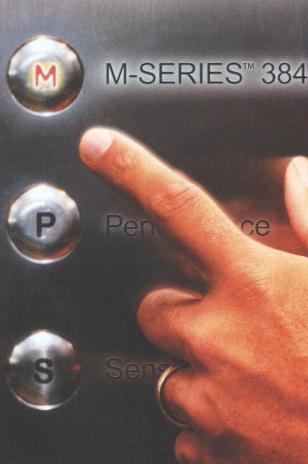


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FOCUS ON CAREERS

# Personalize four postdoc

BY FOLLOWING A FEW GUIDELINES, A POSTDOCTORAL CANDIDATE CAN DESIGN A VALUABLE TRAINING EXPERIENCE IN A FERTILE ENVIRONMENT. IN THIS ARTICLE, RESEARCH UNIVERSITY ADMINISTRATORS, A SOCIETY BOARD MEMBER AND LAB DIRECTOR, AND TWO RECENT POSTDOCS GIVE THEIR TOP TIPS FOR CREATING THE BEST POSTDOCTORAL EXPERIENCE. BY MIKE MAY

In the Old Days—as little as a decade ago—people looked mostly for postdoctoral positions in academic laboratories. In many cases, recent doctoral graduates took any position that they could get and acted glad to have it. Today, postdoctoral candidates can look from academics to industry and beyond. Moreover, the best potential postdocs luxuriate in multiple offers and even get the chance to fine tune a position that works just for them.

Getting just the right postdoctoral position, though, demands knowing what you want and learning how to get it. In this article, readers will find out how to locate a good mentor and arrange an individualized program.



**OKLAHOMA CITY, Okiahoma:** Good students searching for a postdoctoral position in immunology get their pick of the best positions, according to Paul W. Kincade, head of immunobiology and cancer research at the Oklahoma Medical Research Foundation. He said, "Right now, trainees have tremendous choice. There is a great demand for postdocs in immunology, and

trainees with a good science background and one or two first-author publications really have their pick."

That pick can direct a new Ph.D. in a variety of ways. For example, a student could stick with a traditional postdoctoral position in an academic lab or try something a little different, like going to an industrial postdoc. Kincade said, "I tell trainees to consider both options." Still he added: "Typically they only consider the traditional route, but alternatives could be a good option for some people." Historically, scientists often think that, once you go to industry, you can't come back to aca-

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demics, but that's not the case any more. "Even if you want to be in academics," Kincade said, "it could be useful to go somewhere else for a postdoc."

To decide which direction to head, students are encouraged by Kincade to ask themselves if they want to be an

independent investigator—like an academic—or whether they might enjoy being a staff scientist in any type of research organization. Moreover, he suggests that students ask if they even need to do a postdoc at all. For example, some jobs in industry do not require any postdoctoral experience.

For students who decide to pursue a postdoc, Kincade, said, "It is most important to have a clear definition of whether you really are a postdoc. In other words, is it really a training position?" In some cases, he said that a job might be called a postdoc but not include training. That can be OK, especially if a student simply wants to use a position to experience a new environment or test out a possible career path. But, if a student really wants training during a postdoc, Kincade suggests using a written agreement with the supervisor. As a board member who works on training and career issues for the Federation of American Societies for Experimental Biology (FASEB), Kincade recommends what FASEB calls an individual development plan, which provides an overview of expectations of both the postdoc and the super-**CONTINUED** »

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# Postdoctoral Opportunities II PERSONALIZE YOUR POSTDOC

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visor and a planned endpoint for the position. Students should be able to discuss these points with a supervisor right away. "If you can't talk openly and honestly at the very first, it's a bad sign," Kincade said. "You need to be able to talk in an open way about career goals and prospects."



**SAN FRANCISCO, California:** No matter what direction a postdoctoral candidate desires down the road, it pays to get a jump on the decision making as soon as possible. Bill Lindstaedt, director of the career center at University of California at San Francisco (UCSF), said, "It is really important for a Ph.D. candidate to begin planning for postdoctoral options at least a year before finish-

ing the degree." Despite the value in making an early decision about where to complete a postdoc, it is not the single decision that frames a student's entire future. Lindstaedt pointed out that postdocs from UCSF often move on to careers in industry. Likewise, he added: "And now some companies are trying to model postdoctoral programs after ones in the academic environment, so that postdocs can maintain a



publication record, keep up their academic contacts, and move back to academics, if they so desire."

Either direction offers possible benefits, according to Christine Des Jarlais, assistant dean for graduate outreach and postdoctoral affairs at UCSF. She said, "In an academic postdoc, there is much more freedom to ask the questions you are

interested in and to publish your findings." She added: "An industry postdoc may have more assigned research questions that might be proprietary. Also the pay and benefits are usually much better than in academic postdocs."

In any type of postdoc, a student should consider the size of the lab. Des Jarlais said, "In a large lab, the principal investigator may have less time for any individual postdoc and may take less of a personal stake in that postdoc's research. In a small lab, the principal investigator may have



fewer postdocs, so there could be lots of interacting." She also pointed out that a smaller lab might be run by a less-established principal investigator, who might have lots of motivation for publishing. A larger, established lab run by a well-known principal investigator, on the other hand, can provide good contacts for future employment. Des Jarlais concluded: "Both small and large labs offer their benefits. Students just need to realize that lab size changes your experience."

Whatever lab seems best for an individual, Des Jarlais said, "Finding a postdoc is not for the faint of heart because it takes a lot of initiative." Although postdoctoral positions appear in advertisements and may be posted on websites, the best ones need no advertising to get a slew of good applicants. Des Jarlais said, "Established labs will probably never advertise postdoc positions because they get so many inquiries." Students seeking the best positions need to dig up the opportunities by making calls, sending e-mail, working meetings, or all of the above and more.



**CAMBRIDGE, Massachusetts:** In the end, no one knows more about picking a postdoctoral position than people who recently finished one. That brings the discussion to Michael Parr and Jennifer Gommerman, who both completed postdoctoral positions at Harvard Medical School and now work as scientists at Biogen, Inc. Although they both selected industrial positions, they agree

MICHAEL PARK

that academic postdocs served them well. Parr said, "I worked on wonderful scientific questions in an exciting environment, and working in academics didn't hurt my chances of getting a job in industry." Although Parr and Gommerman believe that either an industrial or academic postdoc can be valuable, Gommerman said, "Be sure to tailor your postdoc to your future goals."

Part of that tailoring involves picking a lab size that fits. Gommerman worked in a medium-to-large size lab during her postdoc and is now in a small lab at Biogen. She said, "I prefer the small envi-



ronment, because there's project availability. You can work pretty freely without stepping on someone else's toes." Still she said that a big lab can be lots of fun and expose you to people from around the world.

In a big or small lab, the most important point is the supervisor. In fact, Parr said, "The right supervisor is crucial. You don't need to

be best friends, but you do need to be able to communicate and share ideas."

When asked how to find a great supervisor, Gommerman said, "That's really hard." It takes going to labs and meeting the supervisor and graduate students and postdocs. "If the principal investigator shows any hesitancy about your talking to other postdocs," Gommerman said, "that's a big red flag." When Parr started visiting labs for a potential postdoc, he said, "I was terrified the first couple times that I went out." Then he added: "But you become more comfortable. It's just practice. That's all it is."

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#### POSTDOCTORAL OPPORTUNITIES

#### **Protein Chemistry**

You will support our efforts to discover the biological function of novel membrane-bound proteins identified in our proteomics program. Proteins are expressed, purified and reconstituted into liposomes for structural and functional assessments using biochemical and biophysical methods. Requires a PhD in Biochemistry, Molecular Biology, Chemistry or related field and experience with protein purification, protein mass spectrometry or spectroscopic techniques. Job Code: 3741-SCI

To apply for this position, send your resume via email to vandlen.richard@gene.com and genentechad@ webhirerpc.com.

#### **Protein Engineering**

As an Organic Chemist in this group, you will work to elucidate protein-protein interactions involving novel proteins, focusing on oncology. Project work includes screening peptide libraries displayed on phage against targets and synthesizing peptides. Following initial phage work, project work includes developing peptidebased fluorescence in *in vitro* assays and *in vivo* cellular assays using conjugates with transporters (see Chemical Biology 9: 495, 2002; J. Biological Chemistry 277: 12906-12914, 2002). Candidates must have a PhD in Chemistry. Job Code: 5184-SCI

To apply for this position, send your resume via email to deshayes.kurt@gene.com and genentechad@webhirerpc.com.

#### Molecular Immunology

You will investigate the roles of cytokines and costimulatory molecules in autoimmune and inflammatory diseases. The biology of newly identified and novel molecules will be explored using a range of strategies, including gene knockout and transgenic approaches, disease models, cellular biology and microarray technologies. Requires a PhD and a strong background in both immunology and molecular biology. Experience in cytokine biology, basic molecular and cellular immunologic techniques and animal models is an advantage. Job Code: 5192-SCI

To apply for this position, send your resume via email to gurney.austin@gene.com and genentechad@webhirerpc.com.

#### **MOLECULAR ONCOLOGY**

You will investigate signaling mechanisms, gene activation/repression, cell migration and morphology, seeking their implications for tumorigenesis. Requires a PhD in a related biomedical research field and 5+ years of direct lab experience in molecular or cellular biology or biochemistry. Molecular oncology experience/knowledge is desired. Job Code: 5004-SCI

To apply for this position, send your resume via email to polakis.paul@gene.com and genentechad@webhirerpc.com.

#### **Bioinformatics**

You will develop and apply novel bioinformatic techniques to problems in DNA microarray analysis and genomics. Research topics may include alternative splicing, gene regulation, motif identification, machine learning or statistical approaches to gene expression data, and application of bioinformatics techniques to problems in molecular biology and cancer genetics. Requires a PhD in Bioinformatics, Computer Science, Statistics or a related field and working knowledge of bioinformatics algorithms. Proficiency in Perl, C and Unix programming is necessary. Job Code: 5315-SCI

To apply for this position, send your resume via email to wu.thomas@gene.com and genentechad@webhirerpc.com.

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#### MOLECULAR AND CELLULAR BIOLOGY

POSTDOCTORAL RESEARCH POSI-TIONS are available immediately to study steroid hormone receptor action and cancer in the laboratories of the following Investigators:

Carolyn L. Smith, Ph.D. (e-mail: carolyns@ bcm.tmc.edu): Two positions available to study regulation of estrogen receptor function by coactivators/corepressors and SERMs (see website: http://public.bcm.tmc.edu/mcb/faculty/smith\_c.html for more details and recent publications).

Nancy L. Weigel, Ph.D. (website: nweigel@ bcm.tmc.edu): One position to study the role of cell signaling in progesterone receptor action and interaction with coregulators. One position to identify targets of vitamin D action and mechanism(s) of prostate tumor growth inhibition (see website: http://public.bcm. tmc.edu/mcb/faculty/weigel/html for details).

Required qualifications: Ph.D. with strong background in molecular biology. Salary commensurate with experience.

To apply, send (preferably by e-mail) a letter of application, curriculum vitae, short description of research experience and interests, and names and contact information for three references to the appropriate faculty member at the following address: Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX 77030. BCM is an Equal Opportunity/Affirmative Action/Equal Access Employer.

POSTDOCTORAL POSITION in pre-mRNA splicing. We are studying the cyclophilin USA-CyP, which functions in both steps of pre-mRNA splicing (EMBO. J. 21:470, 2002), and the Prp18 protein, which is both a focus of work and a tool for investigating the mechanisms of the second step of splicing. Experience in molecular biology is essential; some experience in protein biochemistry or in vitro RNA work is desirable. This position is fully funded by an NIH grant. Salary and benefits are highly competitive. If interested, please send curriculum vitae including the names of three references to: Dr. David Horowitz, Department of Biochemistry, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814. Telephone: 301-295-3589; FAX: 301-295-3512; email: dhorowitz@usuhs.mil. Affirmative Action/Equal Opportunity Employer.

#### THREE POSTDOCTORAL POSITIONS Developmental and Cell/Molecular Biology Dana-Farber Cancer Institute and Harvard Medical School

Funded positions open for highly motivated individuals to pursue several exciting projects in development of the mammalian intestine or in hematopoiesis. Overview of the laboratory's efforts and record available at website: http://research.dfci. harvard.edu/shivdasani. Please send curriculum vitae and names of three references to: Dr. Ramesh Shivdasani, Dana-Farber Cancer Institute, One Jimmy Fund Way, Boston, MA 02115. E-mail: ramesh\_shivdasani@dfci.harvard.edu. Equal Opportunity Employer.

#### POSTDOCTORAL RESEARCH ASSOCIATE

Stony Brook University seeks a Postdoctoral Research Associate to study biochemical mechanism of Wnt signaling. Ph.D. in biochemistry, molecular biology, or allied field; strong background in biochemistry and molecular biology. Send curriculum vitae and three references to: Dr. Jen-Chih Hsieh, Department of Biochemistry and Cell Biology, Stony Brook University, Stony Brook, NY 11794. Email: jhsieh@ms.cc.sunysb.edu. Affirmative Action/ Equal Opportunity Employer.

#### POSTDOCTORAL/RESEARCH ASSOCIATE POSITION

Postdoctoral/Research Associate position is available in the Department of Microbiology to investigate the pathogenesis of Chlamydia trachomatis genital tract infection. Preference will be given to applicants with a Ph.D., M.D., or D.V.M. degree and with research experience in immunology or microbial pathogenesis. Highly experienced applicants with B.S. or M.S. degrees will also be given consideration. Salary commensurate with experience (\$30,000 to \$36,000 per year plus benefits). Send curriculum vitae, a statement of research experience, and the names and contact information for three references to: Richard P. Morrison, Ph.D., Department of Microbiology, Lewis Hall, Room 109, Montana State University, Bozeman, MT 59717. Telephone: 406-994-7959; FAX: 406-994-4926; e-mail: morrison@montana.edu. Position open until filled. Americans With Disabilities Act/ Affirmative Action/Equal Opportunity/Veterans Preference.

A POSTDOCTORAL RESEARCH ASSOCI-ATE position is available immediately to study signal transduction in olfactory axon projection and olfactory map development in Drosophila. Several lines of research are open. (1) Genetic screens will be carried out to identify new genes involved in olfactory axon guidance and targeting. (2) New GFP-based cellular labels will be developed to visualize olfactory axons in live animals. (3) Structure-function analyses of signaling proteins will be performed to probe their mechanisms of actions. More details at website: http://www.life.uiuc.edu/ hing/. Projects require knowledge of genetics, molecular biology, and basic protein biochemistry. Please e-mail or send curriculum vitae and names/addresses of three references to: Huey Hing, Ph.D., Assistant Professor, University of Illinois at Urbana-Champaign, 601 South Goodwin Avenue, Urbana, IL 61801. E-mail: hing@life.uiuc.edu.

Two **POSTDOCTORAL POSITIONS** will be funded by the Howard Hughes Medical Institute, a nonprofit medical research organization that conducts scientific research in laboratories at leading academic facilities throughout the United States.

These positions will be available beginning summer/fall 2003 in the laboratory of **David Haussler** at University of California Santa Cruz in the area of comparative genomics.

Applicants should have strong computational and mathematical abilities and experience doing largescale computer analysis and experimentation. Some knowledge of molecular biology, genomics, and bioinformatics is required.

Submit curriculum vitae and three letters of reference to: CBSE Postdoctoral, SOE, University of California Santa Cruz, 1156 High Street, Santa Cruz, CA 95064. E-mail: cbsepd@cse.ucsc.edu by December 6, 2002. Howard Hughes Medical Institute is an Equal Opportunity Employer. Minorities/Females/Disabled/ Veterans.

#### POSTDOCTORAL FELLOW Muscle Genetics, Cell Biology, and Physiology San Diego State University Foundation

Research using an integrative approach to studying the function of the molecular motor myosin in transgenic Drosophila. For project information, see website: http://www-rohan.sdsu.edu/~wk/mhc/index. html. Ph.D. in relevant area required. Apply at website: http://www.foundation.sdsu.edu/hrpage; Telephone: 619-594-5703. Specify Job Number F02-088. Equal Employment Opportunity/Affirmative Action/Title IX Employer.

POSTDOCTORAL POSITIONS are available immediately to study the molecular mechanism of hepatitis C virus RNA replication using reverse genetics and biochemical approaches. Candidates with interests in RNA viruses, protein biochemistry, or molecular and cell biology are encouraged to apply. Contact: Dr. Guangxiang Luo, Department of Microbiology, Immunology, and Molecular Genetics, University of Kentucky (UK) College of Medicine, Lexington, KY 40536-0298. FAX: 859-257-8994; e-mail: gluo0@uky.edu.

#### POSITIONS OPEN



#### POSTDOCTORAL FELLOWSHIP/ RESEARCH ASSOCIATES Lombardi Comprehensive Cancer Center

Two Postdoctoral positions are available within the NCI-funded Lombardi Comprehensive Cancer Center examining molecular mechanisms governing hormonal regulation of breast and prostate cancer growth and metastasis.

The laboratory studies transcriptional regulation of the cell cycle and the role of the cyclin-dependent kinase inhibitors in tumorigenesis using tissue culture, transgenic models (targeted tissue-specific inducible transgenics and floxed oncogene mice), and viral gene therapy vectors.

Applicants must have a Ph.D. or equivalent. Experience in molecular biology immunohistochemistry and *in situ* hybridization would be beneficial.

Please send curriculum vitae and three letters of reference to e-mail: pestell@georgetown.edu.

Director, Lombardi Cancer Center Dr. Richard G. Pestell, M.D., Ph.D., F.R.A.C.P. Chairman, Department of Oncology Georgetown University The Research Building, Suite E–501 3970 Reservoir Road, N.W. Washington, DC 20007

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#### CELLULAR/MOLECULAR BIOLOGY The University of Texas Health Science Center at San Antonio Department of Molecular Medicine

Two POSTDOCTORAL POSITIONS available immediately to join an established research group investigating molecular mechanisms of androgen action and transcriptional control of aging. Stimulating research environment and competitive salary. Prospective candidates should forward their curriculum vitae and the names of three professional references to: Dr. Arun K. Roy, Ph.D., Professor, Department of Molecular Medicine/Institute of Biotechnology, The University of Texas Health Science Center at San Antonio, 15355 Lambda Drive, San Antonio, TX 78245-3207. Telephone: 210-567-7218; FAX: 210-567-7324; e-mail: roy@uthscsa.edu. The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.

#### UNIVERSITY OF MINNESOTA STEM CELL INSTITUTE

POSTDOCTORAL POSITION available to study genetic modification of embryonic stem cells to regulate hematopoietic differentiation. Candidate must have Ph.D. and strong background in molecular biology and mammalian cell culture. Experience with lentiviral vectors and/or genetic interference techniques (RNAi, homologous recombination, or other method) highly desirable. Send curriculum vitae and names of three references to: Dr. Dan S. Kaufman, Stem Cell Institute and Department of Medicine, University of Minnesota, 420 Delaware Street S.E., MMC 716, Minneapolis, MN 554555. FAX: 612-624-2436; e-mail: kaufm020@umn.edu. Applications will be reviewed immediately and accepted until position is filled. University of Minnesota is an Equal Opportunity Employer and Educator.

A POSTDOCTORAL POSITION is available to study neuronal signal transduction mechanisms and the function of various signal transduction pathways in the nervous system including those of neuronal apoptosis, neurodegeneration, and neurogenesis. Excellent research and living environment at University of Washington, Seattle. Experience in molecular biology, cell biology, signal transduction, or neurobiology is desirable. Send curriculum vitae and three letters of recommendation to: Dr. Zhengui Xia, Department of Environmental Health, University of Washington, Box 357234, Seattle, WA 98195. E-mail: zxia@u.washington.edu.

#### POSTDOCTORAL RESEARCH ASSOCIATE

A position is available to study the regulation of dendritic cell functions, maturation and dendritic cell/T-cell interactions by oxidants and antioxidants in asthma using murine models of airway inflammation. Molecular and cellular approaches will be utilized to investigate the expressions of accessory molecules and antigen presenting cell induced T-cell proliferation and Th1/Th2 cytokines production both in vitro and in vivo.

Forward CV and 3 references to: National Jewish Medical and Research Center Ling Yi Chang, Ph.D. 1400 Jackson St., K703 Denver, CO 80206 changl@njc.org AA/EOE

> NATIONAL JEWISH Medical and Research Center

Department of Health and Human Services (DHHS) National Institutes of Health (NIH) National Institute of Child Health and Human Development (NICHD)

#### Postdoctoral Research Fellowship Positions

Two postdoctoral positions are available for a newly established Unit on Pediatric Genetics in the Laboratory of Clinical Genomics, NICHD, NIH. Experience in molecular techniques and/or cell biology essential. Experience with animal and cellular model systems of human disorders, gene discovery, genomics, or microarray technology highly desirable. Candidates must have a M.D. or Ph.D. degree and less than 5 years of postdoctoral laboratory experience.

Interested applicants should submit curriculum vitae and contact information for three referees to: Stephen Kaler, M.D., National Institutes of Health, NICHD, Bldg. 10, Room 9S259, 10 Center Drive MSC 1834, Bethesda, MD 20892-1834; TEL: (301) 496-8368; FAX: (301) 402-1073; Email: kalers@mail.nih.gov.

Apply before October 31, 2002.

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#### Janet Rossant



Samuel Lunenfeld Research Institute, Toronto. Leader in research on stem cells from the early embryo.



University of Calgary. Among first to discover neural stem cells.

LEADING STEM CELL RESEARCH

#### Freda Miller



Hospital for Sick Children, Toronto. Discovered multipotent stem cells in skin.



**Bartha-Maria Knoppers** 

Université de Montréal. Lead ethicist in the Human Genome Organization.

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#### POSITIONS OPEN

#### POSITIONS OPEN

#### UNIVERSITY OF MINNESOTA

POSTDOCTORAL TRAINING opportunities and RESEARCH ASSOCIATE appointments are periodically available in the academic departments and programs of the College of Biological Sciences at the University of Minnesota. Depending upon availability of space, facilities, and funding (as well as current faculty research interests), openings may occur in the Departments of Biochemistry, Molecular Biology, and Biophysics; Ecology, Evolution, and Behavior, Plant Biology; and Genetics, Cell Biology, and Development. Additional research programs operate within The Biotechnology Institute, The Lake Itasca Forestry and Biological Station, and The Plant Molecular Genetics Institute. For more information about these positions and how to apply, please visit the College of Biological Sciences website: http://www.cbs.umn.edu. The University of Minnesota is an Equal Opportunity Educator and Employer.

#### BUSINESS MANAGER DANA-FARBER CANCER INSTITUTE An Affiliate of Harvard Medical School

Looking for a Ph.D. with five to 10 years of experience in biological/biochemical or molecular biology research who is interested in making a transition into administration. This new administrative position is in the business office of the Department of Cancer Biology. Utilizing their scientific knowledge, the candidate's responsibilities will include research operations, compliance, editing, ensuring that the faculty and staff are receiving excellent administrative support, pre- and postaward-sponsored research management, participating in all aspects of department administration, and serving as backup for the Department Administrator. Excellent written and oral communication skills are a must.

#### POSTDOCTORAL POSITION

Position available immediately for a recent graduate with Ph.D. or M.D. degree to join a dynamic research team engaged in the study the structure and function of human CD8 coreceptor and antigen recognition of TCR specific in melanoma tumor antigen. A highly motivated individual with expertise in biochemistry is encouraged to apply. Experience in expression of the recombinant proteins, protein purification, and refolding is desired.

