position) all at University of California, Riverside, CA 92521.**

A **POSTDOCTORAL POSITION** in retinal neurobiology is available to study synaptic plasticity in the vertebrate retina. The project employs electrophysiological (patch clamp and intracellular recording), neurochemical (HPLC), and anatomical (dye injection) techniques to investigate a circadian rhythm in neuronal light responses in fish and rabbit retinas. Experience in electrophysiology is desirable. Please send curriculum vitae, a description of research experience, and the names and addresses of three references to: **Dr. Stuart Mangel, Department of Neurobiology, University of Alabama School of Medicine, CIRC 425, 1530 3rd Avenue South, Birmingham, AL 35294-0021 USA.** E-mail: mangel@nrc.uab.edu. The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal/Parke-Davis, one of the European R&D facilities of Parke-Davis Pharmaceutical Research, located in the suburbs of Paris. In our Research Centres in Ann Arbor (USA), Cambridge (UK) and Fresnes (FR), scientists are working on a broad range of mechanistic approaches to discover new drugs for important human diseases.

In France, our focus is the discovery and development of new drugs in the fields of gastroenterology, allergy, inflammation, and pain. With our continuing growth, we currently have several exciting positions available :



l'alliance ouvre les portes de la découverte

Biochemistry Post-doctoral fellowship

The position is available for a protein biochemist who will investigate the structure of a new recombinant glycoprotein produced from transgenic plants.

A PhD in biochemistry or analytical chemistry is required. Experience with analytical and biochemical methodologies is essential. Also, experience with chromatographic and /or capillary electrophoresis techniques will be an advantage.

Most of the work is to be carried out in a French scientific university located in the suburbs of Paris.

Job code : Bioc2/PB/999

Molecular and Cellular Biology Post-doctoral fellowship

The position is available for an investigator interested in signal transduction and in the identification of kinases involved in neutrophil activation. The successful candidate will join an interactive group focussing on mechanisms involving neutrophil activation and its role in disease.

The ideal candidate must have a PhD with a relevant experience in biochemistry and in molecular biology techniques.

Job code : Bio/IdM/999

Immunology Post-doctoral fellowship

The position available is aimed at the characterization of factors controlling activation and differentiation of human T helper 1 and 2 lymphocytes. More specifically, the role played by the costimulatory molecule CD28 and the features of the interaction between the antigen T cell receptor and peptide-MCH complexes will be studied. Experience in cellular immunology and immunochemistry is required. Knowledge in protein chemistry, molecular biology or intracellular signaling would be an advantage. Job code : Im/SD/999

Innovation, strong communication skills and ability to work independently in a team environment are essential. As a part of our team, the selected candidates will be strongly supported in their training and will contribute to our ability to innovate. Because we are looking for excellence in people and science, we are dedicated to fostering an environment which encourages scientific innovation and creativity, by sharing ideas and experiences.

If you are interested by a challenging postdoctoral position, please send your application (letter of interest, resume, references) referring to the job code, to Marie-Aude Julien, Human Resources Department, Institut de Recherche Jouveinal/Parke-Davis, 3/9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France. Fax : (33.1) 40 96 77 32.

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POSITIONS OPEN

POSTDOCTORAL POSITIONS

Available in the following laboratories studying cell signaling pathways controlling growth and differentiation: (1) **Peter J. Bryant**, Telephone: 949-824-4714; FAX: 949-824-3571; e-mail: pjbryant@uci.edu. Role of growth factors and tumor suppressors in cell proliferation control in *Drosophila*. (2) **J. Lawrence Marsh**, Telephone: 949-824-6677; e-mail: jmarsh@uci.edu. Control of patterning and growth by dpp and wingless in *Drosophila*. (3) **Kavita Arora**, Telephone: 949-824-1087; e-mail: karora@uci.edu. TGF- β signaling in *Drosophila*. (4) **Diane O'Dowd**, Telephone: 949-824-4562; e-mail: dkodowd@uci.edu. Cellular and molecular mechanisms underlying plasticity at central cholinergic and GABAergic synapses in *Drosophila*. (5) **Bruce Blumberg**, Telephone: 949-824-8573; e-mail: blumberg@uci.edu. Identification of RAR target genes. (6) **Murray Kore**, Telephone: 949-824-6887; e-mail: mkore@uci.edu. Molecular alterations and growth factor signaling in human pancreatic cancer. (7) **Arthur D. Lander**, Telephone: 949-824-1008; e-mail: adlander@uci.edu. Coreceptors and growth factor signaling; developmental functions of proteoglycans; molecular mechanism of axon guidance. (8) **Lee Bardwell**, Telephone: 949-824-6902; e-mail: bardwell@uci.edu. Mechanisms of specificity in signal transduction.