Please send the résumé and references to: Shannon Bayer FAX: 617-632-4421

E-mail: shannon\_bayer@dfci.harvard.edu An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCI-ATE POSITION in molecular viral oncogenesis and new pathogen discovery. Position available starting July 2002. Ongoing studies involve viral regulation of cMYC, pRB, apoptotic, and interferonsignaling pathways by Kaposi's sarcoma-associated herpesvirus (Science 266:1865, 1994; PNAS 93:1487, 1996) and use of molecular techniques to find unidentified pathogens. Experience in virology, transcriptional regulation, or genomics preferred. The laboratory is located in the University of Pittsburgh Hillman Cancer Center, a newly built, free-standing 350,000square-foot cancer research and treatment facility. Send curriculum vitae and three references by FAX or mail to: Patrick S. Moore, M.D., M.P.H. and Yuan Chang, M.D., Molecular Virology Program, Uni-versity of Pittsburgh Cancer Institute, Research Pavillion, 5117 Centre Avenue, Suite 1.4, Pitts-burgh, PA 15213-1863. Website: http://www. upci.upmc.edu/internet/molvirology/kshviab. html.

#### POSITIONS OPEN



POSTDOCTORAL POSITION Carbon Nanotechnology

A Postdoctoral Research position is available at Rice University under the direction of **Professor Richard Smalley**. The candidate must be a U.S. citizen or possess a valid green ard. The selected Scientist will be expected to assist in the planning and supervision of research activities. We seek applications from ambitious, dedicated, self-motivated, hard-working Scientists and Engineers with a strong desire to participate in the development of nanoscale science and technology in university settings with strong ties to commercial and government sectors.

Applicants should have backgrounds in one or more of the following areas: chemistry, physics, applied physics, electrical engineering, and materials science. The selected individual will be expected to lead frontier efforts in the emerging nanotechnologies and thus should possess exceptional technical and communication skills. A detailed letter of interest, curriculum vitae, and three references should be sent to: Professor R. E. Smalley, Rice University MS-100, P.O. Box 1892, Houston, TX 77251-1892. Rice University is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL AND RESEARCH ASSOCIATE POSITIONS University of Massachusetts Medical School

Available immediately to participate in the development and optimization of methods for high-throughput screening assays for identification of novel inhibitors for proteases, kinases, nuclear import and export factors, and RNA processing machinery. We are seeking innovative individuals with strong research accomplishments in biology, chemistry, and/or high-throughput screening, University of Massachusetts Medical School offers a unique and exciting research environment and opportunities for creative collaboration with groups in chemical biology, biophysics, molecular biology, immunology, pharmacology, genetics, cell biology, cellular biochemistry, and structural biology. University of Massachusetts Medical School is well equipped with modern instrumentation. Applicants are invited to submit a letter of interest, curriculum vitae, and names of three references to: Christine Fanion, Department of Biochemistry and Molecular Pharmacology, University of Massachusetts Medical School, LRB RM-827, 364 Plantation Street, Worcester, MA 01605-2324. E-mail: christine.fanion@umassmed.edu.

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

Two POSTDOCTORAL POSITIONS are available to study the molecular mechanisms in Alzheimer's and Parkinson's disease neuropathology using transgenic mouse models, cell cultures, and biochemical assays. The successful candidate must have a demonstrated knowledge of protein chemistry and molecular biology. Send curriculum vitae, interests, and names of three references to: Giulio Maria Pasinetti, M.D., Ph.D., Translational Neuroscience Program, Box 1230, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029. E-mail: giulio.pasinetti@mssm.edu.

**RESEARCH** ASSOCIATE/POSTDOC-TORAL POSITION available to study the neural and behavioral mechanisms of cross-modality (i.e., multisensory) integration. Interest in electrophysiological, behavioral, or anatomical techniques preferred. Send curriculum vitae and three letters of recommendation to: Barry E. Stein, Ph.D., Department of Neurobiology and Anatomy, Wake Forest University Health Sciences, Winston-Salem, NC 27157-1010. Affirmative Action/Equal Opportunity Employer.

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At the Johns Hopkins University School of Medicine, play a major role in the development of the genetic interaction map in budding yeast. Join a funded international collaboration (Bocke/Spencer/Boone/others) to discover genetic interactions in a genomewide study and develop tools to evaluate the biological significance of this resource. Be a pioneer in a novel application of DNA microarray technology.

SENIOR POSTDOCTORAL POSITION with managerial responsibility. The ideal candidate will have strong previous experience in budding yeast molecular genetics, microarray hybridization, and/or high-throughput genome work. Demonstrated experience in managing people is essential. The successful applicant will manage a team of at least two Technicians to carry out the microbiological and microarray aspects of this project.

SENIOR RESEARCH TECHNICIAN. The ideal candidate will have a record of performance excellence and a dedicated research orientation. Professional experience will include at least three years in yeast molecular genetics, particularly yeast transformation and nucleic acid hybridization techniques. Familiarity with microarray technology and microarray analysis is advantageous.

For either position, forward curriculum vitae and contact information for three references to: Forrest Spencer, McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University School of Medicine, 720 Rutland Avenue, Ross 850, Baltimore, MD 21205. E-mail: fspencer@jhmi.edu.

#### POSTDOCTORAL POSITIONS Cellular, Molecular, Structural Biology

Postdoctoral positions are available to study the microtubule motor protein cytoplasmic dynein and the endocytic GTPase dynamin. Projects involve the role of dynein and associated proteins in mitosis, brain developmental disease, neuronal and nonneuronal cell migration, and organelle and viral transport; structure of the dynein motor domain and accessory subunits; dynein mechanochemistry; mechanisms of cargo binding; and dynamin structure/function analysis. Background in cell and molecular biology, neurobiology, or structural biology helpful. Contact: Dr. Richard Vallee, Columbia University College of Physicians and Surgeons, Director, Division of Cell and Molecular Biology, Departments of Pathology/Cell Biology and Anatomy. Send curriculum vitae by e-mail (including names of three references) to e-mail: rv2025@columbia.edu. For further information, see websites: http://pathology.cpmc.columbia. edu/vallee/ or http://cpmcnet.columbia.edu/ dept/neurobeh/Vallee.html. Columbia University is an Affirmative Action/Equal Opportunity Employer.

#### POSTDOCTORAL POSITIONS Inflammation and Nutritional Dysfunction

NIH Pre- and Postdoctoral positions are available immediately to study the regulation of inflammation and cytokine production by environmental factors and their subsequent effects on food intake, metabolism, and organ function. A background in immunology, molecular biology, nutritional, and physiology or cell biology would be useful. The University of Illinois provides an exceptional training environment and stipends and benefits are highly competitive. Applicants should submit a cover letter indicating your research interests and expertise, curriculum vitae, and three letters of reference to: Sharon Donovan, Division of Nutritional Sciences, 449 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801. Email: sdonovan@uiuc.edu; FAX: 217-333-9368. More information is available at website: http:// www.nutrsci.uiuc.edu/. The University of Illinois is an Equal Opportunity/Affirmative Action Employer.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health



#### POSTDOCTORAL FELLOWSHIP, RESEARCH ASSISTANT AND INTERNSHIP OPPORTUNITIES IN THE FOLLOWING DISCIPLINES

**Analytical Chemistry Biochemistry Bioinformatics Bioinorganic Chemistry** Biology **Biomedical Science Biophysics Biostatistics Cancer Biology Cellular Biology Cellular Immunology** Chemistry **Developmental Biology Drosophila Genetics** Epidemiology **Functional Genomics** Genetics **HIV Research** 

Immunology **Inorganic Chemistry Medicinal Chemistry** Microbiology **Molecular Biology Molecular Genetics** Molecular Immunology Molecular Radiobiology **Molecular Virology Mouse Genetics** Nuclear Radiochemistry Nutrition **Organic Chemistry** Pathology Pharmacology Structural Biology Synthetic Organic Chem Virology

**Postdoctoral Fellowships (Ph.D./M.D.):** The postdoctoral fellowship experience at the National Cancer Institute can serve as a first postdoctoral training assignment, or offer more experienced postdoctoral scientists an opportunity to further their training in more advanced methods, to acquire new research capabilities, to make changes in the direction of their research, or to receive training in fundamental sciences and clinical disciplines for the purpose of enhancing the transfer of biotechnology to cancer clinical programs. Program duration is 2 to 5 years. Candidates must have less than 5 years postdoctoral experience. Stipend range \$35,000 to \$45,000 commensurate with experience. Health insurance provided and optional family health insurance coverage available. U.S. citizenship, permanent residency (green card), or current authorization (F-1 or J-1 visa) for training in the United States required.

**Research Assistants:** Seeking experienced scientists with undergraduate, masters or doctorate degree. Applicants must have a working knowledge of laboratory techniques and instrumentation, and the ability to collect and analyze scientific data. Two or more years of laboratory experience highly desired. Federal government salary and benefits commensurate to level of experience. United States citizenship required.

Science Internships: The National Cancer Institute provides students and graduates the opportunity to gain training and practical experience in scientific positions. Open to undergraduate students, bachelor degree holders, graduate students, graduate degree holders, and doctorate degree candidates. Interships are renewable annually. Candidates must be in good academic standing (under graduate degree gradepoint-average 3.0 and above highly desired), available for training full-time for 2 months, and be at least 16 years of age. Stipend award commensurate to level of experience. U.S. citizenship or permanent residency (green card) required.

Visit our Training & Employment website http://generalemployment.nci.nih.gov where you can post your resume for possible future openings, communicate with our laboratory principal investigators, and view/apply for positions on the Careerhere link. For more information or assistance, contact Keith Ariola, ariolak@mail.nih.gov



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#### THE NATIONAL ACADEMIES **Postdoctoral Research Awards** Senior Research Awards Summer Faculty Fellowships **Davies Teaching Fellowships** Ellison Medical Foundation Fellowships offered by the NATIONAL RESEARCH COUNCIL for research in residence at **US Government Laboratories** Opportunities for research in all areas of science and engineering 350 awards for independent research at over 120 participating laboratories 12-month awards renewable for up to 3 years • Annual stipend \$34,000 to \$61,000 - higher for senior researchers · Relocation, professional travel, health insurance · 4 annual application reviews Postmark Deadlines: February 1, May 1, August 1, November 1. Further information and application materials at: www.national-academies.org/rap For questions or assistance, contact: TEL: (202) 334-2760 FAX: (202) 334-2759 EMAIL: rap@nas.edu MAIL: Associateship Programs NATIONAL RESEARCH COUNCIL 500 Fifth Street NW, GR322A Washington, DC 20001 Qualified applicants will be reviewed without regard to race, religion, color, age, sex or national origin

#### Washington University School of Medicine McDonnell Pediatric Research Building Developmental Biology

Postdoctoral Positions Available to Study Animal Models of Human Disease Thomas Diacovo: Molecular pathogenesis of inflammation and coagulation utilizing intravital microscopy and murine genetic models

Jonathan Gitlin: Inherited disorders of copper and iron metabolism

Mark Grady: Molecular genetics of the neuromuscular junction and muscular dystrophy

Brian Hackett: Genetics and cell biology of ciliogenesis and left-right axis determination

Robert Heuckeroth: Molecular genetic mechanisms of enteric nervous system and neural crest development

Paul Hruz: Structural and molecular biology of glucose transport and insulin resistance syndromes

Louis Muglia: Molecular genetics of neuroendocrine regulation in perinatal reproduction and behavior

David Rudnick: Signal transduction biology of liver development and regeneration; Mechanisms of liver injury in neonatal liver diseases

Scott Saunders: Role of heparan sulfate proteoglycans in growth factor signaling and organogenesis

Theodore Simon: Molecular mechanisms of transcriptional control in cell growth and injury

Carl Smith: Cell biology and physiology of perinatal amino acid transport and metabolism

Bradley Thach: Physiologic mechanisms for the control of sleep in the newborn infant

David Wilson: Role of transcription factors in differentiation, development, and oncogenesis

Jane Wu: Molecular mechanisms of neural development and neurodegeneration Further information available at http://research.peds.wustl.edu. Send CV and three references to feathers\_d@kids.wustl.edu.

#### POSITIONS OPEN

#### POSTDOCTORL POSITIONS Membrane Protein Folding and Misfolding

Applications are sought for Postdoctoral positions to conduct studies of membrane protein 3-D structure, folding, and misfolding. Systems of interest include human myelin PLP and PMP22 (misfolding of these proteins causes diseases of the nervous system), G protein-coupled receptors, and DAG kinase (see laboratory website: http://biophysics.cwru.edu/ ~chuck). This goal of this work is to establish an interface between the structural and cellular biology of membrane protein folding and misfolding. Candidates are welcome with backgrounds in structural biology (especially NMR), biochemistry, biophysics, cell and molecular biology, and related disciplines. The Sanders laboratory provides a friendly working environment that includes close interactions with several neighboring structural biological groups and location in an outstanding department and university. Send applications to: Professor Charles Sanders, Department of Biochemistry, Vanderbilt University Center for Structural Biology, Room 5142 MRBIII, Nashville, TN 37232-8725. Telephone: 615-936-3756; FAX: 615-936-2211; e-mail: chuck.sanders@vanderbilt.edu. Vanderbilt is an Equal Opportunity University.

#### POSTDOCTORAL POSITIONS Eunice Kennedy Shriver Center University of Massachusetts Medical School

Funded Postdoctoral positions available immediately to study genetic variation in human cell surface glycoconjugates, pathogen binding to host cell glycoconjugates, and human milk glycoconjugates that inhibit pathogen binding to the host cell surface. Candidates should have a professional degree with experience in analytical biochemistry and familiarity with glycobiology. A working knowledge of HPLĆ, CE, MS, and other analytical methodology is desirable. Another position involves oligosaccharide synthesis. The Shriver Center, located in suburban Boston, Massachusetts, is part of The University of Massachusetts Medical School. The program in glycobiology offers many opportunities for scientific interactions and advancement. Please send curriculum vitae and the names/telephone numbers of three references to: Dr. David S. Newburg, Program in Glycobiology, E. K. Shriver Center, 200 Trapelo Road, Waltham, MA 02452. FAX: 781-894-9968; e-mail: david.newburg@umassmed.edu; website: http://www.shriver.org.

**POSTDOCTORAL POSITIONS** in immunology are available to study IL-2 and IL-7 receptor function in vivo. Novel transgenic and gene knockout mouse models are available to examine the physiological basis for cytokine regulation of T cell survival and immune responses. Other projects include investigat ing the role of IL-2 in the production and function of CD4+CD25+ T regulatory cells (see Immunity 17: 167, 2002) and the structure/function of the IL-21 receptor. Prior experience in immunology and/or receptor signal transduction is preferred. Send curriculum vitae, description of research interests, and names of three references to: Dr. Thomas Malek, Depart-ment of Microbiology/Immunology, University of Miami School of Medicine, P.O. Box 016960, Miami, FL 33101. E-mail: tmalek@med.miami. edu. The University of Miami is an Equal Opportunity/ Affirmative Action Employer.

#### POSTDOCTORAL MOLECULAR BIOLOGIST Three-Year Contract

Murdoch University in Perth, Western Australia, is seeking a Postdoctoral Scientist to study the genetics of disease resistance in *Medicago truncatula*. The application package is at website: http://www. murdoch.edu.au. Contact: Richard Oliver; e-mail: roliver@central.murdoch.edu.au or visit website: http://wwwacnfp.murdoch.edu.au/ for further information.

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#### POSTDOCTORAL/RESEARCH ASSOCIATE POSITIONS Yale University School of Medicine

Postdoctoral and Research Associate positions are available in the Department of Pediatrics to study the molecular biology of membrane proteins in erythroid and nonerythroid cells. Our work focuses primarily on the genes encoding erythrocyte membrane proteins and includes studies of the structure, function, and regulation of these genes. Mutation detection, linkage analysis, and studies of the mutations in these genes in inherited disorders of the erythrocyte are other aspects of this work. Applicants should have a Ph.D. or M.D. with experience in molecular genetics or molecular biology. English oral and written ability is required. Please send full curriculum vitae, a summary of research interests, and names and addresses of three references to: Patrick Gallagher, M.D., Department of Pediatrics, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520. É-mail: patrick.gallagher@yale.edu.

Yale University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS in singlemolecule spectroscopy and near-field imaging microscopy available immediately for studying single-molecule dynamics, electron transfer dynamics, redox reactivity at cellular membranes, and receptor protein signaling in living cells. Experience in one of the fields of physical chemistry (ultrafast and nonlinear spectroscopy, fluorescence, TCSPC, Raman, or AFM/ STM) or biophysics (protein dynamics, cell membranes, and lipid bilayers) is desired. If interested, please respond via e-mail: peter.lu@pnl.gov or send curriculum vitae and three letters of reference to: Dr. H. Peter Lu, Pacific Northwest National Laboratory, P.O. Box 999, MSIN K8-88, Richland, WA **99352.** PNNL is operated by Battelle for the U.S. Department of Energy and is an Affirmative Action/Equal Opportunity Employer and supports diversity in the workplace

POSTDOCTORAL POSITIONS are available to study the genetics, biochemistry, and physiology of bacterial metal respiration (website: http://www. biology.gatech.edu/announcements.html). Successful candidates will be part of a multidisciplinary project team that combines expertise in molecular biology, geochemistry, and scanning nanoprobe microscopy. Applicants should have a Ph.D. in microbiology, microbial genetics, biochemistry, or molecular biology. Send curriculum vitae and contact information of three references to: Dr. Thomas DiChristina, School of Biology, Georgia Tech, Atlanta, GA 30332-0230. E-mail: thomas. *Affirmative Action/Equal Opportunity Employer.* 

A POSTDOCTORAL POSITION is available to investigate the role of cryptic epitopes of the extracellular matrix in the regulation of angiogenesis, tumor growth, and metastasis. Specific emphasis will be directed towards understanding novel signaling pathways initiated by cellular interactions with proteolytically altered ECM components. Applicants should have a Ph.D. or M.D./Ph.D. with one to two years of relevant research experience. Send curriculum vitae to: Peter Brooks, Ph.D., New York University School of Medicine, Departments of Radiation Oncology and Cell Biology, 400 East 34th Street, New York, NY 10016. E-mail: peter.brooks@med.nyu.edu.

#### POSITIONS OPEN

#### POSTGRADUATE RESEARCHER Ecosystem Sciences University of California, Berkeley

Microbial population (community) genomics. Three POSTDOCTORAL POSITIONS available October 15, 2002: (1) design and operation of microbial bioreactors, (2) development and application of DNA microarrays/community genomics, and (3) computational systems biology. Background in molecular biology, biochemistry, microbial ecology, trophic ecology, or ecosystems analysis is desirable. The successful applicants will be part of a multidisciplinary NSF biocomplexity project to analyze genetic and biogeochemical factors determining the ecological function and resilience of a subsurface microbial community at an extreme acid mine drainage site. Applications to: Professor Jill Banfield, Department of Environmental Science, Policy, and Management, University of California, Berkeley, CA 94720-4767. E-mail: jill@seismo.berkeley.edu. Also see website: http://www.seismo.berkeley.edu/ %7Ejill/amd/AMDhome.html. Applications should be received by October 13, 2002. The University of California is an Équal Opportunity/Affirmative Action Employer.

Applications are invited for multiple POSTDOC-TORAL POSITIONS in imaging as a part of an initiative in molecular imaging at the University of Arizona. The successful candidates will develop instrumentation and promising applications of MR, radionuclide, and optical imaging in an interdisciplinary environment. Specific projects include (1) imaging of the tumor microenvironment including hypoxia, pH, and diffusion; (2) imaging of drug targets to anticancer therapies; (2) MR imaging of neurodegeneration; (3) MR imaging of kidney pH; (4) design, construction, and testing of targeted ligands for imaging and delivery of therapeutics; and (5) instrumentation development for optical coherence tomography. Minimum qualifications include a Ph.D. in engineering, physics, biological sciences or related fields, and excellent communication and interpersonal skills. Preferred qualifications include experience with diagnostic imaging technology, cancer biology, or signal and image processing. To apply, please send curriculum vitae and three references to: Merry Warner, Arizo-na Cancer Center, 1515 North Campbell Avenue, Tucson, AZ 85724. Telephone: 520-626-5050; e-mail: warnerm@email.arizona.edu. The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Women/Disabled/Veterans.

POSTDOCTORAL POSITION available to study the molecular biology of metabolic bone disease. The laboratory is well equipped, well funded, and has a collegial environment. We prefer someone with some experience in molecular biology, cell biology, genetics, or metabolic bone disease. Please send curriculum vitae and date available to: Michael Econs, M.D., Director, Division of Endocrinology and Metabolism, Indiana University School of Medicine, 541 North Clinical Drive, CL 459, Indianapolis, IN 46202-5111. FAX: 317-278-0658; e-mail: mecons@iupui.edu. Indiana University is an Affirmative Action/Equal Opportunity Educator and Contractor. Minorities/Females/Disabled are encouraged to apply.

**POSTDOCTORAL POSITION** to study cell signaling mechanisms regulating contractile protein phosphorylation in different types of muscles using biochemical, physiological, and genetic (transgenes and knockouts) techniques. Ph.D. or M.D. with experience in molecular approaches and interest in animal models for muscle performance and disease issues strongly preferred. Send curriculum vitae and names of two references to: Dr. James Stull, Department of Physiology, University of Texas Southwestern Medical Center, Dallas, TX 75390-9040. E-mail: james.stull@utsouthwestern.edu. Equal Opportunity Employer.

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Database of Postdoc

Organizations

and articles.



Department of Health and Human Services National Institutes of Health National Institute on Deafness and Other Communication Disorders Molecular Pathophysiology Section Postdoctoral Fellowship

#### G Protein-Coupled Extracellular Calcium-sensing Receptor

The Molecular Pathophysiology Section, NIDCD, headed by Allen M. Spiegel, M.D., is seeking an outstanding individual for an exciting research position on the structure and function of the extracellular calcium-sensing receptor (CaR). Our lab is focused on elucidating the mechanism of activation of this G protein-coupled receptor (GPCR) as a model for activation of other family 3 GPCR (metabotropic glutamate, GABA-b, taste, pheromone), and as it relates to human diseases of extracellular calcium homeostasis. We have identified the molecular basis for covalent homodimerization of the CaR (J Biol Chem 274: 27642, 1999), the role of its cysteine-rich extracellular domain (J Biol Chem 275:16382, 2000; J Biol Chem 276:6901, 2001), the site of action of positive allosteric modulators (Endocrinology 141:4156, 2000), and the basis for CaR activation by naturally occurring mutations identified in autosomal dominant hypocalcemia (J Bone Min Res 17:1461, 2002). We have generated monoclonal antibodies against a purified, secreted form of the CaR extracellular domain, and are employing molecular biologic, immunochemical, biochemical, and molecular modeling approaches to define the basis for receptor activation by agonists and allosteric modulators.

The successful applicant will hold an M.D., Ph.D., M.D./Ph.D. or equivalent degree conferred less than 5 years before beginning this Fellowship. Candidates must have a record of outstanding research productivity and have demonstrated familiarity with molecular biologic/biochemical techniques. The Fellow will interact with staff of the Section including technician and protein chemist. The scientific atmosphere of the NIH Intramural Program offers multiple opportunities for education and training. Postdoctoral Fellowship stipends within the NIH Intramural Program depend on years of experience and are competitive. Please send a resume and names of 3 references (willing to provide letter of recommendation) to Allen M. Spiegel at spiegela@extra.niddk.nih.gov.

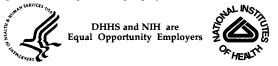
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Department of Health and Human Services National Institutes of Health National Institute of Environmental Health Sciences Research Triangle Park, North Carolina

#### POSTDOCTORAL POSITION ION CHANNEL PHYSIOLOGY

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes. The National Institute of Environmental Health Sciences, a major research component of the National Institutes of Health (NIH) and the Department of Health and Human Services, has a position available immediately in the Laboratory of Signal Transduction to study ligandgated nicotinic ACh and / or serotonin 5-HT3 receptor channels in hippocampal brain slices, cultured neurons and/or clonal cell lines. The role these channels play in regulating hippocampal neuronal activity are investigated, as well as how intracellular signal transduction pathways (i.e. phosphorylation, Ca2+) modulate the physiological properties of these channels. Preference will be given to applicants interested in studying how these ion channels regulate synaptic transmission and plasticity in the brain. Applicants with electrophysiological expeincrease are preferred, and expertise in confocal microscopy, calcium imaging and/or molecular biological techniques would be a great asset. Applicants must have less than 5 years of postdoctoral experi-ence, and salaries start at an annual rate of \$ 35,100 per year (for those with less than 1 year or less of experience), with annual increases of \$ 1,500 per year. For additional information, contact Dr. Jerrel L. Yakel by phone at 919-541-1407, by FAX at 919-541-1898, or by Email at yakel@niehs.nih.gov. For additional information concerning the research projects and publications, visit the following web site: http://dir.niehs.nih.gov/dirlst/groups/yakel.htm.



# POSTDOCTORAL OPPORTUNITIES

#### Resources

A listing of key postdoc policy documents including national reports, surveys, and workforce policies.

Our database of organizations

around the world, with links to

policies, programs, contacts,



POSITIONS OPEN



Pennington Biomedical Research Center, a Louisiana State University facility, is accepting applications for RESEARCH ASSOCIATE and POSTDOC-TORAL RESEARCHER positions. For information on employment options, see our website: http://www.pbrc.edu.

Pennington Biomedical Research Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITION The Role of Calcium Channel Mutations in Neurodegeneration Department of Neurosciences Case Western Reserve University

An NIH-funded position is available immediately for a highly motivated Scientist to study how mutations in voltage-gated Ca2+ channels contribute to neuronal cell death. Experience in electrophysiology and/or fluorescence microscopy is required, and individuals who have expertise recording from acute brain slices are especially encouraged to apply. Stateof-the-art equipment and facilities are available for fast electrical and optical recordings from cultured neurons as well as from neurons in brain slices. We offer an exciting research environment for an individual who wishes to make significant contributions to the study of how calcium regulatory mutations contribute to neurodegeneration.

Send inquiries and curriculum vitae to: David D. Friel, Ph.D., Department of Neurosciences, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44016. Telephone: 216-368-4930; e-mail: ddf2@po.cwru.edu.

#### POSTDOCTORAL POSITION Molecular Neurobiology

Postdoctoral position at the University of Connecticut in molecular neurobiology to study brain GABAA receptors and mechanisms involved in receptor trafficking and localization. Experience with recombinant DNA and/or membrane proteins is desirable. Salary commensurate with experience. Send curriculum vitae and three references to: Dr. Angel L. De Blas, Department of Physiology and Neurobiology, 3107 Horsebarn Hill Road, U-4156, Storrs, CT 06269. FAX: 860-486-3303; e-mail: deblas@oracle.pnb.uconn.edu. We encourage applications from underepresented groups including minorities, woman, and people with disabilities.

#### CAREER IN OPTOMETRY, OPTOMETRIC RESEARCH, OR TEACHING

The New England College of Optometry offers a unique program for those with a Doctorate in the sciences: biology, chemistry, physics, psychology, etc. Candidates have the opportunity to obtain the Doctor of Optometry (O.D.) degree in 27 months. The Program begins annually in March. Employment opportunities exist in clinical practice, industry, optometric faculty positions, and research. Contact: Admissions Office, Department S, 424 Beacon Street, Boston, MA 02115. Telephone: 1-800-824-5526; e-mail: admissio@ne-optometry.edu; website: http://www.ne-optometry.edu. Application deadline: February 1, 2003.

**POSTDOCTORAL FELLOWSHIP:** hepatitis C and RNA binding proteins. Opening to study HCV/host interactions in disease pathogenesis, HCV polymerase, or RNA binding proteins. Interdisciplinary studies with the Emory Vaccine Center and The Winship Cancer Center. Salary and benefits competitive. Send curriculum vitae and references to: Dr. Curt H. Hagedorn, Whitehead Research Building, Suite 201, 615 Michael Street, Emory University School of Medicine, Atlanta, GA 30322. E-mail: chagedo@emory.edu; FAX: 404-712-2980. Emory University is an Equal Opportunity/ Affirmative Action Employer. The Pennington Biomedical Research Center (PBRC) is offering **POSTDOCTORAL FELLOW-SHIPS** in a number of areas:

(1) To investigate the physiology of diet-induced obesity and identify peripheral and central mechanisms that are involved (**Bray/York**, Number 020413). Experience with laboratory animal physiology would be beneficial.

(2) For molecular and genetic studies of the regulation of macronutrient intake and the biology of enterostatin (York, Number 020182). Interest in feeding behavior and/or obesity plus relevant skills in molecular/genetic approaches desirable.

(3) In the Neurobiology of Nutrition laboratory (two positions) to study the neural control of ingestive behavior and energy homeostasis (**Berthoud**, Number 017126/025370). Prior experience with neuroanatomical, electrophysiological, molecular, and/or behavioral methodology preferred.

(4) Three positions to decipher the mechanisms by which fatty acids accelerate SREBP-1 mRNA decay and thereby suppress lipogenic gene expression and reduce the risk of lipotoxicity (S. Clarke, Number 028091-028093). Experience and skills in molecular biology will be required.

(5) To study muscle and exercise biochemistry to obtain a better understanding of the physiological, biochemical, and molecular mechanisms involved in the development of human obesity and in the response to physical training and nutrition intervention (**Ravussin**, Number 026919). Ph.D. in exercise physiology, biochemistry, or related area with experience in basic laboratory techniques and new technologies relevant to the study of health and exercise performance is desirable.

(6) To explore nutrient-gene interactions that regulate the pharmacological profiles of new weightreducing treatment paradigms. The successful candidate would conduct bench research involving mechanistic studies of well-defined animal models and parallel complementary studies in human clinical trials (Gettys and Smith, Number 020919).

(7) To explore the use of microarrays as tools to phenotype metabolic diseases. These projects include the studies in the emerging field of pharmacogenomics in obesity and diabetes (**Smith**, Number 022618). Applicants must have a Ph.D. and may find further

Applicants must have a Ph.D. and may find further information on the Pennington Center website: http://www.pbrc.edu. Applications including curriculum vitae and names of three references should be sent to the address below indicating the position number and faculty name: Evelyn P. Bennett, Assistant Director HRM, 6400 Perkins Road, Baton Rouge, LA 70808.

Louisiana State University/PBRC is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL FELLOW

A Postdoctoral position is available immediately in the skin cancer program at Loyola University Chicago Cardinal Bernardin Cancer Center. Candidates should have a thorough understanding of the immunological and molecular mechanisms of human malignancy and in particular melanoma. Candidates should also possess an expert knowledge of all immunological and molecular techniques associated with tumor/T cell interactions and dendritic cell-based immunotherapy. Please send curriculum vitae and names of references to: Dr. Adam Riker, Loyola University Chicago, 2160 South First Avenue, 112\*202, Maywood, IL 60153. E-mail: ariker@ lumc.edu. Detailed job description at website: http://www.luhs.org/depts/oncology/resjobs. htm.

POSTDOCTORAL POSITION to investigate ecological consequences of grass invasion into native dry forests in Hawaii. Interested applicants with Ph.D. in a relevant field should go to website: http://faculty.plattsburgh.edu/robert.cabin/ postdoc.htm for application instructions or send inquiry to: Dr. Robert Cabin, SUNY Plattsburgh, Department of Biological Sciences, 101 Broad Street, Plattsburgh, NY 12901-2681.

#### **PSYCHIATRIC GENETICS**

POSTDOCTORAL multidisciplinary training program at University of Chicago; FEL-LOWSHIPS now available. For particulars, see website: http://psychiatric-geneticstraining.bsd.uchicago.edu. Director of program: Dr. Elliot S. Gershon. Informal inquiries at e-mail: osumatra@delphi.bsd.uchicago. edu. Open to U.S. citizens and permanent residents. (Equal Opportunity Minorities/Females)

#### POSTDOCTORAL RESEARCH POSITIONS Available in the Laboratory of Steve S. Sommer, M.D., Ph.D. Mutation Load and Methodology Development

Three Junior/Senior Postdoctoral Fellows:

Position One: mutation load and cancer. Apply a novel, developed method for measuring mutation load to explore the relationship between high mutation load in normal tissue and risk for cancer.

Positions Two and Three: methodology development. Join one of two projects recently receiving NIH innovative technology grants: (1) NanoDOVAM-S, utilizing carbon nanotubes to perform nongel-based electrophoresis "on a chip," or (2) PAP-R, microarray-based scanning for unknown mutations based on pyrophosphorolysis-activated polymerization (PAP).

Qualified applicants should submit curriculum vitae, bibliography, statement of goals, and names and telephone numbers of three references to: Ileana Abich, Needleman Building, Room 220, City of Hope, 1500 East Duarte Road, Duarte, CA 91010. FAX: 626-930-5300; e-mail: iabich@ coh.org.

City of Hope is an Equal Opportunty/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

POSTDOCTORAL RESEARCH ASSOCI-ATE position available immediately to study the relationship of alpha-2 and beta adrenergic receptors to juvenile depression using autoradiographic, molecular, and behavioral methods. Doctoral degree required with emphasis in neuropharmacology, neuroanatomy, behavioral neuroscience, and/or molecular neuroscience. Requires strong oral and written communication skills. Applicants should submit curriculum vitae and names of three references to: Dr. David B. Bylund, Department of Pharmacology, University of Nebraska Medical Center, 986260 Nebraska Medical Center, Omaha, NE 68198-6260. FAX: 402-559-7495; e-mail: dbylund@unmc. edu. The University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study the effects of prolonged exposure to nicotine on cloned human neuronal nicotinic receptor subtypes expressed in transfected cell lines. The mechanisms of nicotine-induced upregulation of receptor amount will be studied by a combination of electrophysiology, fluorescence measures of calcium influx, binding of cholinergic ligands and mAbs, and molecular biology techniques. Salary starting at NIH levels for up to two years of experience. Send curriculum vitae, names, and e-mail addresses of three references to: Dr. Jon Lindstrom, Department of Neuroscience, 217 Stemmler Hall, Medical School of the University of Pennsylvania, Philadelphia, PA 19104-6074. E-mail: jslkk@mail. med.upenn.edu.

POSTDOCTORAL FELLOWS are sought in a laboratory specialising in anticancer research, located in the suburb of Montreal, the cultural capital of Canada. Recently Western-educated graduates in the specialised field of synthetic organic chemistry are preferred. Names, telephone numbers, FAX numbers of three teachers, and curriculum vitae should be sent to: Dr. L. O. Zamir, INRS-IAF-Université du Québec, 531 boulevard des Prairies, Laval, Québec, H7V 1B7 Canada. FAX: 450-686-5501.

#### AWARDS



#### The National Research Council and the National Institute of Standards and Technology are seeking applications for

Postdoctoral Research Awards to be offered in the field of Biomolecular Materials/Biotechnology

The National Research Council (NRC) and the National Institute of Standards and Technology (NIST) will offer competitive awards to Ph.D. scientists for research to be conducted in cell signaling at engineered surfaces. Intracellular markers such as GFP will be used to determine signaling and gene regulation in living cells resulting from their interaction with materials of defined composition, spatial organization and topology. A major emphasis is on extracellular matrix proteins associated with self-assembled thin films. Successful candidates will join a team with expertise in quantitative light microscopy, atomic force microscopy, spectroscopies, and molecular biology.

The research will take place in the NIST Biotechnology Division in Gaithersburg, MD. Qualified applicants must be U.S. citizens who have had their Ph.D. less than 5 years at the time of application. The annual stipend for recent Ph.D. recipients is \$52,300 and is appropriately higher for more experienced researchers. Awardees will receive a 2-year appointment. Support is provided for relocation and limited professional travel, and a health insurance program is offered.

Applications must be submitted to the NRC no later than February 1, 2003. A short research proposal is necessary for application. Therefore, prospective applicants should contact Dr. Anne Plant at anne.plant@nist.gov by December 2002 for more specific information regarding this research opportunity.

Application materials are available on the NRC Web site at: www.national-academies.org/rap For guestions or assistance, contact the NRC at:

Tel:	202-334-2760
Fax:	202-334-2759
E-mail:	rap@nas.edu
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	Washington, DC 20001



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Faculty Includes:

- George F. Vande Woude, PhD (Director) Molecular Basis of Cancer
- Sara A. Courtneidge, PhD (Deputy Director) Signal Regulation and Cancer

Art S. Alberts, PhD – Cell Structure and Signal Integration Brian Cao, MD – Antibody Technology Greg S. Cavey, BS – Mass Spectrometry and Proteomics Nick S. Duesbery, PhD – Developmental Cell Biology Brian B. Haab, PhD – DNA and Protein Microarray Technology

Han-Mo Koo, PhD – Cancer Pharmacogenetics Cindy K. Miranti, PhD – Integrin Signaling and Tumorigenesis

- James H. Resau, PhD Analytical, Cellular & Molecular Microscopy
- Pamela J. Swiatek, PhD Germline Modification

Bin Tean Teh, MD, PhD - Cancer Genetics Craig P. Webb, PhD – Tumor Metastasis and Angiogenesis Michael D. Weinreich, PhD – Chromosome Replication Bart O. Williams, PhD – Cell Signaling and Carcinogenesis

H. Eric Xu, PhD – Structural Sciences

Nian Zhang, PhD – Mammalian Developmental Genetics

Fellowships are awarded on an equal opportunity basis to recent recipients of a PhD, MD or equivalent biological or biochemical science degree. VARI offers a competitive salary and a comprehensive benefit package that includes health, life and disability insurance plus a 401K.

Although applications are accepted at any time, candidates are encouraged to apply for open positions well in advance of their availability dates. If interested, send a letter describing your research interests, curriculum vitae, plus names and addresses of three references to:

(Investigator's Name) Van Andel Research Institute 333 Bostwick N.E. Grand Rapids, MI 49503

Visit our Web site at www.vari.org for additional information about our organization. VARI is an Equal Opportunity Employer.

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#### POSITIONS OPEN

The Department of Biochemistry at the University of Iowa has several positions available at the **POST**-**DOCTORAL FELLOW** level for talented individuals interested in pursuing research in an active, collaborative environment. The Department is known for its strong research efforts in molecular and cell biology and molecular biophysics. For more information, see website: http://www.biochem.uiowa.edu/.

Areas of excellence include: (1) Gene expression, chromatin, epigenetics, and development (Drs. Donelson, Geyer, Price, Soares, Wallrath, Weeks). (2) Protein dynamics, enzymology, and bioenergetics (Drs. Cohen, Elcock, Murphy, Plapp, Robertson, Shea). (3) Protein crystallography (Drs. Arnone, Ramaswamy). (4) Signal transduction and organelle trafficking (Drs. Deschenes, Weismann). (5) Contractile proteins, muscle and cytoskeleton (Drs. Fulton, Rubenstein, Tobacman). (6) DNA replication and structure (Drs. E. Stellwagen, N. Stellwagen, Wold). (7) Glycoprotein and lipid structure and function (Drs. Mallampalli, Montgomery, Spector).

Applicants should hold a Ph.D. in biochemistry, biophysics, genetics, molecular biology, or a related field. Interested applicants should send or e-mail curriculum vitae and names of three references to: Brenda Kunkel, Department of Biochemistry, University of Iowa, Iowa City, IA 52242. E-mail: brenda-kunkel@uiowa.edu.

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

#### POSTDOCTORAL POSITIONS Center for Space Research Massachusetts Institute of Technology (MIT)

The MIT Center for Space Research has openings for two Postdoctoral Research Associates in the group of **Professor Walter Lewin** to actively participate in data reduction (image analysis and spectroscopy) using Chandra, XMM, and HST data. The candidates should have a strong background in observational astronomy with a proven ability to conduct independent research. Both positions require a Ph.D. in astronomy or physics. The appointments will be for two years, renewable for one to two additional years based on satisfactory performance.

Applicants should send curriculum vitae, bibliography and statement of research interests, and arrange to have three letters of recommendation sent. The application deadline is October 15, 2002. Interested candidates may apply online at website: http://web.mit.edu/personnel/www/resume. htm. If your do not have access to the Web, a cover letter and résumé may be submitted to: MIT Human Resources, Job Number 02-0651, P.O. Box 391229, Cambridge, MA 02139-0013. Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately in mechanistic/structure/function studies of flavoproteins involved in metal ion reduction. Chemistry/biochemistry experience desirable. Experience or strong interest in rapid reaction kinetics essential. Please send curriculum vitae and contact information for three references to: Dr. Susan Miller, Department of Pharmaceutical Chemistry, University of California, San Francisco, CA 94143-0446. Email: hotsoup@earthlink.net. University of California, San Francisco, is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately in the University of Maryland Center for Vaccine Development for a Protein Chemist to study structure, function, and secretion of protein capsules in enteric bacterial pathogens. Join strong multidisciplinary team with goal of vaccine development. Send curriculum vitae to: James Nataro, M.D., Ph.D., 685 West Baltimore Street, Baltimore, MD 21201. E-mail: jnataro@medicine.umaryland. edu. Equal Opportunity Employer/Affirmative Action.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITION AT EMORY Genetic Manipulation of the ACE Gene

Two NIH-funded Postdoctoral positions are available to study the role of angiotensin-converting enzyme (ACE) in blood pressure control, renal function, and models of disease. Mice genetically modified to lack ACE have a very low blood pressure, the inability to concentrate urine, and anemia (JCI 99:2375–2385, 1997; JCI 106:1391–1398, 2000). We have several different ongoing projects. One is to create and study new strains of mice (made using homologous recombination) that have very limited tissue expression patterns of ACE (Circ. Res. 90:87-92, 2002). A second project is to study the renal concentrating defect in ACE knockout mice. A third project is to investigate the role of angiotensin II in erythropoiesis. A fourth project is to use genetically modified mice to study the role of ACE in diseases such as atherosclerosis and heart disease. The study of these mice is a wonderful opportunity for someone interested in physiology, pathology, or medicine. Reply to: Ken Bernstein, Room 7109 WMB, De-

Reply to: Ken Bernstein, Room 7109 WMB, Department of Pathology and Laboratory Medicine, Emory University, Atlanta, GA 30322. Emory University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL TRAINING in auditory neuroscience at the University of Connecticut Health Center (UCHC). Three NIH-sponsored Fellowships are available. Participating faculty are Les Bernstein (human binaural psychoacoustics and modeling); Duck O. Kim (olivo-cochlear systems, computational models, otoacoustic emissions); Shig Kuwada (neural substrates of sound localization, electrical audiometry in infants); Steven Potashner (plasticity, synpatic and neurotransmitter biochemistry); Douglas Oliver (synaptic, cellular, and network structure/ function; plasticity); Tino Trabiotis (human binaural psychoacoustics and modeling); David Waitzman oculomotor system, gaze control, and auditoryvisual integration in primates). Ph.D. or M.D.; U.S. citzenship or permanent residency is required. Please send curriculum vitae to: Dr. S. Kuwada, Department of Neuroscience, University of Connecticut Health Center, Farmington, CT 06030-3401 See website: http://neuroscience.uchc.edu. UCHC is an Equal Opportunity Employer; Minorities/Females/Veterans/ Persons With Disabilities.

#### POSTDOCTORAL POSITIONS Structural Biology, Protein Engineering Donald Danforth Plant Science Center

Two positions are available: (1) structure, mechanism, and engineering of plant natural product biosynthetic enzymes involved in pathogen defense and stress responses and (2) structural biology of plant hormone signaling mechanisms. Applicants must have a Ph.D. in biochemistry or chemistry, experience in protein chemistry or crystallography, and a willingness to learn new techniques in a multidisciplinary environment. The Danforth Center is a not-for-profit independent research center (website: http://www. danforthcenter.org). Qualified applicants should submit curriculum vitae and the names of three references to: Dr. Joseph Jez, c/o Kathleen Mackey, Donald Danforth Plant Science Center, 975 North Warson Road, St. Louis, MO 63132.

#### POSTDOCTORAL POSITIONS

Available to study proteases involved in blood coagulation, fibrinolysis, and embryonic development using kinetics, site-directed mutagenesis, and X-ray crystallography. Recently graduated candidates with expertise in molecular biology, enzymology, or stuctural biology are encouraged to apply. Contact: Enrico Di Cera, Department of Biochemistry and Molecular Biophysics, Washington University School of Medicine, St. Louis, MO 63110. Email: enrico@biochem.wustl.edu.

#### POSITIONS OPEN

POSTDOCTORAL POSITIONS: molecular microbiology and pathogenesis of bacterial and viral infections. Postdoctoral positions funded by an NIH training grant at the University of Colorado Health Sciences Center are available to study molecular mechanisms of bacterial infections (with Randall K. Holmes or Michael L. Vasil); viral infections (with Bruce Banfield, David Barton, Thomas Campbell, Xiaojiang Chen, Robert Garcea, Donald Gilden, Kathryn Holmes, Jerome Schaack, Aleem Siddiqui, Eric Simoes, Kenneth Tyler, or Linda van Dyk); innate immunity (with Andres Vazquez-Torres); and cytokine biology (with Charles Dinarello). See website: http://www. uchsc.edu/sm/ for additional information about our research. Our laboratory facilities are excellent. Denver and the nearby Rocky Mountains offer many recreational and cultural opportunities. Candidates with Ph.D. or equivalent research degrees must have experience in microbiology, bacteriology, virology, immunology, molecular biology, genetics, biochem-istry, cell biology, or related field. Candidates with M.D., D.V.M., or equivalent clinical degrees must have demonstrated competency for research related to our program. Stipend is determined by NIH policies. Submit curriculum vitae, bibliography, and names of three professional references to: Training Program Director, Department of Microbiology, Box B-175, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action. Individuals from groups underrepresented in biomedical research are encouraged to apply. All candidates must be U.S. citizens or permanent residents (with INS documentation).

#### POSTDOCTORAL FELLOWSHIP PROGRAM Bar-Ilan University

A number of Fellowships for postdoctoral research in the Faculty of Life Sciences and the Faculty of Exact Sciences are available for suitably qualified applicants. In the Faculty of Life Sciences, the fields available are biochemistry, molecular biology, neurobiology, immunology, signal transduction, tumor biology, bioinformatics, and developmental biology. In the Faculty of Exact Sciences, the fields available are chemistry, physics, mathematics, and computer science. The deadline for submission of applications is January 15, 2003. Additional information may be obtained via the respective Faculty. Contact: Office of the Dean, Faculty of Life Sciences; FAX: 972-3-535-9928; email: yeminid1@mail.biu.ac.il or Office of the Dean, Faculty of Exact Sciences; FAX: 972-3-534-4766; e-mail: exacts@mail.biu.ac.il.