Contact: **Peter J. Bryant**, Director, Developmental Biology Center, University of California, Irvine, CA 92697. Website: <http://mamba.bio.uci.edu/~pjbryant/dbc/index.htm>. UCI is an Equal Opportunity Employer committed to excellence through diversity.

POSTDOCTORAL POSITION SUBCELLULAR CHOLESTEROL TRANSPORT

Mount Sinai School of Medicine

Mount Sinai School of Medicine is a leader in medical research and education. A Postdoctoral position is available to study intracellular cholesterol transport and the involvement of the newly identified protein Niemann-Pick C1 in cholesterol mobilization from late endosomes/lysosomes. The function of the NPC1 protein will be probed using a variety of molecular and cell biological approaches. Applicants must have a Ph.D. in molecular biology, cellular biology, biochemistry, or a related field. For consideration, send curriculum vitae and the names of three references to: **Dr. Yiannis A. Ioannou**, Department of Human Genetics, Box 1498, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an Equal Opportunity Employer fostering diversity in the workplace.

NIH-FUNDED POSTDOCTORAL POSITIONS

Several positions available immediately to study immunotherapy and gene therapy for cancer based on vaccines and bone marrow transplantation. Murine tumor models employed in preclinical studies. (See: *PNAS* 95:9482, 1998; *PNAS* 96:2268, 1999). Ph.D. or M.D. degree and experience in tumor immunology required; expertise in hematology and gene transfer desirable. Please send curriculum vitae and three letters of reference to: **Dr. James J. Mulé**, Director, Tumor Immunology Program, University of Michigan Comprehensive Cancer Center, 1520 MSRB-I, Box 0666, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0666. FAX: 734-763-4135; e-mail: jimmule@umich.edu.

The University of Michigan is an Equal Employment Opportunity/Affirmative Action Employer and strongly encourages women and minority candidates to apply.

POSTDOCTORAL POSITIONS available to study (1) function of the breast cancer protein BRCA1 in DNA replication and repair and (2) role of transcription factors in stimulating yeast DNA replication. Experience in molecular biology, mammalian tissue culture, or yeast genetics desirable. Send curriculum vitae and the names of three references to: **Rong Li**, Ph.D., Department of Biochemistry and Molecular Genetics, University of Virginia, Charlottesville, VA 22908. E-mail: rlr2@virginia.edu.

POSITIONS OPEN



POSTDOCTORAL FELLOWSHIP is available January 2000 to study mechanisms of MHC Class II-restricted antigen presentation *in vitro* and in select *in vivo* models of immunity. The Fellowship will focus on the role of cysteine proteases in Class II maturation and use mice deficient in cysteine proteases as a model system. Qualified candidates should have experience in molecular biology and immunology. Send curriculum vitae to: **Harold A. Chapman, M.D.**, Department of Medicine and Cardiovascular Research Institute, University of California, San Francisco, FAX: 415-476-5712; e-mail: hchapman@itsa.ucsf.edu. The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION NEUROBIOLOGY

Position available for a NIH Intramural Training Award (Ph.D., M.D., or equivalent) to study mechanisms directing (1) cell-specific neuropeptide gene expression, (2) neuronal migration, and/or (3) axonal pathfinding. Projects include isolation of molecules involved in differentiation of LHRH neuroendocrine cells from olfactory placode, characterization of genes expressed in LHRH cells at different developmental stages, identification of molecules involved in migration of LHRH neurons from olfactory epithelium into central nervous system and/or targeting of their axons to the median eminence. Multidisciplinary approaches are employed ranging from cellular to molecular biological methods. Applicants should have training in neurobiology, developmental biology, molecular biology, or related field. Salary is commensurate with experience. For qualification requirements contact: **NINDS Personnel**, Telephone: 301-496-5468. Send curriculum vitae and references to: **Dr. Susan Wray**, Cellular and Developmental Neurobiology Section, NINDS, NIH, Building 36/Room 4D-04, Bethesda, MD 20892-4130. E-mail: swray@codon.nih.gov. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS (2) are available to study the P450 epoxide metabolites of arachidonic acid in primary cultured brain cells with respect to (1) their synthesis and effect on Ca^{2+} and other intracellular signaling mechanisms (**Dr. Ellis**) and (2) their electrophysiological effects (**Dr. Les S. Satin**). A background in analytical biochemistry, Ca^{2+} measurement, or electrophysiology is preferred. Send curriculum vitae and names of three references to: **Dr. Earl F. Ellis**, Department of Pharmacology and Toxicology, P.O. Box 980613, Virginia Commonwealth University, Richmond, VA 23298-0613.