#### POSTDOCTORAL FELLOWSHIP PROGRAM Weizmann Institute of Science

A number of Fellowships for postdoctoral research in the fields of biochemistry, biology, chemistry, physics, mathematics, computer science, and science teaching as well as a number of interdisciplinary projects (in bioinformatics, biological physics, structural and molecular biology) will be offered by the Weizmann Institute of Science. The deadlines for the submission of applications are January 1 and May 15, 2003. Additional information and application forms are available on the website: http:// www.weizmann.ac.il/feinberg or by writing to: Postdoctoral Fellowship Program, Feinberg Graduate School, The Weizmann Institute of Science, Rehovot 76100, Israel. FAX: 972-8-934-4114; e-mail: shila@wisemail.weizmann.

An NIH-funded POSTDOCTORAL POSI-TION is available immediately to study the role of cholinergic and GABAergic medial septal neurons in hippocampal function and memory. Experience in electrophysiology desirable. Send curriculum vitae, representative publications, and the names of three references to: Dr. Kevin Pang, Bowling Green State University, Department of Psychology, Bowling Green, OH 43403. E-mail: kpang@ bgnet.bgsu.edu.

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#### WEILL MEDICAL COLLEGE OF CORNELL UNIVERSITY ANNOUNCES: The Weill Cornell Program of Excellence

in Gene Therapy Scholars Program

The NHLBI/NIH Program of Excellence in Gene Therapy at Weill Medical College of Cornell University invites applications from MD, PhD, or MD/PhD physicians and scientists for **four positions** in a unique two year postgraduate program designed to provide comprehensive training in Genetic Medicine. During the first year, Scholars will receive instruction in the preparation and use of DNA and RNA gene transfer vectors, growth and maintenance of stem cells, regulatory approval, and ethics in Genetic Medicine. During the second year, Scholars will select one area in which to perform a concentrated laboratory or clinical study. To supplement the training program, Scholars will attend lectures and seminars in Genetic Medicine and receive formal evaluations.

The Weill Cornell Program of Excellence in Gene Therapy incorporates state-of-the-art facilities including the Belfer Gene Therapy Core Facility, the Institute of Genetic Medicine at Weill Medical College and the Gene Transfer and Somatic Cell Engineering Facility at the Memorial Sloan-Kettering Cancer Center.

To apply, send your curriculum vitae, a detailed cover letter describing your interest in the program, and the names & contact information for three professional references to: Administrative Manager, Department of Genetic Medicine Weill Medical College of Cornell University 1300 York Ave, Box 96, Room W-401, New York, NY 10021

Fax: 212-746-8824 Email: pegt-admin@med.cornell.edu Application deadline: December 2, 2002 Program start date: July 1, 2003

http://www.med.cornell.edu

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#### **Research in Biophotonics and Non-linear** Microscopy at the University of Connecticut Health Center

Several post-doctoral positions are open within The Center for Biomedical Imaging Technology at the University of Connecticut Health Center (http://www.cbit.uchc.edu). The successful candidates will join a highly interdisciplinary team of biologists, organic chemists and optical physicists working on the development and application of new microscopy techniques for investigations of cell biological systems. Projects that are currently underway include:

- stochastic single molecule sensing
- optical recording of single channel activities
- second harmonic imaging microscopy
- 3D nanofabrication of biomimetics
- neuronal cell membrane physiology
- non-linear optical, electrical, and computational studies of synaptic plasticity
- RNA granule trafficking
- · 3D visualization of gene expression during development
- physiology of cell membrane fusion regulatory control of cytoskeletal dynamics

In addition, the group is developing a computational modeling environment, "Virtual Cell", that facilitates model construction and simulation. The positions are available through following faculty preceptors: John Carson, Paul Campagnola, Les Loew, William A. Mohler, Vladimir Rodionov (http://www.cbit.uchc.edu/faculty\_nv/faculty.html)

JOB REQUIREMENTS: Ph.D. in physics, physical chemistry or biophysics. Experience with non-linear optics, single molecule fluorescence, and/or electrophysiology would be required.

TO APPLY: Please send (fax or email is acceptable) CV and contact information for 3 references to: Center for Biomedical Imaging Technology, 263 Farmington Avenue, University of Connecticut Health Center, Farmington, CT 06030-1507; email: les@volt.uchc.edu



#### POSITIONS OPEN

**POSTDOCTORAL POSITIONS** are currently available in three laboratories at Trudeau Institute. Dr. Troy Randall: using the results of gene chip experiments at a basis for a functional analysis of how CD40 and cytokine signaling govern B cell terminal differentiation in vitro and in vivo. Dr. Lawrence L. Johnson: innate and acquired immunity to Taxoplasma gondii; mechanisms of immunopathology resulting from infection. Dr. Stephen T. Smiley: roles for coagulation in immunity and immunopathology; T cell responses to Yersinia pestis. Detailed descriptions of those projects and other ongoing research in the laboratories offering Postdoctoral positions are available at website: http://www.trudeauinstitute. org. Trudeau Institute, Inc., is a not-for-profit biomedical research institute with state-of-the-art facilities and an international reputation for excellence. Located in the heart of New York State's Adirondack Mountains overlooking beautiful Saranac Lake, Trudeau offers competitive salaries and benefits including daycare, pension, and subsidized housing. Trudeau fosters a highly collaborative research envi-ronment focused on basic immunology and infectious disease. Please send curriculum vitae, addresses of three references, and a letter describing your research interests to:

Amy Richardson, Human Resource Manager Trudeau Institute, Inc. P.O. Box 59 Saranac Lake, NY 12983 E-mail: arichardson@trudeauinstitute.org

#### POSTDOCTORAL POSITION

Postdoctoral Research Fellow position is available in the laboratories of Joshua Ellenhorn, M.D., and Don J. Diamond, Ph.D., at the City of Hope National Medical Center and Beckman Research Institute. Seeking an individual with training in U.S. or E.U. laboratories having expertise in molecular and cellular immunology to develop vaccines targeting p53. The work involves construction of recombinant viral vaccines and their evaluation in animal tumor models. Qualified applicants should submit current curriculum vitae and names and addresses of three references to: Ileana Abich, Needleman Building, Room 220, City of Hope, 1500 East Duarte Road, Duarte, CA 91010. FAX: 626-930-5300; e-mail: iabich@coh.org. City of Hope is an Equal Opportunity/Affirmative Action

City of Hope is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

POSTDOCTORAL POSITIONS supported by the National Institutes of Health are available immediately for highly motivated individuals interested in (1) epithelial stem cell biology, (2) epithelial Toll-like receptors, (3) epithelial differentiation, and (4) cutaneous inflammation. Candidates should have a Ph.D., M.D., or M.D./Ph.D. degree with demonstrated molecular and cell biology expertise. Please send curriculum vitae, description of research interests, and names and e-mail addresses for three references to: Robert M. Lavker, Ph.D., Department of Dermatology, The Feinberg School of Medicine, Northwestern University, Ward 9-124, 303 East Chicago Avenue, Chicago, IL 60611. E-mail: r-lavker@northwestern.edu.

Northwestern University is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

**POSTDOCTORAL POSITION** in plant molecular genetics/genomics available to study the effects of sugars on plant gene expression and development using Arabidopsis. This is an emerging field that impacts many aspects of plant biology. The Department of Plant Biology, University Minnesota, St. Paul, provides excellent facilities and is in an area with a high quality of life. Experience with molecular biology and genetics required. Send résumé and three letters of reference to: **Dr. Sue Gibson; e-mail: gibso043@ tc.umn.edu**. The University of Minnesota is an Equal Opportunity Educator and Employer.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITION ECOLOGICAL GENETICS Grinnell College Biology Department

The Department of Biology at Grinnell College invites applications for a two-year Postdoctoral position beginning in January 2003. The successful applicant will participate in research on the ecological genetics of plant mating systems and teach in a liberal arts college environment under the guidance of a faculty mentor. The candidate should anticipate teaching or coteaching one course per semester. A recent Ph.D. in plant ecology, population genetics, ecological genetics, or related field is required as is an interest in teaching and supervising the research of undergraduates. For additional details on research projects, contact: Dr. Vincent M. Eckhart; e-mail: eckhart@grinnell.edu; website: http://web. grinnell.edu/individuals/eckhart. Send curriculum vitae, three letters of recommendation, and copies of all transcripts to: Mellon Postdoctoral Search Committee, Department of Biology, Grinnell College, Grinnell, IA 50112-1690. In their letters of application, candidates should address their interest in developing as a teacher and scholar in an undergraduate liberal arts environment that values diversity and emphasizes close faculty-student interaction. To be assured of full consideration, complete applications should be received by October 11, 2002. For further information about Grinnell College, please see website: http://www. grinnell.edu. Grinnell College is an Equal Opportunity/ Affirmative Action Employer committed to attracting and retaining highly qualified individuals who collectively reflect the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender, sexual orientation, marital status, religion, creed, or disability.

#### POSTDOCTORAL POSITION

A Postdoctoral position is available in the Lineberger Cancer Center in the Department of Microbiology and Immunology at the University of North Carolina-Chapel Hill. Research involves the study of Kaposi's sarcoma-associated herpesvirus (KSHV/HHV-8) and its simian homolog, rhesus monkey rhadinovirus (RRV). Several projects that examine questions in molecular virology are available. These encompass the areas of signal transduction, transcription, and the construction of recombinant herpesviruses. For more information on the research environment at the Lineberger Comprehensive Cancer Center, please look up the following website: http://cancer.med.unc.edu/training/.

Please send curriculum vitae and three letters of reference by regular mail or e-mail to: Dr. B. Damania, Lineberger Comprehensive Cancer Center, University of North Carolina-Chapel Hill, CB 7295, Mason Farm Road, Chapel Hill, NC 27599. E-mail: damania@med.unc.edu.

**POSTDOCTORAL POSITIONS** available to study in areas of physical pharmacy, pharmaceutical analysis, macromolecular pharmaceutics, and cellular and molecular biopharmaceutics. Candidates must have a Ph.D. in chemistry, pharmaceutics, biochemistry, pharmacology, or related field. A strong background in chemistry and experience with a variety of analytical techniques is desirable. Send curriculum vitae and three letters of recommendation to: Postdoctoral Pool Search, Department of Pharmaceutical Chemistry, 2095 Constant Avenue, The University of Kansas, Lawrence, KS 66047. E-mail: khall@ukans.edu. Review of applications will begin September 17, 2002. Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITIONS The Burnham Institute La Jolla, California

Applications accepted for work on (1) gene regulation by Egr 1 transcription factors in prostate and breast cancers using a novel throughput genomic analysis and (2) functional studies of Egr 1 target genes using expression and mutational analyses. Intercampus collaborations available in this biotechnology region. Excellent benefits. E-mail applications to: Eileen Adamson, Ph.D.; e-mail: eadamson@burnham.org.

#### POSITIONS OPEN

#### POSTDOCTORAL FELLOWSHIP Emory University School of Medicine

A Research Postdoctoral Fellow position is available immediately to study the molecular mechanisms regulating cell proliferation, differentiation, and tumorigenesis. Projects will focus on the biological functions of several newly identified Krüppel-like factors (KLFs) in the above processes (Dang et al., Intl. J. Biol. Cell Biol. 32:1103, 2000; Sun et al., J. Biol. Chem. 276: 6897, 2001; Chen et al., J. Biol. Chem. 276:30423, 2001; Katz et al., Development 129:2619, 2002). Our laboratory is located in the recently completed Whitehead Research Building on the beautiful Emory campus. Candidates should have a Ph.D. or M.D. degree with experience in molecular biology and preferably the following techniques: Northern and Western blot analysis, in situ hybridization, immunohistochemistry, and transgenic mouse-related work. Send curriculum vitae, three letters of reference, and a one-page summary of research background and interests to: Vincent W. Yang, M.D., Ph.D., R. Bruce Logue Professor and Director, Division of Digestive Diseases, Department of Medicine, 201 Whitehead Biomedical Research Building, Emory University School of Medicine, Atlanta, GA 30322. E-mail: vyang@emory.edu. Equal Opportunity/Affirmative Action Employer.

Stony Brook University seeks one POSTDOC-TORAL POSITION available immediately to study gene regulation in neural cells. The selected candidate must have a Doctoral degree in biochemistry/cell biology/molecular biology or a related field. Experience in general laboratory techniques (for example, mammalian and bacterial cell culture); biochemical analyses; and DNA/RNA/protein analyses is required. Background in neurobiology, pharmacology, or a related field is preferred. Salary is commensurate with qualifications and experience. Send curriculum vitae and the names of three references to: Marian Evinger, Ph.D., Associate Professor, Department of Pediatrics, Stony Brook University, School of Medicine, Health Sciences Center, Stony Brook, NY 11794-8111. Visit us at website: http://www. stonybrook.edu/cjo for details regarding this position. Affirmative Action/Equal Opportunity Employer.

Two POSTDOCTORAL POSITIONS to investigate the structural and binding characteristics of several novel steroid receptors and their functions. One position is to study three recently discovered human progesterone membrane receptors and their coupling to G proteins. The other is to characterize a third form of the nuclear estrogen receptor identified in fish (PNAS 97:10751, 2000). Candidates should have a Ph.D. and a strong background in molecular and cellular biology and/or steroid hormone receptors. Experience with eukaryotic protein expression, mutagenesis, or signal transduction techniques is preferred but not required. To apply, send curriculum vitae and names of three references to: Peter Thomas, University of Texas Marine Science Institute, 750 Channelview Drive, Port Aransas, TX 78373. E-mail: thomas@utmsi.utexas.edu; website: http://www. utmsi.utexas.edu/staff/thomas/index.htm.

#### POSTDOCTORAL AND GRADUATE RESEARCH POSITIONS Honey Bee Genomics

With the proposed sequencing of the honey bee genome next year, now is a good time to work with an organism that is rapidly becoming a model for behavioral genetics. We are interested in genomic, behavioral, and gene expression analyses of the bee. Positions are available immediately to identify and characterize the expression of candidate genes for quantitative trait loci that influence behavior. Salary will depend on experience. Please send a statement of interest; curriculum vitae; and the names, e-mail addresses, and telephone numbers of three references to: Greg J. Hunt, Department of Entomology, Purdue University, West Lafayette, IN 47907-1158. E-mail: ghunt@purdue.edu. Purdue University is an Equal Opportunity/Affirmative Action Employer.

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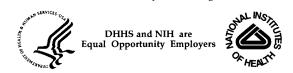
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#### POSTDOCTORAL POSITIONS

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes

The Laboratory of Molecular Genetics (LMG) of the National Institute of Environmental Health Sciences (NIEHS), a major research component of the National Institutes of Health (NIH) and the Department of Health and Human Services, is recruiting for postdoctoral fellows in areas related to genome stability and integrity. The research directions of the LMG encompass DNA replication, recombination, repair, mutagenesis, evolution, telomere structure, somatic hypermutation in the immune system, mitochondrial genome stability, the impact of environmental factors, and a variety of human diseases. The NIEHS resides in an attractive area with ready access to mountains, the seashore, and a myriad of natural habitats. Living costs are moderate. The LMG labs are spacious and well equipped and almost any imaginable specialty is practiced here or nearby. We provide a highly interactive environment among groups headed by William C. Copeland, Marilyn Diaz, John W. Drake, Thomas A. Kunkel, James M. Mason, Michael A. Resnick, Roel M. Schaaper, and Bennett Van Houten. Qualified postdoctoral fellows may apply for special grants that can be used in subsequent tenure-track academic appointments. Postdoctoral stipends start at \$35,100 per year plus health insurance. Applicants must have less than five years of postdoctoral work. Please e-mail your curriculum vitae and areas of interest to kersey@niehs.nih.gov



#### NATIONAL CANCER INSTITUTE

#### NEW SALLIE ROSEN KAPLAN FELLOWSHIP FOR WOMEN IN BASIC, CLINICAL, POPULATION AND PREVENTION SCIENCE

The Sallie Rosen Kaplan Fellowship is a new opportunity for women postdoctoral scientists in cancer research, made possible by a generous bequest to the Foundation for NIH (FNIH). Candidates for the Kaplan Fellowship must possess a doctoral degree, have less than 5 years postdoctoral research experience, and have U.S. citizenship or U.S. permanent residency (green card). Fellowship training at the NCI can serve as a first postdoctoral assignment, or offer more experienced postdoctoral scientists an opportunity to further their training. Program duration is normally 2 to 5 years.

NCI's Maryland campuses boast the best funded and equipped research facilities in the United States. Postdoctoral fellows have the opportunity to interact with internationally renowned scientists from a wide range of disciplines. Starting fellowship stipend is \$35,000 to \$45,000 commensurate with level of experience. Kaplan Fellows will receive first-year stipend augmentation of approximately \$10,000. Health insurance is provided and optional family insurance coverage is available.

Applications and supporting letters must be received by February 1, 2003. Selected candidates will be notified May 1, 2003. Applicants are strongly encouraged to apply online. For important application criteria information and instructions to apply online or by mail for this special opportunity, please go to our training and employment website: http://generalemployment.nci.nih.gov or contact: Mr. Lee McPhatter, phone: (301) 496-4796,

fax: (301) 451-6238, email: lm148g@nih.gov

The NCI is an Equal Employment Opportunity and Affirmative Action Employer.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITIONS Department of Pharmacology University of Washington School of Medicine

MOLECULAR CHAPERONES: Position available to study the effects of chaperones on proteins that cause neurodegeneration. Experience in molecular and cellular biology preferred. U.S. *citizenship or permanent residency required*. For background information, see website: http://depts.washington. edu/phcol/fac/muchowski.html. To apply, e-mail curriculum vitae to: Paul Muchowski; e-mail: mucho@u.washington.edu.

STRUCTURAL BIOLOGY: Position available to study the structures and functions of protein complexes involved in the ubiquitination pathways using X-ray crystallography (see Cell 102:533; Nature 416:703; and this issue of Science). Experience in protein crystallography and protein chemistry is desirable but not required. Highly motivated individual willing to learn and tackle difficult problems is preferred. To apply, please send your curriculum vitae and names of three references to: Dr. Ning Zheng, Department of Pharmacology, University of Washington, Box 357280, Seattle, WA 98195. E-mail: nzheng@u.washington.edu.

#### POSTDOCTORAL POSITIONS University of California, San Diego

Postdoctoral positions are available now for studies on (1) regulation of cytomegalovirus (CMV) gene expression, (2) impact of CMV on cell cycle regulatory and signaling pathways, and (3) CMV vaccine development. A strong background in molecular biology and either cell biology, immunology, or biochemistry is required. Send curriculum vitae and names of three references to:

> Dr. Deborah H. Spector Molecular Biology Section 0366 University of California, San Diego 9500 Gilman Drive La Jolla, CA 92093-0366 E-mail: dspector@ucsd.edu

UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

POSTDOCTORAL POSITIONS supported by the NIH are available in the Section of Nephrology at the University of Chicago. Research topics include immunopathogenesis of experimental renal diseases, apoptotic antigens and autoimmunity, novel macrophage signaling pathways, and study of renal transport mechanisms. Investigative work can take advantage of a fully operational microarray facility controlled by the Section. Applicant must have a Ph.D. and/or M.D. degree and be a U.S. citizen or permanent resident. Expertise in cellular and molecular biology, signal transduction, and/or immunology is essential. The start date can be as early as October 1, 2002. Submit curriculum vitae including three references to: Dr. Jerrold Levine; e-mail: jlevine@medicine.uchicago.edu. Affiramtive Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS to study trafficking, localization, and function of neuronal ion channels in cell culture and transgenic animal models (see website: http://www.sunysb.edu/biochem/ BIOCHEM/facultypages/trimmer/index.html). Applicants must have recent Ph.D., publications, and strong research background. Send curriculum vitae including references to: Dr. J. Trimmer; e-mail: james.trimmer@sunysb.edu.

A POSTDOCTORAL POSITION in neuroscience is available to join NIH- and NSF-funded projects to study glutamate-dependent acetylcholine plasticity in neurons. See website: http://www. tulane.edu/~belousov for more details. Successful candidate must have strong background in whole cell recording/electrophysiology and Ph.D. degree. Highly competitive salary will be offered to a qualified candidate. Contact: Andrei Belousov, Department of Cell and Molecular Biology, Tulane University, New Orleans, LA 70118. E-mail: belousov@ tulane.edu.

#### POSITIONS OPEN

#### POSTDOCTORAL FELLOW TWO POSITIONS (22UC3202 and 3203)

The Center for Imaging Research at the University of Cincinnati Medical School has two immediate openings for Postdoctoral positions in high-field (4T) MRI/MRS. Our primary focus is on the development of both acquisition and analysis methodology. Ample research time and collaborative opportunity will be made available to the Research Fellows. Our new MRI Center is equipped with a 4T Varian whole body NMR imager/spectrometer. Access to a few 1.5 T GÉ scanners is also available. Fellows will be supervised by the Senior Physicist. Fellows will have opportunities to join ongoing research efforts in MRI and MRS technical development and MR applications to neuroscience and neuropsychiatry as well as opportunities to pursue independent research. Applicants should have a Ph.D. in electrical engineering, MR physics, or related field with a strong MR background and handson experience in MRI or MRS. Experience in pulsesequence development and hardware and/or image analysis is highly desirable. Salary is commensurate with experience and will be based on University of Cincinnati guidelines. Send curriculum vitae (noting control number), brief statement of research interest, and names of three references to: Stephen Strakowski, M.D., Director, University of Cincinnati Center for Imaging Research, 231 Albert Sabin Way, Cincinnati, OH 45267-0583. E-mail: strakosm@ucmail.uc.edu or Jing-Huei Lee, Ph.D., Senior Physicist, University of Cincinnati Center for Imaging Research, 231 Albert Sabin Way, Cincinnati, OH 45267-0583. E-mail: jlee@ bnl.gov. Open until filled.

**POSTDOCTORAL POSITION** available immediately to study genetic and molecular pathways of skeletal development. Ph.D. degree in molecular/cellular biology, genetics, or related discipline and expertise in modern molecular and cell biology methods are required. Individuals with an academic career goal and excellent communication skills are preferred. Experience in murine developmental biology, skeletal physiology, and/or gene transfer is desirable. Salary is competitive and commensurate with experience. Please send your curriculum vitae, summary of research experience, and the names and contact information for three references to: Robert F. Klein, M.D., Bone and Mineral Unit (CR113), Oregon Health and Science University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97239. E-mail: kleinro@ohsu.edu.

#### POSTDOCTORAL FELLOWSHIP PROGRAM Hebrew University of Jerusalem

The Hebrew University offers Fellowships for postdoctoral research in the faculties of science, medicine, dental medicine, agriculture, social sciences, humanities, law, and in the schools of business administration and social work. The deadline for submission of applications for the academic year 2003-2004 is December 31, 2002.

For further information regarding submission of applications and how to contact us, please consult the following website: http://sites.huji.ac.il/LDFT.

#### POSTDOCTORAL POSITIONS Institute for Genetic Medicine University of Southern California

Several fully funded Postdoctoral positions are available in the laboratory of **Henry Sucov**. We use conventional and conditional knockout mice to explore diverse aspects of development and postnatal physiology that are regulated by nuclear receptors. Current projects address cardiovascular development, erythropoiesis, fate and function of neural crest cells, cholesterol homeostasis, and prostate growth and tumorigenesis. The laboratory is in newly constructed research space on the USC Health Sciences Campus in Los Angeles. Contact **e-mail: sucov@use.edu**.