POSTDOCTORAL POSITION available immediately to study signal transduction and gene expression related to the development and progression of type 2 diabetes. Candidates must have demonstrated expertise in one of the following areas: molecular biology, protein biochemistry, signal transduction, and *in vivo* animal studies. Send curriculum vitae, and three references to: **Dr. Riccardo Perfetti**, Division of Endocrinology and Metabolism, Becker Building B-131, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Los Angeles, CA 90048. FAX: 310-652-7987; e-mail: perfettir@csmc.edu.

Harvard Medical School. **POSTDOCTORAL RESEARCH POSITIONS** in biological/social psychiatry. Research training in neuro- and psychobiological areas with integrative seminar for Ph.D.'s and M.D.'s who are U.S. citizens or permanent residents. Deadline December 31, 1999. Contact: **Clinical Research Training Program**, Science, Judge Baker Children's Center, 3 Blackfan Circle, Boston, MA 02115. Telephone: 617-232-8390, ext. 2559; e-mail: crtp@bcc.harvard.edu. Minorities and M.D.'s encouraged to apply.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE IN DEVELOPMENTAL NEUROBIOLOGY Tufts University, School of Medicine Boston, Massachusetts

Opportunity to join a laboratory studying *in vivo* molecular mechanisms of neuronal synapse differentiation, with particular emphasis on targeting of different neurotransmitter receptors to synaptic membrane subdomains (*Nature Neurosci.* 1:557-562, 1998). Expertise in the laboratory includes viral vector-mediated gene transfer to neurons *in situ*, molecular techniques, immunolabeling at the light and electron microscopic levels, and yeast 2-hybrid assays. For more information see website: <http://www.neurosci.tufts.edu>. Requirements for the position are a strong background in neurobiology and experience with molecular and/or biochemical techniques. Please send curriculum vitae, statement of research experience and goals, and three letters of reference to: **Dr. Michele Jacob**, Department of Neuroscience, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111. E-mail: mjacob@opal.tufts.edu.

POSTDOCTORAL FELLOWSHIP

Postdoctoral Fellowship available immediately to study the neurophysiology of acquisition and production of vocalization abnormalities in songbirds. The qualifications required for this position are a Ph.D. in neuroscience, physiology, or pharmacology with a strong background in electrophysiology, and experience in *in vivo* (single/multiple unit) or *in vitro* (brain slice) electrophysiological recording in small animals. Candidates who have an interest in animal models of neurological disorders and/or mechanisms of neural plasticity are encouraged to apply. Please send curriculum vitae, statement of research goals, and three letters of recommendation to: **Dr. Santosh A. Helekar**, 6501 Fannin Street, NB302, Stuttering Center Speech Motor Control Laboratory, Department of Neurology, Baylor College of Medicine, Houston, TX 77030. E-mail: shelekar@bcm.tmc.edu. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA, BERKELEY

Two-year NIH-funded Postdoctoral position available immediately to study signal processing in the vertebrate retina using electrophysiological methods. Ongoing projects involve whole-cell patch-recording from ganglion cells *in situ*, and the use of a multielectrode array to analyze ganglion cell activity elicited by natural stimuli. Applicants should have a Ph.D. and experience in retinal electrophysiology. Strong analytical and computational skills desirable. Send curriculum vitae with bibliography, description of research experience, and contact information for three references to: **W. Geoffrey Owen, D.Sc.**, Division of Neurobiology, Department of Molecular and Cell Biology, 181 Life Sciences Addition, University of California, Berkeley, CA 94720-3200. E-mail: gowen@uclink4.berkeley.edu.

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POSTDOCTORAL RESEARCHER

The Cedars-Sinai Research Institute has a Postdoctoral Researcher position available in the Autoimmune Disease Unit to study the autoantigens and the immune response to these autoantigens in autoimmune thyroid diseases (Graves' disease and Hashimoto's thyroiditis). Experience with molecular biology, immunological and cellular techniques is preferred. Candidate must be a U.S. citizen or permanent resident. Please send curriculum vitae and the names of three references to: **Dr. Basil Rapoport** or **Dr. Sandra McLachlan**, Cedars-Sinai Medical Center, 8700 Beverly Boulevard, Suite B-131, Los Angeles, CA 90048-1865. FAX: 310-652-0578; e-mail: rapoportb@cshs.org.

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**THE CYPRUS FOUNDATION FOR MUSCULAR DYSTROPHY RESEARCH
THE CYPRUS INSTITUTE OF NEUROLOGY AND GENETICS
VACANCY FOR THE POSITION OF MEDICAL DIRECTOR**

THE CYPRUS INSTITUTE OF NEUROLOGY & GENETICS: The Cyprus Institute of Neurology & Genetics is a bicomunal charitable non-profit organisation providing specialised medical treatment and developing prevention programs, conducting research and post graduate training in the fields of neurology, genetics and molecular biology. Services and research aim towards early detection and prevention of diseases, the provision of high quality medical services and in general improvement in the quality of life of the community. More specifically, The Cyprus Institute of Neurology & Genetics is dedicated to lessening the suffering of patients and their families and preventing diseases through patient care, research and teaching programs on neurological diseases such as muscular dystrophy, multiple sclerosis and epilepsy, and all aspects of molecular biology and genetics such as thalassaemia, mental retardation, cardiovascular disease, stroke and cystic fibrosis.

THE POSITION: The position is that of Medical Director of the Foundation, and Chairman of the Scientific Council of The Cyprus Institute of Neurology and Genetics. The postholder is effectively the chief executive officer of The Cyprus Institute of Neurology & Genetics and is accountable to its Board of Directors. The position has become vacant with the appointment of the previous Medical Director to a senior corporate position in the UK.

REQUIREMENTS FOR THE POSITION: The candidate must fulfil the following requirements:

- Medical degree preferably with Board Certification in Neurology or Medical Genetics or related field and/or higher degree as a result of research such as Ph.D., M.D. or equivalent
- At least 10 years training and experience in accredited Medical and/or Genetics Institutions
- Excellent academic track record including teaching, directing and coordinating research groups
- Excellent track record in attracting national and international research grants
- International reputation and standing
- Impressive list of publications
- Wisdom and vision to develop prudent fiscal/scientific policies

REMUNERATION PACKAGE: The remuneration package to be offered will reflect the importance of the position and will be agreed by taking into consideration the qualifications and experience of the candidate.

CONTRACT DURATION: The appointment will be made with a contract for a period of 3-5 years with the possibility of renewal.

APPLICATIONS: Interested candidates should apply providing full curriculum vitae and the names of three referees to: The President of the Board of Directors, The Cyprus Foundation for Muscular Dystrophy Research, 6 International Airport Avenue, P.O. Box 23462, 1683 Nicosia, Cyprus. The closing date for applications is 4 November 1999. All applications will be treated in strictest confidence. The Board of Directors is under no obligation to make an appointment if none of the applicants are considered suitable.

**International
University
Bremen**

invites applications and nominations for the positions of two founding

Academic Deans

Reporting to the President, the **Dean of Engineering and Science** and the **Dean of Humanities and Social Sciences** will develop and promote an environment of academic excellence and scholarship, provide leadership in the development of the academic program, identify, recruit and retain high-quality faculty, and develop a sound base of external research funding. Candidates should be distinguished educators and research scholars with extensive administrative experience within a research university and should possess a demonstrated commitment to the ideals of internationalism and general education. Visionary leadership and common sense will be prerequisites, as will strong interpersonal and communication skills.

Applications and nominations will be accepted until the positions are filled.

All material should be sent – at best prior to October 31, 1999 – to:
Dr. Fritz Schaumann, President, International University Bremen,
Bürgermeister-Smidt-Straße 78, 28195 Bremen, Germany.

For further information about these positions, the search committee, and IUB please visit
www.iu-bremen.de

IU^B

FOUNDED ON FEBRUARY 11, 1999,
INTERNATIONAL UNIVERSITY BREMEN IS AN
INDEPENDENT INSTITUTION FOR THE
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CITIZENSHIP. ITS BOARD OF GOVERNORS IS
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A HIGHLY SELECTIVE RESIDENTIAL RESEARCH
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TO THE BACHELORS, MASTERS AND DOCTORAL
DEGREES. THE LANGUAGE OF INSTRUCTION
WILL BE ENGLISH. BY FALL 2000, IUB WILL
MATRICULATE ITS FIRST STUDENTS ON ITS
RESIDENTIAL CAMPUS IN BREMEN, GERMANY,
IN THE HEART OF EUROPE.