#### POSITIONS OPEN

#### NIH POSTDOCTORAL RESEARCH FELLOWSHIPS Yale University School of Medicine

The Department of Immunobiology and the Child Study Center at Yale University invites applications for a multidisciplinary Postdoctoral research training program. A specific focus of research is the development of animal models for Tourette's syndrome and obsessive-compulsive disorder through an exploration of the hypothesis that superantigens activate a series of responses that lead to antibody and T and B cell effects that disrupt the normal functioning of the basal ganglia. A Postdoctoral position is available immediately. Possible mentors include Michael Carrithers, Paul Lombroso, Debra Bessen, and James Leckman working in close association with Charles Janeway. Candidates must have an M.D. and have completed their psychiatric and/or pediatric training or have a Ph.D. in immunobiology or a related discipline. NIH-funded research training programs are available for U.S. citizens and permanent residents. Send curriculum vitae, any published research papers, three letters of reference, and a brief statement of research goals to:

> James F. Leckman, M.D. Director of Research Yale University Child Study Center 230 South Frontage Road P.O. Box 207900, SHM, 1-267 New Haven, CT 06520-7900 E-mail: monique.staggers@yale.edu

Yale University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from women and minority candidates.

POSTDOCTORAL POSITION is available to study the molecular mechanism of retroviral DNA integration and the structure and function of the proteins involved. Experience in molecular biology and biochemical/biophysical analysis of biological macromolecules is desirable. Candidates must have less than five years of postdoctoral experience. Send cover letter, summary of research experience, and the names and addresses of three references by e-mail or mail to: Dr. Robert Craigie, Laboratory of Molecular Biology, National Institute of Diabetes and Digestive and Kidney Diseases, NIH/HHS, Building 5, Room 301, 5 Center Drive, Bethesda, MD 20892 U.S.A. E-mail: bobc@helix.nih.gov. For information, see website: http://orac.niddk.nih.gov/ www/craigie/crahome.html.

HHS and NIH are Equal Opportunity Employers.

**POSTDOCTORAL POSITIONS** are available within the epithelial pathobiology research unit at Emory University to study the molecular basis of epithelial intercellular junction structure-function, membrane raft biology, and epithelial cell migration. A Doctoral degree in molecular biology, biochemistry, or microbiology is preferable. The successful applicant will be a member of a large, dynamic group with broad expertise in cell and molecular biology pertaining to epithelial cell biology and mucosal immunology.

Interested individuals should send curriculum vitae to Dr. A. Nusrat at the address below: Emory University, Department of Pathology, Whitehead Biomedical Research Building, Room 105E, 615 Michael Street, Atlanta, GA 30322. E-mail: anusrat@emory.edu.

POSTDOCTORAL POSITIONS are available to study (1) the molecular basis of import and export from the nucleus and (2) the regulation of transport by inositol polyphosphate signaling. Applicants must have a Ph.D. and/or M.D. and a strong background in molecular cell biology. Send curriculum vitae and three letters of reference to: Dr. Susan Wente, Professor and Chair, Department of Cell and Developmental Biology, Vanderbilt University Medical Center, 3120A Medical Research Building III, Nashville, TN 37232-8240. More information is available through our website: http://www.mc. vanderbilt.edu/vumcdept/cellbio/. THE INSTITUTE FOR GENOMIC RESEARCH

TIGR is continuing to expand into exciting new fields of research. The scope of research includes structural, functional, and comparative analysis of genomes and gene products in viruses, eubacteria, pathogenic bacteria, archaea, and eukaryotes. Currently, we are seeking post doctoral candidates for several new and exciting research projects.

Post Doctoral Fellowships require a Ph.D. or an M.D. in relevant scientific discipline such as Molecular Biology, Biochemistry, Pharmacology, Immunology, Microbiology, Neuroscience, Plant Biology or related field.

A Post-Doctoral Fellowship or Staff Scientist position is available to work on microarray data for the Potato Functional Genomics project. This NSF funded functional genomics project will use microarrays to characterize expression patterns of genes involved in stress and development in potato and related species. Code#RB174SCI

A Post-Doctoral Fellowship is available on an NSF-funded project to study gene expression in the model plant *Arabidopsis thaliana*. The goal of this project is to facilitate functional annotation of the *Arabidopsis* genome and to uncover gene-interaction networks in the context of specific biological problems using whole-genome microarrays and bioinformatics tools. Code#JQ175SCI

This Post Doctoral position will collaborate with PI on the NIH funded project to study genome-level variation in *Bacillus anthracis*. This project will include developing and implementing methods to study evolution of whole genomes. Code#JE176SCI

TIGR, situated on an attractive campus in Rockville, Maryland, currently has a staff of 340, including 30 faculty. We offer an excellent working environment and a competitive benefits package. Please submit a c.v.and cover letter indicating the job code of interest to: TIGR, Attn: HR/1184, 9712 Medical Center Dr.,Rockville, MD 20850 E-mail: jobs@tigr.org EOE.



**TIGR** is the world's premier center for whole genome sequencing and analysis having completed more than 60% of the genomes and chromosomes in the public domain. Since it was founded in 1992, TIGR has been a trailblazer in the genomics revolution.



#### Health Canada is inviting applications for its new Postdoctoral Fellowship program.

This program provides an opportunity for highly motivated postdoctoral researchers to work with prominent Health Canada researchers for up to 2 years in an innovative research environment that promotes excellence in science to support informed decision-making.

The range of scientific disciplines considered in the program include the biological, physical, and environmental sciences, social sciences, and areas of policy research and analysis that address the importance of translating science outcomes to sound health policy.

A list of Health Canada researchers who will act as potential supervisors is available on our Web site. Candidates and prospective supervisors will jointly develop a research proposal, to be submitted before **October 11, 2002.** 

This program is open to Canadian citizens and landed immigrants who are resident in Canada or abroad. Non-Canadians may also be considered for fellowships under special circumstances.

Postdoctoral fellows will receive a stipend of up to \$40,000 per year.

For more information, please visit our Web site at www.healthcanada.ca/fellowships. Written inquiries and applications may be sent to:

Postdoctoral Fellowship Program c/o Office of the Chief Scientist Health Canada Frederick G. Banting Building Tunney's Pasture, Postal Locator 2202C Ottawa, Ontario K1A 0L2 Canada E-mail: PDF\_PBP@hc-sc.gc.ca

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Health Santé Canada Canada

## Canada

# POSTDOCTORAL OPPORTUNITIES

#### POSITIONS OPEN

#### POSTDOCTORAL FELLOWS Cardiovascular Sciences/Biochemistry

The Program in Integrative Cardiac Metabolism at the University of Illinois College of Medicine announces Postdoctoral positions. The Program seeks individuals in cardiovascular sciences with experience in immunoassay, HPLC, gene transfer, or NMR along with isolated hearts or cardiomyocytes. Applicants must hold an M.D. or Ph.D. Send curriculum vitae and research interests to: Dr. E. Douglas Lewandowski, Department of Physiology and Biophysics (MC901), University of Illinois College of Medicine, 835 South Wolcott, Chicago, IL 60612. FAX: 312-996-2870. UIC is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITIONS** available to study the regulation of nuclear function and gene expression by lipid mediators in lung disease (asthma and lung cancer). NIH-funded studies will use biochemical, molecular, and microarray approaches to examine the effects of arachidonic acid metabolites on gene expression. The ideal candidate has a strong background in cellular and molecular biology as applied to nuclear function. Interested applicants should send curriculum vitae with contact information for three references to: Thomas G. Brock, Ph.D., University of Michigan Medical Center, Ann Arbor, MI 48109-0642. Email: brocko@umich.edu. The University of Michigan is an Affirmative Action/Equal Opportunity Employer.

#### IMMUNOLOGY POSTDOCTORAL POSITIONS Stanford University

Postdoctoral positions available in four areas: transcriptional regulation of the chemokine RAN-TES; granulysin, a lytic molecule found in CTL; tolerogenic HLA peptides; and T cell epitopes for *Mycobacterium tuberculosis*. Experience in molecular and/or cellular immunology essential. Send curriculum vitae, statement of interest, and names of three references to: Dr. Alan Krensky (e-mail: krensky@ stanford.edu) or Dr. Carol Clayberger (e-mail: cclay@stanford.edu), Department of Pediatrics, Stanford University, Stanford, CA 94305-5247. FAX: 650-498-6077.

Two POSTDOCTORAL RESEARCH POSI-TIONS in cellular electrophysiology and/or calcium imaging are immediately available in the Center for Molecular Cardiology in the laboratories of Andrew Marks and Steven Marx to study ion channels in the heart. Applicants should have an M.D. and/or Ph.D. with two to three years of training in cellular electrophysiology and/or calcium imaging. Outstanding applicants should send curriculum vitae and names of three references to: Dr. Steven Marx, Cardiology/ Medicine, Columbia University, 630 West 168th Street, New York, NY 10032. E-mail: sm460@columbia.edu. Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE for sensory neurobiology group studying cellular/molecular aspects of signaling in taste buds (e.g., Chaudhari et al., Nat. Neurosci. 3:113, 2000; Caicedo and Roper, Science 291:1557, 2001; Caicedo et al., J. Physiol. in press 2002). Experience in calcium imaging and/or patch clamp required; previous publications in English-language journals essential. Salary up to \$50,000 depending on experience. Send curriculum vitae and names of references to: Dr. S. Roper, Physiology/Biophysics (R430), University of Miami Medical School, 1600 N.W. 10th Avenue, Miami, FL 33136. E-mail: roper@miami.edu.

**POSTDOCTORAL POSITION** available for study of sonic hedgehog signaling in mouse prostate development and human prostate cancer. NIH/ NCI/DOD-funded projects include *in vitro* organ culture and transgenic and xenograft tumor modeling as well as human tumor tissue analysis. Interested applicants may contact: Wade Bushman, M.D., Ph.D., Division of Urology, G5/350 CSC, 600 Highland Avenue, Madison, WI 53792. E-mail: bushman@surgery.wisc.edu.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITIONS T Cell Immune Responses

Positions are available to study T cell immune responses and the mechanisms responsible for viral persistence in infections caused by HIV, HCV, and CMV as a part of ongoing clinical trials focused on immunebased therapies with cytokines and vaccines. Also, other studies are focused on the identification and evaluation of novel gene expression in response to T cell activation. There are opportunities and expectations that the candidates will develop independent basic research projects within these areas to synergize with existing clinical trial efforts. See website: http://www. kendallasmith.com for further information. Candidates should have a Ph.D. or M.D. degree and a strong background in cellular immunology, molecular immunology, and/or virology. Prior postdoctoral experience preferred. Please send curriculum vitae and contact information for three references to:

Kendall A. Smith, M.D. Rochelle Belfer Professor of Medicine and Immunology Weill Medical College of Cornell University 1300 York Avenue, Box 41 New York, NY 10021 E-mail: kasmith@med.cornell.edu

#### POSTDOCTORAL POSITIONS AVAILABLE

NIH-funded Postdoctoral positions are available within the Vascular Physiology Group to study mechanisms of altered vasoreactivity associated with pathological conditions such as chronic hypoxia and hypertension. A variety of modern experimental approaches are utilized by Investigators in the group including dimensional analysis of isolated arterioles, calcium imaging, electrophysiology, molecular biology, and integrative whole animal studies. A background in physiology is desirable. Send applications to:

Benjimen R. Walker, Ph.D. Vascular Physiology Group Department of Cell Biology and Physiology University of New Mexico Health Sciences Center 915 Camino de Salud N.E. Albuquerque, NM 87131-5218 E-mail: bwalker@salud.unm.edu

NIH-sponsored POSTDOCTORAL FELLOW-SHIP program in vaccinology at the University of Maryland School of Medicine Center for Vaccine Development. Unique training opportunity in highly productive multidisciplinary research environment. Opportunities include basic to applied bacteriology, parasitology, and immunology. Outstanding clinical epidemiology training also available. Applicants should have M.D. and/or Ph.D. degrees and U.S. *citizenship or permanent residency.* Send curriculum vitae to: James Nataro, M.D., Ph.D., 685 West Baltimore Street, Baltimore, MD 21201. The University of Maryland is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH FELLOW or ASSOCIATE RESEARCH SCIENTIST. Positions available immediately for M.D. or Ph.D. Scientists in the Division of Molecular Medicine to conduct research on molecular mechanisms of atherogenesis and the link between cholesterol metabolism and Alzheimer's disease. See website: http://www.alantall. org for projects and personnel in laboratory. Send curriculum vitae to: Dr. Alan Tall, Division of Molecular Medicine, P and S 8-401, Columbia University, New York, NY 10031. We take Affirmative Action toward Equal Employment Opportunity.

**POSTDOCTORAL RESEARCH ASSOCI-ATE**. Starting date flexible. To carry out research on enzyme kinetics and mechanisms (see J. Am. Chem. Soc. 123:9912, 2001). Send curriculum vitae and two letters of reference to: **R. Pollack, Department of Chemistry and Biochemistry, University of Maryland Baltimore County, Baltimore, MD 21250**. Position will be open until filled. UMBC is an Equal Opportunity/Affirmative Action Employer and applications from women, minorities, and individuals with disabilities are especially encouraged.

#### POSITIONS OPEN

#### POSTDOCTORAL POSITION Regulatory Connection Between Growth and the Cell Cycle

A Postdoctoral position is available in the Santangelo laboratory at the University of Southern Mississippi in Hattiesburg, Mississippi, recently designated one of the five "Best Small Metro Areas" in the United States. Hattiesburg is 75 minutes from the Gulf of Mexico and 95 minutes from New Orleans, Louisiana. We have recently identified a cell cycle function for regulators that control transcription of the two major classes of yeast genes required for cellular growth (Deminoff and Santangelo, Genetics 158: 133-143, 2001). Excellent resources and training opportunities are available including the recent addition of cutting-edge bioinformatics and confocal laserscanning microscope facilities on site. Candidates should have a Ph.D., prior training in standard molecular techniques, and a strong work ethic. Previous experience with the model organism Saccharomyces cerevisiae is preferred. Salary will be very competitive and commensurate with experience. Send curriculum vitae and a cover letter with contact information for three references to: Martha Sparrow, Box 5018, Hattiesburg, MS 39406. E-mail: martha. sparrow@usm.edu. The University of Southern Mississippi is an Affirmative Action/Equal Opportunity Employment Employer.

#### POSTDOCTORAL POSITIONS Beckman Research Institute of the City of Hope Division of Neuroscience

Two Postdoctoral Research Fellows positions in the Los Angeles, California, metropolitan areas are available in the laboratory of Qiang Lu, Ph.D. to study Eph/ephrin and other cellular signaling mechanisms controlling the development of neuronal connectivity using combined biochemical, cell biological, and genetic approaches (*Cell* 105:69-79; *Nature Neurosci.* 3:358-365). Motivated individuals with experience in biochemistry, molecular biology, or neurobiology are preferred. Send curriculum vitae and names of three references by e-mail to: Ileana Abich; e-mail: iabich@coh.org.

City of Hope is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

**POSTDOCTORAL POSITION(S)** available immediately to study pituitary gonadotropin gene expression. Specific project areas include transcriptional regulation of the LH $\beta$ -subunit gene, PACAP in the anterior pituitary, and the effects of aging on female gonadotrope function. Background in reproductive biology or endocrinology required. Experience in cell culture and molecular biology techniques desirable. Applicants should send a résumé, names of three references, and a brief description of research goals to: Dr. Lisa Halvorson, Department of Obstetrics/ Gynecology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75390-9032. E-mail: lisa.halvorson@ utsouthwestern.edu. Equal Opportunity Employer.

#### POSTDOCTORAL POSITION Germ Line Stem Cells

Studies include culture, purification, gene activity, and gene modification of male germ line stem cells (spermatogonia). See review in *Science* 21 June 2002. Send curriculum vitae, names of three references, and a letter describing research experience to: **R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania, 3850 Baltimore Avenue, Philadelphia, PA 19104**.

**POSTDOCTORAL POSITIONS** immediately available to study molecular aspects of antigen presentation including work in a model of autoimmunity. Molecular biology and biochemistry experience required and immunology background preferred. Candidates with recent Ph.D.s who are eligible for NIH training grant positions preferred. Please send curriculum vitae and three references to e-mail: mellins@stanford.edu.

#### Emory University Postdoctoral Positions Cellular Responses to Genotoxic Stress

Postdoctoral positions with competitive salary and benefits available immediately to study various aspects of bacterial and eukaryotic cellular pathways that result in resistance to DNA damaging agents. These studies are supported by a five year NIH-supported Program Project Grant. The DNA damage resistance strategies that will be analyzed will include DNA repair, damage tolerance and direct prevention pathways using genetic, biochemical and cell biological approaches. The five Emory faculty leading this collaborative effort are Paul W. Doetsch, Ph.D., Bernard Weiss, M.D., Yoke Wah Kow, Ph.D., Gerald Shadel, Ph.D., and Wolfram Siede, Ph.D. whose laboratories are located in close proximity to each other in the Departments of Biochemistry, Pathology and Radiation Oncology and the Winship Cancer Institute at Emory University School of Medicine. A vibrant, stimulating intellectual environment, a highly interactive community of scientists and state-of-the-art facilities and equipment should make this a rewarding experience for the successful applicants.

Candidates should submit their curriculum vitae with contact information for three references, a statement describing their Doctoral training and future research interests, and a letter identifying the specific faculty member(s) with whom the candidate would like to conduct postdoctoral research. These items should be sent to: **Ms. Debbie Duke, Basic Science Administrator, Department of Biochemistry, Emory University School of Medicine, 4001 Rollins Research Center, Atlanta, GA 30322. Information on the investigators' specific research programs can be obtained by navigating the Emory website (www.emory.edu) to the faculty web pages or by direct email to the faculty member of interest.** 

Emory University is an Equal Employment Opportunity/ Affirmative Action Employer

#### POST-DOCTORAL POSITIONS IN THE MOLECULAR CARDIOLOGY RESEARCH CENTER AT THE UNIVERSITY OF PENNSYLVANIA

The Molecular Cardiology Research Center at the University of Pennsylvania has several postdoctoral research positions for interested individuals to pursue exciting projects in the development of cardiovascular, pulmonary, and hematological tissue systems. The MCRC has a state-of-the-art Transgenic/ES injection core facility as well as excellent Histology and Physiology cores. Laboratories and projects include:

Edward E. Morrisey, Ph.D. - Mechanisms underlying development of lung and vascular tissues. Development 129:2233-2246, 2002; Development 129: in press, 2002.

Mark L. Kahn, M.D. - Signaling pathways that regulate angiogenesis and hemostasis. J. Biol. Chem. 277:18801; J. Biol. Chem. 277:3011

Jonathan Epstein, M.D. - Transcriptional control of cardiac and neural crest development; mouse models of congenital heart disease. *Cell*, 104: 619-629, 2001; *Cell*, 110: in press, 2002.

Michael Parmacek, M.D. - Transcriptional programs regulating heart and vascular development, angiogenesis, diabetic vascular disease. J. Biol. Chem. 276:16418-16424, 2001; Mol. Cell Biol. 21:1336-1344, 2001; Genes Dev. 12:3579-3590, 1998.

 $Candidates \ must have a Ph.D. \ and/or \ M.D. \ in \ biology \ or \ related \ field. \ Experience \ working \ with \ the \ muse \ as \ a \ model \ organism \ is \ desirable.$ 

If interested, please send CV and the names of three references to:

Carolyn Phillips Molecular Cardiology Research Center University of Pennsylvania 957 BRB II/III 421 Curie Blvd. Philadelphia, PA 19104 Phone: 215-573-9306 FAX: 215-573-2094 Email: carolynp@mail.med.upenn.edu

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

# work $\Rightarrow$ satisfaction

Science is all about making connections. Each discovery builds on those that came before it, and every idea requires a body of knowledge built up over a lifetime. Life is like that, too. The connections you make with people and places are what make you feel part of something larger than yourself. And that's the feeling you get at Roche. Not only do you get to share ideas with some of the best minds in the world, you get to share your days with some of the best people in the world, and still have plenty of time left over for the other things in your life that you enjoy.

We currently have the following position available in our **Nutley**, **NJ** location:

#### Post-Doctoral Position Position Code: 900

We are seeking a talented post-doctoral scientist for an innovative research project in the Department of Bioinformatics, Genetics and Genomics. The successful individual will become part of an exciting collaboration of in-house scientists and leading academic researchers in the U.S. and China to employ cutting edge genomic tools in identifying genetic loci that regulate the clinical manifestations of Type II Diabetes and obesity.

In this role, you will work closely with experts in polymorphism discovery and genotyping, computational biology and statistical analysis, the successful candidate will work with a novel, high-throughput SNP genotyping system. You will also be responsible for assisting with assay design, protocol development, data handling, genetic analysis, and the transfer of data to and from researchers at collaborating medical centers.

We are eager to hear from highly motivated individuals with a doctoral degree and a strong background in the genetics of complex disease, wet-lab genomics, or metabolic diseases. Demonstrated enthusiasm and initiative, effective communication skills, and the proven ability to work well in a team environment are essential.

To find out more about these and other opportunities at our Nutley, NJ campus or to apply online, visit our website at: www.rocheusa.com and enter position code 900, or send your resume to: Roche Resume Processing Center, PO Box 3600, Nogales, AZ 85628-3600 or e-mail: roche@offshoredata.com Please include position code 900 and source code SCI913 in the subject line of your e-mail or cover letter. No agencies please.



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## DISTINGUISHED FELLOWSHIP

#### Lawrence Livermore Postdoctoral Fellowship

The Lawrence Livermore National Laboratory (LLNL) has openings available under its Postdoctoral Fellowship Program. This is a highly desirable, prestigious position with ample resources and freedom to conduct cutting-edge research in the fields of the candidate's choice. Duration for the Fellowship is up to three years. Typically two openings are available each year. Fellowships are awarded only to candidates with exceptional talent, credentials, and a track record of research accomplishments.

Candidates will do original research in one or more aspects of science relevant to the mission and goals of LLNL which include: Physics, Computational Mathematics, Computer Science, Chemistry, Material Science, Engineering, Environmental Research, Atmospheric Science, Geological Sciences, Energy, Laser Science, and Biological Science. Successful candidates may participate in experimental or theoretical work at LLNL, and will have access to LLNL's extensive computing facilities, specialized laboratory facilities, and field equipment. A senior scientist will serve as a mentor to each of the Fellows. The candidates will receive full management and administrative support. The salary is \$7,250/mo.

Please refer to our web page http://fellowship.llnl.gov for eligibility requirements and application information. Please reference source code AJSC9D2DO. The deadline for application is November 1, 2002. No applications will be accepted after this date. LLNL is operated by the University of California for the National Nuclear Security Administration/Department of Energy. We are an Equal Opportunity Employer with a commitment to workforce diversity.



Science in the National Interest

For information about other employment opportunities, visit our website:

#### www.llnl.gov/jobs

#### USDA Agricultural Research Service

The USDA, Agricultural Research Service, Plum Island Animal Disease Center is seeking a Microbiologist (Postdoctoral Research Associate) to study the integrin viral receptors for foot-and-mouth disease virus. The research will involve cloning receptors from susceptible species, mutational analysis of cloned receptors, determination of co-receptor requirements, analysis of mechanisms of viral entry, and pathogenesis studies. A Ph.D. and specific training focusing on molecular and cell biology is required. Experience in receptor biology is desirable.

Salary range is \$48,032-\$57,568 (commensurate with experience), plus benefits. Only US citizens or permanent residents (Green Card) are eligible for this position. There are some restrictions on the hiring of non-US citizens. For research program information contact **Dr. Barry Baxt** at **631-323-3354**, or **bbaxt@piadc.ars.usda.gov**. Application instructions may be found at **http:** //www.ars.usda.gov/careers or by contacting **Maria Martoccia at 631-323-3346**. Refer to vacancy announcement RA-02-085L.