Search Committee: Prof. Dr. Wolfgang Frühwald, Ger. (Chair) / Prof. Dr. David H. Auston, U.S.A. / Prof. Dr. Richard J. Brook, U.K. /
Prof. Dr. Friedrich Hirzebruch, Ger. / Prof. Dr. James L. Kinsey, U.S.A. / Prof. Dr. Wolf Lepenies, Ger. / Prof. Dr. Karl Ulrich Mayer, Ger. /
Prof. Dr. Helmut Schwarz, Ger. / Prof. Dr. Fritz Stern, U.S.A. / Prof. Dr. med. Günter Stock, Ger. / Prof. Dr. Joachim Treusch, Ger. /
Prof. Dr.-Ing. Sigmar Wittig, Ger. / Prof. Dr. Theodore J. Ziolkowski, U.S.A.

POSITIONS OPEN

POSTDOCTORAL POSITION PRIMATE BEHAVIORAL NEUROPHYSIOLOGY

A Postdoctoral position at Wake Forest University School of Medicine to study the fronto-cortical mechanisms of working memory and skill learning in non-human primates using a multi-electrode single-unit recording technique ([website: www.wfubmc.edu/nba/faculty/lee/lee.html](http://www.wfubmc.edu/nba/faculty/lee/lee.html)). Send a curriculum vitae, brief statement of research experience/interests, and three letters of recommendation to: **Dr. Daeyoul Lee, Department of Neurobiology and Anatomy, Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157. E-mail: dlee@wfubmc.edu. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION in bladder cancer metastasis. To study invasion and metastasis of bladder cancer as a complex process involving cell-cell and cell-matrix interactions producing the invasive phenotype. The successful candidate will have demonstrated expertise in (1) experimental cancer research, (2) molecular biology and gene expression emphasizing phenotypic regulation, (3) analysis of complexity in biological systems. Salary based on NIH/NHRS scale. Send cover letter outlining relevant experience, résumé, and names of references to: **Robert E. Hurst, Ph.D., Department of Urology, Oklahoma University Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION in cell biology of Alzheimer's disease and inclusion body myopathy. Available immediately at St. Elizabeth's Medical Center, Tufts University. Research is into mechanisms of beta-amyloid formation and toxicity involving signaling, calcium release, cell cycle, and apoptotic pathways. Solid experience in molecular and cell biology is required. Send résumé and letter describing experience/interests to: **Dr. Henry Querfurth, St. Elizabeth's Medical Center, Department of Neurology, 736 Cambridge Street, Boston, MA 02135. FAX: 617-789-5177; e-mail: hquerfur@opal.tufts.edu.**

POSTDOCTORAL POSITION available to study the enzymology of proteins associated with antibiotic biosynthesis in *Streptomyces*. Significant experience in enzymology is required. Some experience in protein expression is desirable. Send curriculum vitae and the names of three references to: **Dr. Ronald Parry, Department of Chemistry MS60, Rice University, 6100 Main Street, Houston, TX 77251-1892. E-mail: parry@rice.edu.**

SYMPOSIUM

THE CREST INTERNATIONAL SYMPOSIUM ON IMMUNOGLOBULIN-LIKE RECEPTORS September 19 to 20, 2000, at Sendai International Center, Sendai, Japan.

Speakers: **Marco Colonna** (Basel); **Max D. Cooper** (HHMI); **David Cosman** (Immunex); **Marc Daeron** (INSERM); **P. Mark Hogarth** (Austin); **Howard R. Katz** (Harvard); **Jean-Pierre Kinet** (Harvard); **Tomohiro Kurosaki** (Kansai Med); **Lewis L. Lanier** (DNAX); **Eric O. Long** (NIH); **Lorenzo Moretta** (Genova); **Masao Ono** (Tohoku); **Peter Parham** (Stanford); **Chisei Ra** (Juntendo); **Jeffrey V. Ravetch** (RockefellerA); **Takashi Saito** (Chiba); **Akira Shibuya** (Tsukuba); **Toshiyuki Takai** (Tohoku); **Eric Vivier** (INSERM).

Advanced registration via e-mail or FAX is encouraged.

Contact to: **T. Takai, IDAC, Tohoku University, Seiry, Sendai 980-8575 Japan. FAX: +81-22-717-8505; e-mail: tostakai@idac.tohoku.ac.jp; website: www.idac.tohoku.ac.jp/expimu/index.html.**

POSITIONS OPEN

PRE- AND POSTDOCTORAL POSITIONS IN REPRODUCTIVE BIOLOGY JOHNS HOPKINS UNIVERSITY

The Division of Reproductive Biology, Department of Biochemistry and Molecular Biology, invites applications for Pre- and Postdoctoral positions. Areas of research include molecular regulation of Leydig cell structure, function, and aging (**B. Zirkin**); androgen receptor structure, function, and expression (**T. Brown**); hormonal and molecular regulation of spermatogenesis (**B. Zirkin, W. Wright**); germ cell-Sertoli cell communication (**W. Wright**); egg activation and oocyte maturation (**J. P. Evans**); molecular regulation of prostate growth and disease (**T. Brown**); sperm-egg interactions (**J. P. Evans, W. Wright**); male fertility/infertility (**J. Jarow, B. Zirkin**); and reproductive toxicology (**B. Zirkin, W. Wright**). Please send curriculum vitae and names/addresses of three references to: **Dr. Barry Zirkin, Professor and Head, Division of Reproductive Biology, Johns Hopkins School of Hygiene and Public Health, Baltimore, MD 21205. Or communicate by e-mail: brzirk@jhsp.hopkins.edu.**

POSTDOCTORAL POSITION available immediately in the Emory University Physics Department to develop a SQUID nuclear quadrupole double resonance spectrometer for the study of metalloproteins. This five-year project is funded by both the NIH and NSF and offers competitive salaries. Expertise with NMR RF techniques covering the range from 0.01 MHz to 1000 MHz at up to 25 W is essential. Ability to produce commercial code for instrumentation control, data acquisition, and data analysis in Delphi preferred as a second area of expertise. You will work at Emory University with a commercial company as partner to develop a new low-temperature instrument to detect quadrupole spectra in biophysical samples. You will receive training in molecular biophysics.

Send curriculum vitae and the names, addresses (including e-mail), and telephone numbers of three references to: **Dr. Edmund P. Day, Physics Department, Emory University, 1510 Clifton Road, Atlanta, GA 30322. FAX: 404-727-0873; e-mail: phsepd@physics.emory.edu. Equal Opportunity Employer.**

AWARDS

NATIONAL RESEARCH COUNCIL POSTDOCTORAL AND SENIOR RESEARCH AWARDS

The National Research Council will offer 350 awards in 2000 for postdoctoral research to be conducted in cooperation with 34 participating U.S. government agencies. Opportunities are available for regular researchers (less than five years beyond Doctorate) and Senior Investigators (more than five years beyond Doctorate). Available research opportunities encompass most areas of science and engineering. Each applicant designs his/her own research project that is compatible with the overall interests of the government laboratory for research to be conducted in residence at that laboratory. Duration of each award is for one year with possible renewals for a total of three years maximum. Applications are reviewed in three annual competitions with deadlines of January 15, 2000, April 15, 2000, and August 15, 2000. Stipends range from \$30,000 to \$50,000 for recent Doctoral recipients and are appropriately higher for more experienced researchers. Support for relocation and limited professional travel is available, and a health insurance program is offered. Further information on research opportunities and participating laboratories, as well as application materials, may be obtained from our [website: national-academies.org/rap](http://www.national-academies.org/rap) or by contacting: **Association Programs, National Research Council, 2101 Constitution Avenue N.W., TJ 2114/SS, Washington, DC 20418. E-mail: rap@nas.edu; Telephone: 202-334-2760; FAX: 202-334-2759. Qualified applicants will be reviewed without regard to race, creed, color, age, sex, or national origin.**

POSITIONS OPEN

GLYCOBIOLOGY OF DEVELOPMENT

POSTDOCTORAL POSITIONS available to lead novel, multidisciplinary studies in a highly interactive glycobiochemistry group. Our research goal is to define the roles played by glycoproteins and glycolipids during development. Our training goal is to provide young scientists with an environment that will allow them to develop into creative and independent Investigators. Individuals with strong backgrounds in either biochemistry or cell and developmental biology are encouraged to apply.

The group will move into newly constructed laboratory space this fall ([website: http://www.urmc.rochester.edu/Ribs/](http://www.urmc.rochester.edu/Ribs/)) and benefits from the availability of a number of strong centralized University resources including Imaging, Microarray, Proteomic, and Transgenic Core Facilities.