The Plum Island Animal Disease Center is located approximately 1.5 miles from the east end of Long Island, NY and is accessible by Government ferry from either Orient Point, Long Island or Old Saybrook, CT. Application must be postmarked by October 30, 2002.

> USDA/ARS is an Equal Opportunity Employer and Provider.

# City of Hope

#### **BECKMAN FELLOWS PROGRAM**

Postdoctoral Research Fellowships Beckman Research Institute of the City of Hope

The prestigious Beckman Fellows program, established by the Arnold and Mabel Beckman Foundation, provides support and resources for postdoctoral fellows to develop rapidly into independent investigators. The fellowship is designed for beginning or advanced postdoctoral fellows with strong records of accomplishment, who have a clear sense of direction and/or a novel idea they wish to develop in collaboration with one or more City of Hope investigators.

Two fellows will be selected in the current competition. Each will be provided a salary of \$55,000 per year and a research allowance of \$55,000 per year for supplies, equipment, travel and/or technical support. Fellowships are renewable for three years.

For applications and eligibility requirements please visit the Beckman Fellows Web site: http://beckmanfellows.coh.org. For a list of potential mentors and their research interests, please visit: http://bricoh.coh.org and go to Divisions and Programs.

Application Deadline: October 15, 2002

City of Hope is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans and disabled persons are encouraged to apply.

#### POSTDOCTORAL POSITIONS Monell Chemical Senses Center

The Monell Chemical Senses Center is a nonprofit, basic research institute dedicated to the study of taste, smell, chemical irritation and appetite. The Center is located on the campus of the University of Pennsylvania in Philadelphia. Research focuses on understanding how the chemical senses function and their importance in everyday life.

Positions are currently available for interdisciplinary training and research in the areas of Sensation and Perception, Genetics, Neuroscience and Molecular Biology, Environmental and Occupational Health, Nutrition and Appetite, Health and Well-Being, and Chemical Ecology and Communication (see http://www.monell.org/researchoverview\_ h.htm for details). Approaches include clinical medicine, chemistry, biochemistry, organismal and molecular biology, animal and human psychophysics, organo- and neurophysiology, including single cell, whole nerve and in situ brain recordings, neuroanatomy, experimental psychology, environmental sampling and human exposure assessment. A background in chemosensory research is not required.

Req. include a Ph.D., M.D., or equivalent. Stipend is in accordance with NIH standards. Those who seek appointment to a position on the Center's NIH-sponsored training grant should be a US Citizen or a permanent resident alien.

Send C.V., cover letter explaining your experiences and career goals, and the names and means to contact three references to: **Personnel Administrator, Monell Chemical Senses Center, 3500 Market St., Philadelphia, PA 19104**.

Monell is an Equal Opportunity Employer and encourages applications from women and minorities.

#### POST-DOCTORAL OPPORTUNITIES Biodefense and Emerging Infectious Disease Research



Medical College of Wisconsin Milwaukee, WI

Post-doctoral opportunities are available immediately to participate in **Biodefense** initiatives at the Medical College of Wisconsin. A new multidisciplinary group is being formed to focus on basic, clinical, and translational research related to human pathogens. Candidates with a Ph.D., M.D., or D.V.M., research experience, and a desire to train in new and emerging areas of microbial pathogenesis, virology, molecular genetics, toxins, cell biology, innate immunity, structural biology, gene regulation and expression, and animal models of infection will be considered. United States citizens or permanent residents will be given high priority.

The Medical College of Wisconsin is located in Milwaukee, a diverse community offering a variety of job opportunities, excellent schools, and affordable housing. Recreational and cultural activities are exceptional and range from sailing on Lake Michigan to fine dining in the theater district. Information about the school and various research programs can be obtained from <u>http: //www.mcw.edu/</u>. Interested candidates should apply to:

Dr. Dara W. Frank, Department of Microbiology and Molecular Genetics, Medical College of Wisconsin, 8701 Watertown Plank Rd., Milwaukee, WI 53226. EEO/AA/M/F/D/V



#### DOCTORAL AND POSTDOCTORAL POSITIONS Diabetes Research Vancouver, British Columbia

Positions are available, on Canadian Institutes of Health Research (CIHR) and Juvenile Diabetes Research Foundation (JDRF) funded projects in the areas of type 1 or type 2

In the laboratory of **Dr. Diane T. Finegood, PhD**, Professor and Scientific Director, CIHR Institute of Nutrition, Metabolism and Diabetes. Current projects in the laboratory include:  $\beta$ -cell adaptation and turnover in type 2 diabetes, regulation of  $\beta$ -cell turnover by glucose, relative efficacy of thiazolidinedione, biguanide, or sulfonylurea treatment at preventing/ reversing type 2 diabetes in rodents, neonatal  $\beta$ -cell apoptosis and the initiation of  $\beta$ -cell directed autoimmunity, macrophage function in type 1 diabetes. Applicants with interests and experience in one or more of the following areas will be given consideration: cell mass dynamics/turnover, apoptosis,  $\beta$ -cell biology, *in vivo* physiology of diabetes, mathematical modeling, image analysis, quantitative morphometry, and immunology.

Successful applicants will have a demonstrated record of achievement appropriate to their level of experience. Positions are appropriate for highly motivated, independent thinkers interested in pursuing their own ideas within the context of the research interests of the laboratory. Fellows will have the opportunity for independent work, supervision of students and technical staff, and skills development in grant and manuscript preparation and review. The laboratory has strong linkages to several multidisciplinary research groups located across Canada, including the JDRF/CIHR funded  $\beta$ -Cell Apoptosis Network and the Mathematics for Information Technology and Complex Systems Network Centre of Excellence. These linkages provide outstanding opportunities for training in a diverse range of approaches and techniques.

Applications should include a cover letter, curriculum vitae and the names and addresses of three referees, and be sent to: Dr. Diane T. Finegood, PhD, School of Kinesiology, Simon Fraser University, 8888 University Drive, Burnaby, British Columbia, Canada, V5A 1S6. FAX: 604-291-3040 or email to: finegood@sfu.ca. Salary is negotiable and will be based on experience.

#### POSTDOCTORAL POSITIONS AVAILABLE

#### AMERICAN SOCIETY FOR MICROBIOLOGY AND NATIONAL CENTER FOR INFECTIOUS DISEASES

#### 2003 POSTDOCTORAL RESEARCH PROGRAM

Up to ten associate positions will be awarded by the American Society for Microbiology for fulltime research on infectious diseases which cause significant public health problems. Associates will perform research in residence at the National Center for Infectious Diseases (NCID) which is headquartered at the Centers for Disease Control and Prevention (CDC) in Atlanta, GA. In addition to Atlanta, NCID operates laboratories in Ft. Collins, CO, Anchorage, AK, and San Juan, Puerto Rico.

#### Eligible fields of study include:

- Bacterial and Mycotic Diseases
- Viral and Rickettsial Infections
- Nosocomial Infections
- HIV/AIDS
- Vector-borne Infectious Diseases
- Sexually Transmitted Diseases
- Parasitic Diseases

The associate positions are limited to individuals who either earned their doctorate degree (Ph.D., Sc.D., M.D., D.V.M., or D.D.S.) or have completed a primary residency within three years of their proposed start date. The program provides an annual stipend of \$30,800, health care benefits package and up to \$4,000 for professional development.

The application deadline is **November 15, 2002**. For more information, visit ASM's home page at http://www.asmusa.org/ edusrc/edu23e.htm or e-mail: Fellowships-CareerInformation@asmusa.org. The brochure and application are available on line.

#### ASM

American Society for Microbiology

#### **CDC/NCID**

Centers for Disease Control and Prevention/ National Center for Infectious Diseases



West Virginia University ROBERT C. BYRD HEALTH SCIENCES CENTER

#### POSTDOCTORAL FELLOWSHIPS SENSORY NEUROSCIENCE RESEARCH CENTER Including two openings in the SNRC Distinguished Fellow Program

The newly formed **Sensory Neuroscience Research Center** (www.hsc.wvu.edu/snrc) announces postdoctoral fellowship opportunities. SNRC faculty have a broad range of research interests, from the molecular and cellular to the system and behavioral analyses of sensory systems. The SNRC offers a stimulating and collegial environment with excellent institutional support that permits design of an independent and creative multidisciplinary experience. Available technologies include fMRI, PET, optical imaging, extra/intracellular physiology, *in vitro* fluorescence imaging, confocal microscopy, EM, protein structure/function assays, molecular embryology, recombinant antibodies, and transgenics. Development and plasticity are common research themes among the faculty. The SNRC was recently designated a NIH Center for Biomedical Research Excellence. Morgantown has been recognized nationally as one of the best small cities in the nation for its quality of living and is near Pittsburgh and Washington D.C. (www.mgtn.com, or mgnchamber.org)

SNRC Faculty and Research Interests:

Aric Agmon, Ph.D.: Development of synaptic circuits in the cerebral cortex.

Albert Berrebi, Ph.D.: Structural and functional investigations of mature and developing auditory brainstem circuits.

Janet Cyr, Ph.D.: Molecular basis of mechanoelectric transduction by auditory and vestibular hair cells. Peter Mathers, Ph.D.: Molecular control of axonal pathfinding and eye formation.

Janine Mendola, Ph.D.: Functional neuroimaging of human visual cortex in health and disease. Ben Ramsden, Ph.D.: Combined optical imaging and electrophysiology of primate visual cortex. George Spirou, Ph.D.: Sound localization: biophysical and structural mechanisms and their development.

All fellows are offered competitive salaries and annual travel allowances. The SNRC Distinguished Fellow Program awards a salary starting at \$42K to outstanding applicants. Potential applicants are encouraged to contact directly any SNRC faculty through our website or the Center Director for more general information. To apply, send CV, statement of interests, and names of 3 references to: Research Fellow Program, Sensory Neuroscience Research Center, School of Medicine, P.O. Box 9303, West Virginia University HSC, Morgantown, WV 26506-9303, Tel. 304-293-2929.

WVU is an Equal Opportunity/Affirmative Action Employer.

#### POST-DOCTORAL OPPORTUNITIES

Department of Microbiology & Molecular Genetics Medical College of Wisconsin

http://www.mcw.edu/microbiology

Post-doctoral opportunities are available in several active research groups within a dynamic and interactive department offering newly renovated space, state-of-the-art equipment and core facilities. The Medical College of Wisconsin is expanding and developing multiple interdisciplinary initiatives. Milwaukee offers diverse cultural and recreational opportunities, affordable housing, good schools and a variety of career opportunities.

- Dr. Joseph Barbieri bacterial pathogenesis: molecular mechanisms of toxin action
- Dr. Michael Dwinell mucosal immunology: chemokines and chemokine receptors in intestinal epithelia
- Dr. Dara Frank bacterial pathogenesis: type III secretion, regulation of toxin expression in *Pseudomonas aeruginosa*
- Dr. Ming Lei molecular genetics: regulation of cell-cycle dependent initiation of DNA replication in S. cerevisiae
- Dr. Mark McNally molecular genetics: mRNA splicing and polyadenylation
- Dr. Paula Traktman molecular genetics and virology: kinase/ phosphatase signaling and DNA replication in vaccinia virus

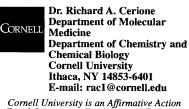
Interested candidates may apply directly to the faculty or to: Dept. of Microbiol. & Molecular Genetics, Medical College of Wisconsin, 8701 Watertown Plank Rd., Milwaukee, WI 53226 EEO/AA/M/F/D/V

#### Postdoctoral Positions in Emerging Fields of Signal Transduction

Postdoctoral positions are available immediately to lead novel areas of study in an established signal transduction laboratory. The laboratory is committed to combining biochemical and genetic approaches with Xray crystallographic and computational methods to better understand how complex signaling networks give rise to cell growth, differentiation or apoptosis. One area of particular interest involves understanding how Cdc42 serves as a convergence point for growth factor signaling and trafficking activities. A second area involves the study of the molecular mechanisms of a GTP-binding protein/transglutaminase molecular switch in determining whether cells undergo differentiation or apoptosis.

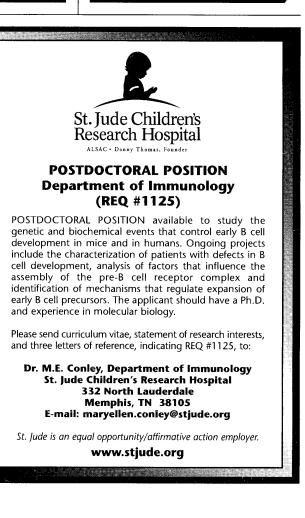
Highly motivated individuals with a strong background in molecular and/or cellular biology, and/or structural biology are encouraged to apply.

Please send a C.V. and 3 references to:



Equal Opportunity Employer and Educator.

http://www.cornell.edu http://chronicle.com/jobs/profiles/2377.htm



#### POSTDOCTORAL RESEARCH FELLOW

A position is available to study transcriptional regulation in B lymphocyte development and the immune response. The successful candidate will focus on the functions of early B cell-specific factors, including Pax-5 and EBF, and their roles in B cell commitment, antigen receptor signaling, and epigenetic regulation. Candidates must have a Ph.D. in immunology, biochemistry, molecular biology, or a related discipline, and U.S. residency is required

Forward CV, 3 references and a brief description of your interest to: National Jewish Medical and Research Center Dr. James Hagman Integrated Department of Immunology 1400 Jackson St., K516b Denver, C0 80206 hagmanj@njc.org AA/EDE

> NATIONAL JEWISH Medical and Research Center

#### **Stowers Institute Postdoctoral Program**

The Stowers Institute seeks more effective means of preserving health and preventing disease through basic research on genes and proteins that control fundamental processes of cellular life. The Institute offers fellowships for postdoctoral research training in state-of-the-art laboratories headed by outstanding scientists who work at the bench alongside their team members. Among the Mentors are: **Robb Krumlauf, Ph.D.** 

Regulatory pathways in the developing brain & nervous system Peter Baumann, Ph.D. Telomeres in aging and cancer James Coffman, Ph.D. Genomic regulatory systems in sea urchin embryogenesis Joan Conaway, Ph.D. Mechanism and regulation of transcription by RNA polymerase II Ron Conaway, Ph.D. Molecular mechanism and regulation of gene transcription Chunying Du, Ph.D. Control of apoptosis in mammalian systems Jennifer Gerton, Ph.D. Mechanisms ensuring fidelity of chromosome distribution Scott Hawley, Ph.D. Control of meiotic chromosome behavior in Drosophila Linheng Li, Ph.D. Regulatory networks in hematopoietic stem cell development Olivier Pourquié, Ph.D. Regulation and timing of vertebrate segmentation Paul Trainor, Ph.D. Tissue interactions regulating cranial and facial development Ting Xie, Ph.D. Molecular regulation of germline stem cells in Drosophila and mouse Arcady Mushegian, Ph.D. Computational analysis of genes and proteins Brian Sauer, Ph.D. Biochemical genetics of the Cre/lox system; gene targeting in mice More information may be found at:

#### www.stowers-institute.org

The Stowers Institute is committed to equal opportunity in all its programs.

#### Research Associate Center for Insect Science University of Arizona

Postdoctoral Excellence in Research and Teaching (PERT) offers up to three years of support to outstanding candidates seeking advanced research training in insect science and preparation for the additional demands of an academic career. PERT trainees may select from among over forty faculty research mentors representing a broad range of insect science disciplines: genetics, biochemistry, neurobiology, ecology, evolutionary biology, molecular/cellular biology, entomology, physiology, behavior. During the three-year research training period, each trainee will participate in a two semester pedagogy program. Trainees will receive preparation in additional areas such as the job application process, grantsmanship, and how to balance research, teaching and service during the tenure and promotion process. Funded through the NIH, the starting salary will be based on the NIH NRSA scale for years of postdoctoral experience, with an annual allowance of \$5,000 for research and \$1,000 for travel. Each trainee will have exclusive use of a laptop computer. Additional information about the Center for Insect Science and the PERT program is available at http://cis.arl.arizona.edu/index.html. Applicants must have a Ph.D. in a related field and must be U.S. citizens or permanent residents. Applicants should have no more than four previous years of postdoctoral experience.

To apply, please submit a letter of application that includes a statement explaining how the PERT program will assist the applicant in his/her career goals, a CV, three letters of reference, a two to three page research proposal developed with the intended CIS research mentor describing the project to be undertaken during the training period, and a letter of support from the intended CIS research mentor to: **PERT, Center for Insect Science, PO Box 210106, University of Arizona, Tucson, AZ 85721-0106.** Review of applications will begin October 31, 2002 and will continue until positions are filled.

**WAYO CLINIC** 

#### POSTDOCTORAL RESEARCHER Laboratory Medicine and Pathology Rochester, Minnesota, U.S.A

Ph.D. with considerable expertise in large-scale genomic analysis and cytogenetics needed to study the role that the common fragile sites play in gene amplification in cancer. Looking for a hard-working independent young investigator with considerable molecular biology expertise. Experience in cytogenetics is essential to characterize the common fragile sites and the regions of genomic amplification.

Salary will be determined by the successful candidate's experience. There is an attractive benefit package. Mayo Clinic is a not-for-profit organization. Mayo integrates research with clinical practice and education in a multi-campus environment. For further information please visit **http://www.mayo.edu/research**/.

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

> David I. Smith, Ph.D. Professor, Laboratory Medicine and Pathology 811 Hilton 200 First Street SW Rochester, MN 55905 (507)-266-0309/(507)-266-5193 smith.david@mayo.edu

Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

The University of Arizona is an EEO/AA Employer -M/W/D/V.

### An extraordinary day. An extraordinary company.

Purdue Pharma L.P. is one of the fastest-growing pharmaceutical companies in the world today. Together with its associated companies worldwide, Purdue produces a variety of prescription and non-prescription products and is known for its pioneering research on a principal cause of human suffering: chronic pain. Purdue's Discovery Research Group in central New Jersey is collaborating to discover new approaches to the treatment of cancer and pain. Their work is supported by state-of-the-art facilities, sophisticated information services and an extensive library of scientific literature.

We currently have the following position available:

#### Postdoctoral Scientist, Molecular Biology

The successful candidate will develop and apply molecular techniques for the study of gene expression at the level of individual neurons. Responsibilities will include: generating and comparing cDNA libraries from single patch-clamped neurons, FACS-sorted cells or limited tissue isolated by laser capture microscopy using subtractive hybridization and microarray hybridization to identify genes differentially expressed in neurons under different experimental conditions; collaborating with electrophysiologists and neuroanatomists to optimize cDNA amplification protocols in different experimental systems; and designing and developing an experimental program in coordination with different departments.

This position requires a PhD in Molecular Biology with the ability to be proactive in a group work setting. Strong interpersonal and organizational skills and a solid background in molecular neurobiology are required. Experience with primary neuronal cell culture, neuroanatomy, and/or electrophysiology would be helpful. Background in nociception or a related field of neuropharmacology is also desirable.

Purdue Pharma L.P. offers competitive salaries, an attractive benefits package and opportunities for personal advancement and professional growth. For consideration, qualified applicants should mail their resumes, indicating position of interest, to: Recruiter, Human Resources, 6 Cedar Brook Drive, Cranbury, NJ 08512 or e-mail to: jmmrecruiter@pharma.com.

Corporate standards require drug testing and background investigation. We are an equal opportunity employer committed to a diverse workforce. M/F/D/V.

If you'd like to see what a difference a day can make and learn about our career opportunities, please visit **www.purduepharma.com** 



YOUR DAY WILL BE DIFFERENT HERE.

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#### **Postdoctoral Positions Available**

The University of Cincinnati Department of Pharmacology and Cell Biophysics is seeking Postdoctoral Scientists to participate in established biomedical sciences research projects. Positions require a Ph.D. degree in the biological or physical sciences.

#### **Project areas include:**

#### Cardiovascular dynamics and imaging (Dr. RW Millard)

- Genomics and proteomics of diabetic cardiomyopathy (Dr. MA Matlib)
- Cytokines and transcription in cardiomyopathy and ischemia (Dr. WK Jones)
- Growth factors, opioids and cardiovascular disease (**Dr. JJ Schultz**)
- Action of estrogen during neurodevelopment (Dr. SM Belcher)
- Amyloid peptides and Alzheimer's disease (**Dr. JE Maggio**)
- Adenosine receptors and VEGF biology (Dr. ME Olah)
- Drug-specific therapeutic antibodies (Dr. WJ Ball)
- · Function and regulation of ion channels (Dr. HS Wang)

#### Expertise in any of the following areas is desirable:

molecular biology
small animal physiology
immunochemistry
electrophysiology
fluorescence spectroscopy

•receptor binding
•peptide chemistry
•molecular modeling
•enzyme kinetics
•informatics
•cellular biology

Competitive compensation and benefits. See www.med.uc.edu/ pharmacology/ for individual research programs and positions. Send CV and references via email to: donna.gering@uc.edu or paper versions to: Ms. D. Gering, Department of Pharmacology and Cell Biophysics, University of Cincinnati College of Medicine, P. O. Box 670575, Cincinnati, OH 45267-0575.

The University of Cincinnati is an Equal Opportunity Employer. Women and underrepresented minorities are especially encouraged to apply.

#### University of Rochester Medical Center Center for Oral Biology Post-doctoral / Research Faculty Positions

Multiple postdoctoral and research faculty opportunities exist within a highly interactive group of scientists utilizing multidisciplinary approaches to study salivary gland physiology, oral microbiology, and craniofacial development (http://www.urmc.rochester.edu/Aab/OralBio/faculty.htm). Candidates with relevant research background and a PhD, DDS, or MD degree may apply. Specific research opportunities include:

**Dr. James Melvin:** Functional studies including electrophysiology and gene manipulation techniques applied to investigate the mechanism and regulation of fluid secretion. Experience in cell physiology, electrophysiology and/or molecular biology required; experience with epithelial cells a plus. Position may be at the Research Faculty level.

**Dr. Robert Quivey:** Regulation of stress responses in planktonic and biofilm cultures of the oral pathogen *Streptococcus mutans*. Experience in molecular techniques required, experience with biochemical techniques very helpful. Position may be at the Research Faculty level.

**Dr. Rulang Jiang:** To characterize the molecular genetic mechanisms of craniofacial development and orofacial cleft pathogenesis using spontaneous and transgenic mutant mouse models. We have recently identified a mutant gene that causes cleft lip and palate. We have also generated mutant mice carrying targeted mutations in several craniofacial genes and are in the process of analyzing these mutant mice. Experience in molecular biology required.

**Dr. Wei Hsu:** Cellular signaling in mammalian development and disease progression. Two major research areas are: (1) mammalian head formation and stem cell biology; (2) mammary gland development and breast cancer. The first project focuses on craniofacial development, patterning of the brain and cell fate determination of neural stem/progenitor cells. The second investigates Wnt signaling inducers and antagonists in breast cancer development and anticancer mechanisms.

Salary is determined by the successful candidate's experience. Interested applicants should directly contact the Faculty at the e-mail address (first name\_ last name@urmc.rochester.edu) with curriculum vitae, summary of past accomplishments and the names of three references.