To apply, please send your curriculum vitae and the names of two references to: **Dr. Lawrence A. Tabak, Aab Institute of Biomedical Sciences, Medical Center Box 611, 601 Elmwood Avenue, University of Rochester, Rochester, NY 14642. E-mail: lawrence_tabak@urmc.rochester.edu.**

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

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR BASIS OF AGING AT University of Texas

Health Science Center-San Antonio

The University of Texas Health Science Center at San Antonio offers an interdisciplinary training program in the molecular biology of aging supported by the National Institute on Aging. Research areas include transcription factors and programmed changes in gene expression; oxidative stress, free radicals, DNA damage, and DNA repair; oncogenes and tumor suppressor genes in cell growth, differentiation, and apoptosis; steroid receptors and endocrine diseases; transmembrane signaling and immune regulation; Alzheimer's disease, Parkinson's disease, and retinal degeneration. Fellows will have access to transgenic/knockout mice and advanced imaging core facilities. U.S. citizenship or permanent residency is required. Please send curriculum vitae and names of three references to: **Bandana Chatterjee, Ph.D., Program Director, Molecular Basis of Aging Training Grant, Department of Cellular and Structural Biology, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900. The University of Texas Health Science Center at San Antonio is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIPS INFECTIOUS DISEASES RESEARCH

Malaria. Positions available to study biochemistry of malaria parasites and pursue antimalarial drug discovery. Principal projects include characterization of antimalarial drug targets and biochemical and parasitological evaluation of potential antimalarial agents. Strong background in cell biology, biochemistry, and/or molecular parasitology required. Send curriculum vitae and names, telephone numbers, and e-mail addresses of three references to: **Dr. P. J. Rosenthal, Box 0811, University of California, San Francisco, CA 94143-0811. E-mail: rosenth@itsa.ucsf.edu; FAX: 415-648-8425.**

Tuberculosis and toxoplasmosis. Two positions are available. One is to study mechanisms of evasion of host immunity by *Mycobacterium tuberculosis*. Strong background in immunology or cell biology required. The other position is to study the dependence of *Toxoplasma gondii* on host cell sterol esterification. For this position, strong background in cell biology and molecular biology are required. Send curriculum vitae and statement of project preference to: **Dr. J. D. Ernst, University of California, San Francisco, Box 0868, San Francisco, CA 94143-0868. E-mail: joel@cgl.ucsf.edu.**

ANNOUNCEMENT

REQUEST FOR PROPOSALS

The National Institute for Global Environmental Change (NIGEC) is an academically based research program funded by the U.S. Department of Energy. It focuses on regional studies in the areas of (1) the AmeriFlux network of whole ecosystem flux sites; (2) ecological effects of climate change; and (3) regional climate impact analysis. Full text of the RFP is available on-line at **website: <http://nigec.ucdavis.edu>**. To request a hard copy, address your query to: **National Institute for Global Environmental Change, University of California-Davis, 1490 Drew Avenue Suite 140, Davis, CA 95616. Telephone: 530-757-3350; e-mail: nigec@ucdavis.edu**.

Letters of Intent due 17 September 1999.

Proposal due 15 October 1999.

EUROPEAN OPPORTUNITIES

POSTDOCTORAL POSITION IN CONSERVATION BIOLOGY

Universities of Cambridge and Copenhagen

A Postdoctoral Research Assistant is required for two years from 1 January 2000 to work with **Dr. Carsten Rahbek** and **Dr. Andrew Baimford** on identifying Africa-wide priorities for conservation using distributional data on sub-Saharan vertebrates. Candidates should have a strong publication record, relevant analytical and data handling skills, and an ability to communicate within a research team; African experience also helpful. Time will be split between Copenhagen and Cambridge, with visits to NGOs in Washington; competitive salary offered.

Applications, including a curriculum vitae and details of three referees, should be sent by 15 October 1999 to: **Dr. Carsten Rahbek, Zoological Museum, University of Copenhagen, Universitetsparken 15, DK-2100 Copenhagen 0, Denmark. FAX: +45-35-32-10-10; e-mail: crahbek@zmuc.ku.dk**.

For further information, see **website: www.aki.ku.dk/zmuc/job/jobs.htm**.