The University of Rochester Medical Center is an Affirmative Action and Equal Opportunity Employer and Educator. The Institute of Materials Research and Engineering (IMRE) is supported by the Agency for Science, Technology and Research (A\*STAR) under the purview of the Ministry of Trade and Industry, and is an affiliate of the National University of Singapore (NUS). Established in 1996, IMRE undertakes research in selected fields of materials science and engineering. One of our goals is to make IMRE a breeding ground and hotbed for new ideas and innovations through creating the right research environment. Quality in whatever we do, excellence in our work, and to respect the views and ideas of each individual is the creed by which IMRE will seek to make its name in the world of materials research and beyond.

The Institute has 4 clusters/laboratory at present:

- · Micro- & Nano- Systems Cluster
- Molecular and Biomaterials Cluster
- Opto- & Electronic Systems Cluster
- Materials Science and Characterization Laboratory

Due to our continuing expansion, we are seeking out talents in the areas of computational Materials Science; Polymer Materials Science; Sensor and Actuator Materials; Multifunctional Materials; Microfabrication; Nanofabrication; Nanopatterning; Inorganic-organic Hybrid Materials; Optoelectronic Semiconductor Materials.

Interested candidates should possess a PhD in Physics, Chemistry, Materials Science, Chemical Engineering, Mechanical Engineering or Electrical Engineering. IMRE provides attractive salary and benefits, including medical and dental coverage, housing allowance, settling-in allowance, passage assistance, etc. The level of appointment and remuneration will be made commensurate to qualification and experience.

#### For recent PhDs

For PhDs with at least 2 years of postdoctoral/working experience

: S\$120K - S\$172K p.a. : S\$136K - S\$187K p.a.

Institute of

Materials Research

and Engineering

Interested candidates should apply with a detailed resume, attaching a list of publications, a research plan (max. 2 pages), and the details of 3 referees to the address shown below.

The Recruitment Officer Institute of Materials Research and Engineering 3 Research Link Republic of Singapore 117602 Fax : (65) 6872 5373 Website : http://www.imre.org.sg

We regret that only shortlisted candidates will be notified.

#### AWARDS

#### Frederick Gardner Cottrell Postdoctoral Enhancement Awards

#### The University of Alabama at Birmingham

The University of Alabama at Birmingham and its affiliated Southern Research Institute are pleased to announce the ongoing availability over the next four years of up to seventeen postdoctoral opportunities that include annual stipends of at least \$50,000 plus \$3500 per year travel allowance. See http://www.postdocs.uab.edu for details.

Successful candidates will have outstanding research credentials and references, and be completing their doctoral training or have no more than three years of previous postdoctoral experience.

Candidates who have not yet identified a prospective UAB or SRI mentor can click on our web pages **http://www.uab.edu** or **www.sri.org** and follow appropriate links or use the NIH CRISP database **http://wwwcommons.cit.nih.gov/crisp**, limited by institution and search terms. Once identified, the prospective mentors should be contacted directly for further information regarding research opportunities and the application process.

> Office of Postdoctoral Education (205) 975-7020 Mailing address: 770F AB, 1530 3rd Ave. S. Birmingham, AL 35294-0107 http://www.postdocs.uab.edu



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

#### FELLOWSHIPS

Postdoctoral Fellowships in Complex Systems at the Santa Fe Institute

The Santa Fe Institute anticipates possible openings for postdoctoral fellowships beginning in September 2003.

The Institute's interdisciplinary research program is devoted to the study of complex systems in a wide variety of fields, including biology (e.g., genomics, evolutionary biology, ecology, immunology), computer science (adaptive computation, novel forms of computation, simulation), physics (nonlinear systems, statistical physics, biophysics), mathematics, statistics, cognitive science, and the social sciences, including anthropology, economics, and political science. Applications are also welcome from disciplines other than those listed here.

Postdoctoral Fellows work either on existing research projects or on projects of their own choosing. Research at the Institute focuses primarily on mathematical and computational approaches, although applicants whose research will include an experimental or data-collection component in collaboration with off-site colleagues are also encouraged to apply.

Candidates should have a Ph.D. (or expect to receive one before September 2003) in the mathematical, computational, physical, biological, or social sciences, with an academic record of scientific excellence, a demonstrated ability for independent research, and a strong interest in interdisciplinary approaches and collaboration.

Please be aware that openings for this position are subject to the availability of funds.

**TO APPLY:** Applicants should submit a curriculum vitae, list of publications, and statement of research interests. Arrange for three letters of recommendation to be sent to the address below. These letters may be sent independently of the application package but must be postmarked by the deadline date.

**On-line**—You may submit your materials using our on-line application form at <a href="http://www.santafe.edu/postdoc03.html">http://www.santafe.edu/postdoc03.html</a>. We strongly encourage you to apply on-line to expedite your application.

**Postal Mail/Courier**—Application packages sent via postal mail will also be accepted. Include your e-mail address and/or fax number. Mail application materials to:

Postdoctoral Committee Santa Fe Institute, 1399 Hyde Park Road Santa Fe, NM 87501 USA

Non-U.S. applicants are eligible to apply. Successful foreign applicants will enter the U.S. on a J visa.

DEADLINE: All application materials, including three letters of recommendation, must be postmarked or submitted on-line by Friday, <u>December 6, 2002</u>.



#### **Postdoctoral Fellowships**

The UNC Lineberger Comprehensive Cancer Center of the University of North Carolina at Chapel Hill will have openings in 2002-2003 in its training program, now in its 28<sup>th</sup> year, for persons completing graduate studies to train with excellent investigators in basic research in tumor virology, molecular carcinogenesis, molecular therapeutics, cancer cell biology, genetics, tumor immunology and research that interfaces with clinical and physical sciences. Special programs are organized for Fellows including career opportunities in academia and biotechnology.

Training is available in DNA repair, replication and mutagenesis; regulation; regulation of cellular proliferation and differentiation including growth factors, signal transduction pathways and intercellular communication; molecular immunology; tumor virology and pathogenesis; molecular genetics and epidemiology of cancer; and human disease models and gene therapy. Unique training resources and core facilities are supported by the NCI-designated UNC Lineberger Comprehensive Cancer Center.

Preceptors are: Shawn Ahmed, Steven Bachenheimer, Albert Baldwin, Victoria Bautch, David Brenner, Keith Burridge, Sharon Campbell, Stephen Chaney, David Clemmons, Edward Collins, Marila Cordeiro-Stone, Blossom Damania, Channing Der, Robert Duronio, Shelton Earp, Beverly Errede, Jeffrey Frelinger, Frank French, Jack Griffith, Eng-Shang Huang, Clyde Hutchison III, Kenneth Jacobson, Rudolph Juliano, David Kaufman, William Kaufmann, Shannon Kenney, Ryszard Kole, Steven Leadon, David Lee, Terry Magnuson, Patricia Maness, William Marzluff, Beverly Mitchell, Joseph Pagano, Leslie Parise, Mark Peifer, Charles Perou, Tom Petes, Nancy Raab-Traub, James Raleigh, Dale Ramsden, R. Jude Samulski, Aziz Sancar, Oliver Smithies, John Sondek, Ronald Swanstrom, Lishan Su, Holden Thorp, David Threadgill, Jenny Ting, Michael Topal, Terry Van Dyke, Kevin Weeks, Bernard Weissman, Elizabeth Wilson, Yue Xiong and Yi Zhang.

Candidates must be U.S. citizens or permanent residents. For an informational brochure or to apply (include curriculum vitae, three letters of recommendation, a statement of research interests and graduate school records) write to:

Joseph S. Pagano, M.D. Lineberger Comprehensive Cancer Center University of North Carolina at Chapel Hill School of Medicine CB 7295 Chapel Hill, NC 27599-7295 http://cancer.med.unc.edu

UNC's Comprehensive Cancer Center is an Affirmative Action/Equal Opportunity Employer. Minority applicants are encouraged voluntarily to identify themselves.

#### Post Doctoral Associate-Research Chemist (Natural Products)

The Chemistry Research Unit, Center for Medical, Agricultural and Veterinary Entomology, USDA, Agricultural Research Service, Gainesville, Florida, is seeking a Post Doctoral Research Chemist, GS-1320-11 (\$45,285-\$58,867 per annum) to study the semiochemically mediated interactions between insects, other organisms and plants. Candidates must be U.S. citizens or have appropriate Visa/ Immigration status to allow hiring by the Government of the United States. The position provides a unique opportunity for investigating the chemical and biochemical factors that mediate insect behavior, reproduction and development, including the foraging behaviors of beneficial and pest insects, and that induce biosynthesis and/or release of compounds by plants attacked by herbivorous insects or infected with pathogens. The goal of the research is to design and develop new, effective, environmentally acceptable technologies for managing insect pests of agriculture. In addition to basic educational requirements, applicants must demonstrate (1) Ability to isolate and identify biologically active natural compounds; (2) Knowledge of analytical chemical methods including chromatography and spectroscopy of organic and biochemical compounds; and (3) Knowledge of biochemistry, biology, entomology and/or plant physiology and biochemistry. For more information on application procedures and forms, contact Jackie Sullivan, Telephone: 352-374-5861 OR visit the web at www.ars.usda.gov and see announcement number RA-02-086L. Applications in response to this advertisement must be mailed to Dr. James H. Tumlinson or Dr. Peter E.A. Teal, USDA/ARS/Insect Chemistry Research Unit/CMAVE, 1700 SW 23rd Drive, Gainesville, Florida 32608. USDA is an Equal **Opportunity** Provider and Employer

#### Sierra Sciences Creating Products to Extend Life

Sierra Sciences, Inc. (SSI) is seeking scientists with excellent credentials in protein chemistry, molecular biology, and cellular biology. SSI is an early stage biotechnology company focused on developing therapies to control **telomere length** and reverse the effects of human aging.

Nestled in the foothills of the Sierra Nevada mountain range, the Reno/Lake Tahoe area offers great year-round recreational and cultural opportunities, along with very competitive housing and schools. Further information about Sierra Sciences and our research may be viewed on our website listed below.

Sierra Sciences currently has positions open for:

**Post Doctoral -** Purify/characterize transcription factors that regulate expression of the **telomerase** gene. Experience in protein chemistry.

**Research Assistants/Associates** - Molecular biology and cell culture experience. BA/BS or masters in related field and 3-5 years of experience.

Lab Technician - BA/BS in biology or related field.

Applicants should be interested in working in a very collaborative environment that encourages creative thinking.

Interested applicants are invited to e-mail/Fax/send their resumes to: Sierra Sciences, Inc. Human Resources 250 So. Rock Blvd., Suite 130 Reno, NV 89502 Fax: 775-856-9510 E-mail: hr@sierrasci.com Website: www.sierrasci.com

# TECHNION

**Zeff Postdoctoral Fellowships** 

Relevant fields of study include all Engineering disciplines, Life Sciences and Natural Sciences. Technion is the leading technological university in Israel and has superb research facilities. Technion is located in Haifa on the slope of the beautiful Carmel Mountain.

The maximal level of Zeff Fellowships is \$21,600 per annum, plus a modest monthly housing allowance of \$100/month, a travel grant of \$1,500 and return airfare to Israel. Extension to a 2nd year may be possible, based on merit.

Qualified individuals are invited to submit applications for the Academic Year 2003/2004 by sending: An updated C.V., names of 3 references and the name of a Technion faculty member who agrees to be a supervisor. This material should be sent to:

Visiting Scientists Coordinator Office for Academic Staff Technion Technion City, 32000 ISRAEL (Fax: 972-4-8294610) (e-mail: kayellet@tx.technion.ac.il)

Further information is available at the Technion web-site: www.technion.ac.il

#### POSTDOCTORAL

#### PRE- and POSTDOCTORAL TRAINING IN MAMMALIAN GENETICS

The Jackson Laboratory, a non-profit research center, provides a unique research environment with unparalleled resources for training in animal models of development and disease.

#### Areas of expertise include:

Cancer, Developmental Biology, Aging, Genetics of Complex Traits, Genomics, Immunology/Hematology, Metabolic Diseases, Neurobiology, Bioinformatics/ Statistical Genetics, Cryopreservation/ Assisted Reproduction

Letters of application should include: Curriculum vitae, statement of research interests, list of publications, and names of three references. Predoctoral program is in conjunction with the University of Maine and is limited to US citizens or permanent residents.

#### To apply contact:

Suzanne Serreze Box 116-S The Jackson Laboratory 600 Main Street Bar Harbor, ME 04609 Phone: 207-288-6420 FAX: 207-288-6079 email: sbs@jax.org (Please reference code "SC" when you apply) http://www.jax.org EO/AA Employer NATIONAI CANCER INSTITUTE

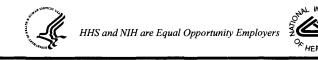
#### Department of Health and Human Services National Institutes of Health National Cancer Institute Laboratory Chief, Regulation of Cell Growth Laboratory

The Center for Cancer Research (CCR) of the National Cancer Institute (NCI) is the world's largest Center dedicated to basic, translational, and clinical aspects of cancer research. The Regulation of Cell Growth Laboratory (RCGL), a department within the CCR, is located at the Frederick, Maryland campus at Ft. Detrick. This highly collaborative scientific community includes other groups with a variety of interests in cell biology, genetics, immunology, development and structural biology.

The RCGL is recruiting for a position of Laboratory Chief. The RCGL includes both tenured and tenure track scientists with expertise in a wide variety of areas related to regulation of basic cellular processes. RCGL investigators employ a number of different model systems and have a focus on identification and characterization of molecular targets in cancer. The Frederick campus features easy access to state-of-the-art NCI cores in areas such as mass spectroscopy, imaging, protein production and analysis, gene expression, and proteomics, as well as the potential for collaborative relations with the newly formed CCR Molecular Targets Development Program. There are close ties to the Bethesda, Maryland campus of NIH including meetings of CCR faculties, and advanced facilities for videoconferencing between campuses. There are extensive opportunities for collaboration within and outside of the NCI community.

The position of Laboratory Chief is a tenured position at the National Institutes of Health. A fully equipped, recently renovated laboratory will be provided, and there is potential for recruitment of additional tenure track scientists. Total annual compensation will be commensurate with experience, accomplishments, and education. Internationally recognized experts in basic cancer research, who would also like the opportunity to play a leadership role in applying fundamental scientific findings to disease and in mentoring of junior scientists in this dynamic atmosphere, are encouraged to apply for this Laboratory Chief position. Candidates should submit a description of research interests, curriculum vitae, bibliography, and 3 or more references to Ms. Tanya Sappington, Administrative Officer, NCI-Frederick, Building 578, Room 14, Frederick, MD 21702.

The Search Committee will begin reviewing completed applications after December 9, 2002. For consideration, all applications must be postmarked by December 2, 2002. Applications may also be faxed to (301) 846-6053. If you need additional information, please call Ms. Tanya Sappington, Search Committee Executive Secretary, at (301) 846-1072, or go to http://ccr.cancer.gov/labs/regulation/.



#### Wetlands Ecologist

San Francisco State University's Romberg Tiburon Center for Environmental Studies, a field campus of SFSU located on San Francisco Bay, and the **Department of Biology** seek candidates for a tenure-track Assistant Professorship in Wetlands Ecology. The position is open with respect to organismal (plants, invertebrates, vertebrates) and organizational (individual, population, community) focus. Interactions with conservation and restoration ecology programs are strongly encouraged, as are research interests in San Francisco Bay.

#### **Quantitative Ecologist**

The **Department of Biology** seeks candidates for a tenure-track Assistant Professorship in Quantitative Ecology. We are interested in a population and/ or community ecologist employing quantitative methods such as analytical, simulation, or statistical modeling in combination with field or laboratory observation and experimentation.

For both positions: Ph.D. required and postdoctoral experience preferred. Applicants are expected to maintain externally funded research that involves students working toward Masters degrees and to contribute to the Biology majors and non-majors curriculum. See the web sites for the Romberg Tiburon Center (http://rtc.sfsu.edu) and Biology Department (http: //www.sfsu.edu/~biology) for further information.

San Francisco State University, a member of the California State University system, serves a diverse student body of 27,000 undergraduate and graduate students. The mission of the University is to promote scholarship, freedom, human diversity, excellence in instruction, and intellectual accomplishment. SFSU faculty are expected to be effective teachers and demonstrate professional achievement and growth through continued research, publications, and/or creative activities.

Send curriculum vitae, a statement of teaching interests, a statement of research interests, selected reprints, and three letters of reference to either: Chair, Wetlands Ecologist Search Committee, or Chair, Quantitative Ecology Search Committee, Biology Department, San Francisco State University, 1600 Holloway Ave, San Francisco, CA 94132. Applications will be reviewed beginning November 1, 2002.

San Francisco State University is an Equal Opportunity/ Affirmative Action Employer.

#### UNIVERSITY OF Massachusetts AMHERST

The Department of Biochemistry and Molecular Biology invites applications for up to two faculty positions, as part of an ongoing program to recruit several new faculty at the interface of chemistry and biology over the next three to four years. Emphasis will be given to individuals who use structural biology, in particular x-ray crystallography, to investigate the mechanisms of cellular processes. While we expect to hire at the **ASSISTANT PRO-FESSOR** level, applications from senior scientists will be considered for appointment at the **ASSOCIATE** or **FULL PROFESSOR** level. Individuals working in areas that complement existing campus strengths in biological chemistry including signal transduction, protein synthesis/trafficking/folding, organelle biogenesis, protein degradation and apoptosis, structure/function of membrane proteins, and protein-nucleic acid interactions particularly are encouraged to apply.

We seek individuals with a record of significant accomplishment in research and creative scholarship. The successful candidate will have access to students from several interdisciplinary graduate programs and will be expected to participate in teaching at the undergraduate and graduate levels.

The Five College Consortium comprising Smith College, Amherst College, Mount Holyoke College, Hampshire College and the University of Massachusetts, Amherst provides a rich academic and intellectual environment. The Town of Amherst is situated in the beautiful, rural Pioneer Valley of Western Massachusetts, with convenient access to the metropolitan New York and Boston areas, as well as a multitude of recreational resources.

Applicants should send curriculum vitae, a description of research interests, and three letters of recommendation to: **Professor Lila M. Gierasch, Head**, **Department of Biochemistry & Molecular Biology, LGRT 913, University of Massachusetts, Amherst, MA 01003-4505**. Review of applications will begin October 1, 2002, and continue until the position is filled.

> The University of Massachusetts is an Equal Opportunity/ Affirmative Action Employer. Women and members of minority groups are encouraged to apply.

# **Director, Imaging Research**

The Imaging Research Group at Sunnybrook & Women's Research Institute is internationally recognized as one of the most productive biomedical imaging research groups in the world. Fully affiliated with the University of Toronto, the Research Institute is comprised of four Research Disciplines: Clinical Epidemiology, Clinical Integrative Biology, Imaging, and Molecular & Cellular Biology, each of which functions similarly to a University Department under the leadership of a respective Director. The Institute currently supports ~\$50M/year of research activities within 200,000 sq.ft. of state-of-the-art research space located on the Bayview Campus of Sunnybrook & Women's.

The discipline of Imaging is comprised of 10 Scientists and a total staff of 100 including graduate students, fellows, and research assistants, and currently has an annual extramural funding of \$8M. Imaging research foci range from basic physics, to functional biophysics, to new clinical applications of imaging technologies, both medical and biological as related to cancer, cardiology, neuroscience and genomics.

Reporting to the Vice-President, Research, you will be responsible for: strategic planning; recruitment, the annual activities of research faculty; and fiscal planning and accountability. You will also ensure the integration of discipline-based research with strategic clinical directions, and the operations of the discipline.

You bring a track record of scientific excellence, a personal research program of international caliber, and evident leadership and administrative experience. Your academic appointment will be based at the University of Toronto, Department of Medical Biophysics.

Interested applicants are invited to submit their curriculum vitæ and the names of three references, by November 25, 2002



to: Michael Julius, Vice-President, Research, Sunnybrook and Women's College Health Sciences Centre, 2075 Bayview Avenue, Room A3 33, Toronto, Ontario, Canada, M4N 3M5. Only those selected for interviews will be contacted.



www.sunnybrookandwomens.on.ca

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#### CALIFORNIA INSTITUTE OF TECHNOLOGY Division of Engineering and Applied Science

The Division of Engineering and Applied Science at Caltech invites applications for a tenure-track positions at the Assistant Professor level.

We are seeking highly qualified candidates committed to a career in research and teaching with a research focus on fluid dynamics and a preference for experimental work. Interested candidates are asked to complete the on-line application summary at:

#### FLUID MECHANICS http://www.galcit.caltech.edu/fluids-search

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Candidates with a particular interest and research focus in environmental fluid dynamics are informed that a companion invitation for this area is available at:

# ENVIRONMENTAL FLUID MECHANICS http://www.eas.caltech.edu/env-fluids

Candidates with a research focus on large-scale atmosphere or ocean dynamics are encouraged to consult companion invitations at:

#### ATMOSPHERIC SCIENCE

http://www.gps.caltech.edu/positions/pos\_asstprof\_atmos.html

#### OCEANOGRAPHY

http://www.gps.caltech.edu/positions/pos\_asstprof\_ocean.html

Initial appointments at the Assistant Professor level are for four years and contingent on completion of the PhD degree. Exceptionally qualified applicants at the associate or full professor level are also encouraged to apply.



Caltech is an Equal-Opportunity/Affirmative-Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.



#### **Division of Infectious Diseases**

The division is expanding its current basic science efforts and has 3 new positions available. In addition we are recruiting for one clinician research position. Current research is focused on vaccines, antivirals and the molecular biology, immunobiology and epidemiology of herpes viruses and viral causes of gastroenteritis. The division currently has 12 faculty including 6 M.Ds and 6 Ph.Ds. We are seeking a senior investigator at the Associate of Full Professor level to direct our basic science efforts. This person should have a history of sustained funding and productivity. The ideal candidate would interact with both clinical researchers and basic scientists to expand basic science related research at Cincinnati Children's Hospital especially as it relates to vaccines. A second recruit will help direct our NIH supported studies of herpes antivirals using existing and new animal models. Experience with animal models and/or herpes antivirals is required. Another recruit will be an independent investigator that can enhance our efforts either in immunology, vaccinology or the immunobiology of herpes or respiratory viruses. Lastly we seek a clinician researcher who may have interests as described above, interest related to infections in the immunocompromised or clinical studies. These positions may be at the Assistant or Associate Professor level. Generous support for all positions is provided. Applicants should have an M.D. or Ph.D. degree and evidence of independent research.

Send curriculum vitae to: Dr. David I. Bernstein, 3333 Burnet Ave., Cincinnati, Ohio 45229-3039; (513) 636-7625.

Cincinnati Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.



# UNIVERSITY OF MICHIGAN BIOLOGICAL SCIENCES SCHOLARS PROGRAM For Junior, Tenure-Track Faculty

The University of Michigan Medical School announces recruitment for the Biological Sciences Scholars Program (BSSP) to enhance investigational strength in the life sciences at the University of Michigan.

Now entering its sixth year, this Program has led to the recruitment of outstanding young scientists in the areas of genetics, microbiology, virology, structural biology, pharmacology, biochemistry, molecular pharmacology, stem cell biology, and the neurosciences. The Program seeks individuals with PhD, MD, or MD/PhD degrees, at least two years of postdoctoral research experience, and evidence of superlative scientific accomplishment and scholarly promise. Successful candidates will be expected to establish a vigorous, externally-funded research program, and to become leaders in departmental and program activities, including teaching at the medical, graduate, and/or undergraduate levels. Primary college and department affiliation and rank will be determined by the applicant's qualifications and by relevance of the applicant's research program to departmental initiatives and focus. Preference will be given to appointments at the Assistant Professor level, though outstanding applicants at a more advanced career stage will also be seriously considered.