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Department of Physical Chemistry
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Applications by scientists exceptionally qualified in one of the areas central to physical chemistry (preferably electrochemistry, thermodynamics, or kinetics) should be sent to: **Dekanat der Formal- und Naturwissenschaftlichen Fakultät der Universität Wien, Dr. Karl Lueger-Ring 1, A-1010 Wien, Austria before October 31, 1999**. Applications should contain a curriculum vitae, scientific and professional résumé, list of publications (with reprints of the 10 most important ones), concise statement about teaching experience as well as current research activities.

For more information see **website: <http://www.univie.ac.at/Phys-Chemie/Vacancy.htm>**.

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Two **POSTDOCTORAL POSITIONS** available now for projects investigating mast cell proteases and protease-activated receptors in allergy and inflammation. Applications to: **Dr. Andrew F. Walls, Immunopharmacology Group, University of Southampton, Mailpoint 837, Southampton General Hospital, Southampton SO16 6YD UK. Telephone: +44-023-8079-6151; FAX: +44-023-8079-6979; e-mail: afw1@soton.ac.uk**.

A **POSTDOCTORAL POSITION** is available immediately for a Ph.D. to study the modulation of radiation-induced apoptosis in lymphoma cells by thiols like glutathione. Candidates should be experienced in molecular biology. The appointment is for two years. Send curriculum vitae and names of references to: **Dr. Reinhard Kodym, Clinic for Radiotherapy and Radiobiology, Wahringer Gurtel 18-20, 1090 Vienna, Austria. E-mail: kodyre1@akh-wien.ac.at**.

AWARDS

HAROLD M. WEINTRAUB GRADUATE STUDENT AWARD

The Fred Hutchinson Cancer Center is seeking nominations for outstanding graduate students for the Harold M. Weintraub Graduate Student Award to recognize outstanding achievement during Graduate Studies in the Biological Sciences. Awardees will participate in a two-day scientific symposium honoring **Hal Weintraub** and his commitment to innovative science. The first annual Award Symposium will be held May 5-6, 2000. Graduate Student Awardees will be selected from among those nominated on the basis of quality, originality, and significance of their work, as well as to represent a diverse range of research topics. The Hutchinson Center Weintraub and Groudine Fund, established to foster intellectual exchange through the promotion of programs for graduate students, Fellows, and visiting scholars, will cover expenses for the Graduate Student Awardees. One nomination may be submitted per department or program. A letter of nomination should be submitted by the department/program Chairperson and include the student's curriculum vitae, a one-page description of the thesis work conducted, and a recommendation letter from the student's mentor. The nomination should be submitted by December 15, 1999, to:

**Harold M. Weintraub Graduate Student Award
Fred Hutchinson Cancer Research Center
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Questions regarding this Award should be addressed to: **Susan Parkhurst, e-mail: susanp@fred.fhcr.org or Mark Groudine, e-mail: markg@fred.fhcr.org**.

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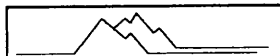
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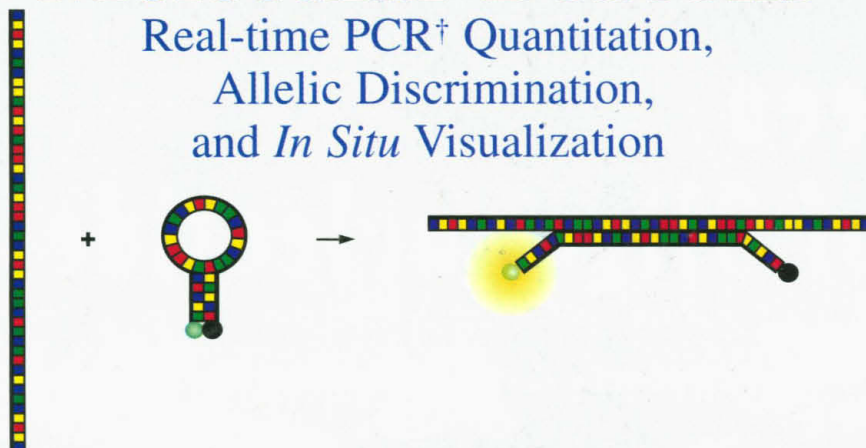
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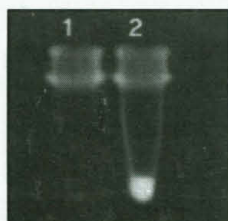
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1. Tyagi, S. and Kramer, F.R. (1996) *Nature Biotech.* 14, 303-8.
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7. Sokol, D. et al (September 1998) *Proc. Natl. Acad. Sci. USA* Vol 95, 11538-11543.

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