Applicants should send their current curriculum vitae (including bibliography), three letters of support, and a two to four page summary of their current research program and future research plans to the address below. Applications will be considered on a rolling basis, although candidates are strongly encouraged to submit their applications by October 31, 2002.

John B. Lowe, MD, Chair, BSSP Search Committee Warner-Lambert/Parke-Davis Endowed Professor in Medicine University of Michigan Medical School Dean's Office / 4107S Medical Science I / 1301 Catherine St. Ann Arbor, MI 48109-0624 be University of Michigan is an Affirmative Action/Equal Opportunity Employ

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



# HOWARD HUGHES MEDICAL INSTITUTE

The Howard Hughes Medical Institute conducts biomedical research in the areas of cell biology, genetics, immunology, neuroscience and structural biology at over seventy locations around the United States. HHMI regularly has positions open for research and administrative personnel. Laboratory Positions:

- Postdoctoral Fellowships
- Research Specialists/Technicians
- Research Secretaries

Administrative Positions:

- Managers
- Administrative Assistants
- Purchasing Coordinators
- Receiving Clerks

Institute employees enjoy competitive salaries and an excellent benefits package. HHMI is an equal opportunity employer. Please visit our website at: **www.hhmi.org/jobs** for a listing of available positions.

# Anatomist

### Creating the future of health.

The **Department of Cell Biology & Anatomy** invites applications for a full-time faculty position and coordinator of anatomy teaching. This position offers a superb opportunity to advance an independent research program within a faculty of medicine that has outstanding facilities and a record of success in multidisciplinary health research, and innovation in education – visit our Web site: http://www.med.ucalgary.ca/

UNIVERSITY OF

CALGARY

Duties include the development of an independent and externally funded research program, the organization of anatomy teaching across the medical curriculum within a multidisciplinary teaching environment, as well as directing the body bequeathal program.

Qualifications include a PhD and/or MD, and a graduate degree in broad areas that may include anatomy, organismal biology, or biological anthropology. The applicants should have experience teaching medical students and evidence of innovation in course organization and development, as well as a proven record of excellence in research and grant support. We welcome applications for all levels of appointment.

Please submit a curriculum vitae, a statement of research interests and career goals, and the names of three referees, by **October 31, 2002** to:**Dr. John Reynolds**, Head, Department of Cell Biology & Anatomy, University of Calgary, 3330 Hospital Drive N.W., Calgary, Alberta, Canada T2N 4N1

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary respects, appreciates and encourages diversity.

www.ucalgary.ca

#### FRED HUTCHINSON CANCER RESEARCH CENTER

JUNIOR FACULTY POSITION

vancing Knowledge, Saving Lives

The Divisions of Human Biology and Public Health Sciences at the Fred Hutchinson Cancer Research Center are soliciting applications to fill a junior faculty position in the area of Cancer Biology. Applicants with outstanding accomplishments in the molecular biology, cellular biology, or genetics of cancer are encouraged to apply. We are particularly interested in applicants whose research may involve interactions with epidemiologists, biostatisticians or prevention researchers.

The FHCRC is located on a new lakeside campus and occupies state-of-the-art research laboratories. The Center offers outstanding shared resources, including DNA array and sequencing facilities. The Center has active graduate-student and postdoctoral training programs and offers an outstanding scientific environment.

Additional information about the Divisions can be found at: http://www.fhcrc.org/science/human\_biology/

http://www.fhcrc.org/phs/

Candidates should send a curriculum vitae, a concise statement of research plans, and three letters of reference to: HB/PHS Joint Faculty Search Committee, Fred Hutchinson Cancer Research Center, MS: C3-168, 1100 Fairview Ave. N, P.O. Box 19024, Seattle WA 98109.

The application deadline is October 15, 2002.

The Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer committed to work force diversity. Applications from women and/or minority candidates are strongly encouraged.

Center for Molecular Physiology of the Brain and Max-Planck-Institute for Experimental Medicine Göttingen

#### A Senior Research Position is available for a specialist in Proteomics.

The ideal candidate should have a strong background in mass spectrometric analysis of proteins and bioinformatics, and will be involved in the establishment of proteomic strategies for the analysis of neurological diseases and corresponding mutant mouse models.

The successful candidate will be based at the new Proteomics Core Facility of the Center for Molecular Physiology of the Brain, which is located at the Max-Planck-Institute for Experimental Medicine and completely equipped with the most modern protein purification and mass spectrometry (MALDI and ESI) instrumentation.

The Center for Molecular Physiology of the Brain is an interdisciplinary Research Center that is financed by the Deutsche Forschungsgemeinschaft. It acts as a Holding Institution linking the traditional departments of the various University Faculties and Research Institutions, the European Neuroscience Institute, the Multiple Sclerosis Research Institute, the Göttingen Center for Molecular Biology, the Max-Planck-Institutes for Biophysical Chemistry and Experimental Medicine and the German Primate Center.

The position will initially be available for four years with the possibility of an extension to a maximum of twelve years. The pay rate will be BAT IIa/Ib according to the German Public Service regulations, and will include all usual social benefits. Women are especially encouraged to apply. Handicapped applicants with equal qualifications will be given preferential treatment.

In order to apply, send a curriculum vitae, a summary of past research achievements, a statement of professional goals, and the names of two referees not later than October 15, 2002, to

 Max-Planck-Institute for Experimental Medicine

 Department of Molecular Neurobiology

 Dr. Nils Brose

 Hermann-Rein-Str. 3

 D-37075 Göttingen, Germany

 Phone: x49-551-3899707

 E-Mail: brose@em.mpg.de



ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF GENETICS HARVARD MEDICAL SCHOOL

The Department of Genetics invites applicants for the position of **Assistant** or **Associate Professor**. Qualifications for the position include a strong potential for imaginative research in any area of contemporary biology. This position offers very significant scholarly and scientific resources as well as the opportunity to teach graduate and medical students with a strong interest in research.

Applicants should submit, as soon as possible, but prior to October 31st, curriculum vitae, bibliography, a brief (limit to 500 words) description of research interests and ask three references to send letters of recommendation. These materials should be directed to:

> Dr. Philip Leder, Chairman Department of Genetics Harvard Medical School 200 Longwood Avenue Boston, MA 02115

Harvard University is an Equal Opportunity/ Affirmative Action Employer and encourages the application of qualified women and minorities.



#### Postdoctoral Research Associate Molecular Virologist

The Animal Waste Pathogen Laboratory (AWPL), Animal and Natural Resources Institute of the Beltsville Area Research Center. Beltsville, MD seeks applications for a postdoctoral research scientist to perform research on the molecular biology of bovine enteric viruses. Candidates must be skilled in molecular analysis of viruses including molecular epidemiology and cloning and expressing viral genes in cell cultures. Research will be directed at viruses that may have zoonotic potential. The AWPL is a multidisciplinary laboratory whose objectives are to prevent transmission of enteric, zoonotic pathogens through the food and water supply system. The position is at the GS-11/12 level, with salary commensurate with experience, and eligibility for benefits. Only U.S. Citizens and permanent residents from allied countries are eligible for consideration.

For more information contact Dr. Michael L. Perdue; e-mail mperdue@anri.barc.usda.gov or see announcement RA-02-87L at http://www.ars.usda.gov/careers to apply.

USDA is an Equal Opportunity Provider and Employer.



#### POSTDOCTORAL POSITION Molecular Pharmacology (REQ #1548)

**St. Jude Children's Research Hospital** currently has a position available for a Postdoctoral Research Fellow to conduct research on the selective sensitization of human tumor cells to camptothecin analogs. The applicant would join a highly productive group analyzing the role of carboxylesterases in drug activation and resistance. The laboratory has broad-based goals and projects ranging from structural biology to adenoviral transduction of tumor cells (Sompop et al, Nature Structural Biology, 9:337-342; Wierdl et al, Cancer Research 61:5078-5082). In addition, we have established collaborations with other groups in this field of research, that includes both academic institutions and pharmaceutical companies.

St. Jude Children's Research Hospital provides state-of-the-art research facilities including a unique working environment, excellent core facilities, resources and employee benefits. These include funds for travel to scientific symposia and competitive salaries. Highly motivated and enthusiastic candidates with a Ph.D. degree and experience in molecular biology, viral transduction or protein biochemistry, should send a CV, three letters of reference and a completed postdoctoral fellowship application form, indicating REQ #1548, to (http://www.stjude.org/education/Postdoc\_Application.html):

Dr. Philip M. Potter Department of Molecular Pharmacology St. Jude Children's Research Hospital 332 N. Lauderdale Memphis, TN 38105 USA

http://www.stjude.org/departments/potter.htm

St. Jude Children's Research Hospital is an Equal Opportunity/Affirmative Action Employer.

THE NATIONAL ACADEMIES Advisors to the Nation on Science, Engineering, and Medicine The NATIONAL RESEARCH COUNCIL is accepting applications for a Postdoctoral Research Associateship Award tenable at the Walter Reed Army Institute of Research Department of Cellular Injury Silver Spring, MD The Department of Cellular Unjury at WRAIR conducts studies to determine the role of complement activation in tissue injury

determine the role of complement activation in tissue injury. Experiments use various murine models of tissue injury to determine the mechanisms that trigger complement activation and cause local and remote organ injury. Genetically modified animals and complement activation inhibitors are used. Individuals with demonstrated experience in the study of the acquired and/or innate immune response using animal models are encouraged to apply. For references see: J. Immunol. 2002 Aug 15;169(4):2126-33; J. Immunol, 2001 Nov 15;167(10): 5921-7, J. Immunol. 2001 May 15,166(10):6156-63.

For more information about this research opportunity, contact: Dr. George Tsokos at george.tsokos@na.amedd.army.mil

george.tsokos@na.amedd.army.mii
 <mailto:george.tsokos@na.amedd.army.mil>

Applications must be submitted directly to the National Research Council (NRC) and are to be postmarked by February 1, May 1, August 1 or November 1.

Application materials may be obtained from the NRC Web site at www.national-academies.org/rap Questions about the application process should be directed to the NRC at: TEL: (202) 334-2769 EMAIL: rap@nas.edu MAIL: Associateship Programs NATIONAL RESEARCH COUNCIL 500 Fifth Street NW, GR322A Washington, DC 20001 Qualified applicants will be reviewed without regard to race, religion, color, age, sex or national origin.



UNIVERSITY OF NEBRASKA MEDICAL CENTER CENTER FOR NEUROVIROLOGY AND NEURODEGENERATIVE DISORDERS

#### Predoctoral and Postdoctoral Training Positions Available Immediately

Postdoctoral and graduate student positions are available in the Center for Neurovirology and Neurodegenerative Disorders (CNND) supported by federal research and training grants. The CNND is a national leader in brain immunity and its interplay with infectious and/or neurodegenerative processes. State-ofthe-art core facilities support nine integrated laboratories:

- Mike Boska, Radiological Research: Magnetic resonance imaging/ spectroscopy of HIV Associated Dementia (HAD), Alzheimer's and Parkinson's Disease (AD, PD) in mouse models.
- Kim Carlson, Proteomics: Protein discovery and links to neurodegeneration.
   Howard E. Gendelman, Neuroregeneration: HIV-1 molecular biology,
- therapeutic vaccines and adjunctive therapies for PD and HIV.
  Anuja Ghorpade, Cellular Neuroimmunology: Glial immune responses in HAD and AD (Fas ligand, cytokines/chemokines, and matrix metallopro-
- teinases).
  Tsuneya Ikezu, Molecular Genetics: Novel genes for AD and HAD: diagnostics and pathogenesis; transgenic AD animals.
- Jenae Limoges, Immunoregulation: HAD pathogenesis and diagnostics.
- Yuri Persidsky, Neuropathology: Leukocyte CNS trafficking and functional/ structural alterations of blood-brain barrier including drug delivery.
- Larisa Poluektova, Immunology: Protective immunity and HIV vaccines.
   Huangui Xiong, Neurophysiology: Synaptic transmission/plasticity, neurotransmitter receptors and ion channels.
- Jialin Zheng, Neurotoxicology: Chemokines and their receptors in HAD; neural stem cells biology; AD immunology.

For program information, descriptions and on-line application, visit http: //unmc.edu/cnnd; e-mail: cnndjobs@unmc.edu. H. E. Gendelman, MD, Director, CNND, 985215 Nebraska Medical Center, Omaha, NE 68198-5215; 402-559-4035.

UNMC is an Equal Opportunity and Affirmative Action Employer and Educator.



#### Assistant or Associate Professor STRUCTURAL BIOLOGY OF MACROMOLECULAR COMPLEXES

The Department of Molecular, Cell and Develop-

**US STATE** California, Santa Cruz invites applications for a tenure-track or tenured position in Structural Biology. We seek an individual using X-ray crystallography or other structural approaches to address fundamental questions in cell and molecular biology, particularly candidates who study the structures of macromolecular complexes, including protein-DNA complexes (nucleosomes, transcription complexes), protein-RNA complexes (spliceosomes, ribosomes), and multi-protein complexes. Candidates whose research complements existing faculty strengths will be given preference. Requires Ph.D. or equivalent in molecular biology, biophysics or a related field, postdoctoral research experience, and demonstrate demonstrate exceptional qualifications and experience in all areas, and the ability to supervise a productive research program.

Submit letter of application, curriculum vitae, concise description of research and teaching experience and plans, copies of reprints, and arrange for confidential letters of recommendation (three or five letters are required for the Assistant or Associate Professor positions, respectively) to be sent to: Chair, Structural Biology Search Committee, Department of MCD Biology, University of California, Santa Cruz, 1156 High Street, Santa Cruz, CA 95064. Refer to position #231-03 (Assistant) and #231T-03 (Associate). Application materials must be received by December 2, 2002. Full job description and application details: http://www.biology.ucsc.edu/mrcd/.

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

#### X-RAY CRYSTALLOGRAPHER Faculty Position University of California Riverside, California

The Department of Biochemistry, University of California, Riverside (http: //www.biochemistry.ucr.edu/) invites applications for an open level faculty position in the area of protein X-ray crystallography. The specific area of research is open and can include fundamental questions in topics such as transcription regulation, signal transduction, membrane-bound proteins, novel approaches in structural genomics, and high throughput structure determination of biological macromolecules. The successful candidate will be able to interact with faculty working in the UCR Genomics Institute, with faculty working in the Center for Plant Cell Biology, and with many faculty working in the area of mammalian molecular and cellular biology. The campus plans additional hires in the area of structural biology in the future, including at least one additional protein x-ray crystallographer. Applicants at the ASSISTANT PROFESSOR level should have demonstrated their potential to establish an innovative, extramurally funded research program. Applicants at the ASSOCI-ATE or FULL PROFESSOR levels should have an established, well-funded research program. The successful candidate will participate in graduate and post-graduate training in the Biochemistry and Molecular Biology Graduate Program and will participate in teaching at the graduate and undergraduate levels. An attractive start-up package will be supplied, with salary commensurate with education and experience.

The position is available July 1, 2003. A Ph.D., M.D., or equivalent degree is required. Interested individuals should forward (1) a curriculum vitae, (2) a brief statement of research interests, and (3) the names and addresses (postal and email) of at least three references to: **Professor Richard Debus, Chair, Crystallography Search Committee, Department of Biochemistry, University of California, Riverside, CA 92521-0129**. Electronic applications are encouraged (send to **Richard.Debus@ucr.edu**). Review of applications will begin December 1, 2002, and will continue until the position is filled. For additional information about the UCR campus, visit http://www.cnas.ucr.edu or http://www.ucr.edu.

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



### PURDUE UNIVERSITY FACULTY POSITIONS IN CHEMICAL BIOLOGY

Purdue University invites applications for tenure-track positions at the **ASSISTANT** or **ASSOCIATE** level in the area of chemical biology. As a part of an interdisciplinary vision to build on existing strengths at the chemistry and life sciences interface at Purdue we anticipate hiring at least three faculty members. These appointments will be in the Departments of Biochemistry, Chemistry or Medicinal Chemistry and Molecular Pharmacology. Candidates should have a Ph.D. degree and should demonstrate exceptional promise in research and teaching at the undergraduate and graduate levels.

Applicants should send a curriculum vitae, a summary of planned research and three letters of reference to:

#### Head of Chemical Biology Search Purdue University 1393 BRWN West Lafayette, IN 47907

Files will be reviewed beginning October 15, 2002. For more information about chemical biology at Purdue see: http://www.biochem.purdue.edu/chembiol.htm.

Purdue University is an Equal Opportunity/Affirmative Action Employer fully committed to achieving a diverse workforce. Women, minority applicants, and dual career couples are encouraged to apply.

#### Jack L. Beal Professor of Natural Products Chemistry and Pharmacognosy The Ohio State University

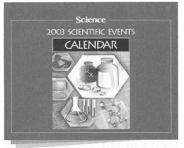
The Division of Medicinal Chemistry and Pharmacognosy, College of Pharmacy, The Ohio State University, invites applications for the position of the Jack L. Beal Professor of Natural Products Chemistry and Pharmacognosy at the full professor level beginning in the 2003-2004 academic year. Candidates should have a Ph.D. in medicinal chemistry, pharmacognosy, bioorganic chemistry, biochemistry, or related areas. Individuals with expertise in drug discovery, natural products chemistry, isolation and structure elucidation of pharmacologically active natural products from plants, marine organisms, and microbes, examination of the biosynthesis of natural products, and/or evaluation of the biochemical effects of these active constituents are of special interest and are especially encouraged to apply. The successful applicant will be expected to lead interdisciplinary and multi-investigator research programs in the development of therapeutic and/or chemopreventive agents (nutraceuticals). Applicants are also expected to have extramural funding and to actively participate in teaching at the undergraduate, professional, and graduate levels. Applicants should submit a letter of application, complete curriculum vitae, description of research programs, and three names for letters of reference to:

Dr. Robert W. Brueggemeier, Chair Division of Medicinal Chemistry and Pharmacognosy College of Pharmacy The Ohio State University 500 West 12<sup>th</sup> Avenue Columbus, OH 43210-1291

Applications will be processed as received and review of candidates will begin November 15, 2002. The search will continue until the position is filled.

The Ohio State University is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women, underrepresented minorities, and armed forces veterans.

# Will your event be listed in *Science's* 2003 Events Calendar?



Calendar being published by Science Business Office.

#### The 2003 Scientific Events Calendar

will be published in our 13 December 2002 issue. Deadline for submissions is 8 November 2002. This calendar reaches nearly 800,000<sup>1</sup> *Science* readers who could be potential delegates, exhibitors, and sponsors for your event.

To submit a free listing go to **www.sciencemeetings.org** or call your *Science* sales representative for more information on multiple listings and advertising in this year-round resource.

1 Science Harvey Research Readership surveys: 14 January 2000, 4 February 2000, 4 June 1999 (Japan) as applied to Science December 2001 BPA Publisher's Statement, publisher's own data.

#### For full details contact:

phone fax	Kathleen Clark 202-326-6555 202-289-6742 . kclark@aaas.org
phone +44	Richard Walters (0) 1223 326 500 (0) 1223 326 532 Science-int.co.uk

AAAS



#### Drexel University College of Medicine Chair, Department of Microbiology and Immunology

Drexel University College of Medicine (formerly MCP Hahnemann School of Medicine), the largest private medical school in the United States, seeks a highly qualified individual to chair the Department of Microbiology and Immunology. Faculty in the department are research-intensive and well-funded, and are actively involved in graduate and medical student education, and in service to the University. Research activities within the department include: the molecular and cell biology of malaria parasites and pathogenic fungi; immunological analysis of malaria and viral pathogenesis and vaccine development; Neisseria host-cell interactions; anthrax pathogenesis; yeast cell cycle and cellular metabolism; strategies to enhance the role of CD8(+) T cells in anti-HIV immunity; molecular and genetic characterization of autoimmune diseases; and the relationship between aging and the immune response. In addition, the department operates the College of Medicine's molecular genomics core facility, with a complete microarray laboratory.

Applicants should have an M.D., Ph.D. or an equivalent degree, significant competitive research funding, a commitment to education, the necessary skills and experience to manage a highly successful basic science department, and the qualifications necessary for appointment at the rank of a Professor. Applicants' research interests are expected to complement and expand upon the areas listed above. A highly competitive start-up package is offered, as are opportunities to hire new faculty.

Please send a letter of application including a one-page summary of research interests, your curriculum vitae, the names of at least three references and their contact information, and copies of three representative papers to: Daniel V. Schidlow, M.D., Search Committee Chair, Professor and Chair, Department of Pediatrics, Drexel University College of Medicine, St. Christopher's Hospital for Children, Erie Avenue at Front Street, Philadelphia, PA 19134-1095; Phone: 215-427-4801; Fax: 215-427-4805; Email: daniel.schidlow@drexel.edu.

Please visit our website at http://www.drexel.edu/med/microbiology\_immunology/

Drexel University College of Medicine is an Equal Opportunity - Affirmative Action Employer. Minority candidates are encouraged to apply.

The **Department of Biology (www.bio.uni.edu)** at the **University of Northern Iowa** invites applications for a tenure-track, assistant professor position effective August 2003. The successful candidate will be expected to develop a research program in their area of expertise that will involve undergraduate and graduate students, to teach Comparative Vertebrate Anatomy to Biology majors and, depending on the candidate's expertise, to contribute to other departmental needs by also teaching a course(s) from among the following: Molecular Biology of the Cell (sophomore level); Introductory Biology; Anatomy and Physiology laboratory (introductory level). Faculty members are expected to seek extramural funding.

A Ph.D. in a biological science and teaching experience are required. ABD's will be considered with evidence of completion by August 1, 2003. Postdoctoral research experience is desired. Please submit a curriculum vitae, undergraduate and graduate transcripts, a statement of research interests and goals, a statement of teaching interests including qualifications to teach courses from the above list, and three letters of reference to: Dr. James Demastes, Chair of Search Committee, Department of Biology, University of Northern Iowa, Cedar Falls, IA 50614-0421; jim.demastes@uni.edu; Telephone: (319) 273-2456; Fax: (319) 273-7125.

Salary is competitive based on qualifications. Benefits include TIAA/CREF, group life, disability, medical and dental insurance. Applications must be received by November 1, 2002, to be given full consideration. The department encourages applications from minority persons, women, Vietnam era veterans, and persons with disabilities. The University of Northern Iowa is an Equal Opportunity Educator and Employer with a comprehensive plan for Affirmative Action.

#### UNIVERSITY OF PITTSBURGH NAMED PROFESSORSHIP IN EXPERIMENTAL BIOLOGICAL PHYSICS

The Department of Physics and Astronomy of the University of Pittsburgh is searching for an established experimental researcher in biological physics to assume a Mellon Professorship. This tenured appointment, which is subject to budgetary approval, would begin with the Fall Term 2003 or thereafter. The successful candidate will have an outstanding record of research accomplishments and will likely have an established record as an educator having demonstrated teaching effectiveness at both the graduate and undergraduate levels. Applicants should also have a demonstrated ability to build and successfully fund a creative, independent and broad-based research program, to provide cohesion with existing efforts and to initiate new directions. Potential for interactions with faculty and researchers in the natural and life sciences, engineering, and the School of Medicine and the Medical Center of the University of Pittsburgh will be considered favorably. The relevant research can be in any area of biology-inspired physics at the interface between physics and biological science. An associated search for a junior faculty member will be constituted as soon as practicable. Please send a curriculum vitae, bibliography, statement of research interests and proposed directions, and a list of references to: David Jasnow, Chair, Department of Physics and Astronomy, 100 Allen Hall, University of Pittsburgh, Pittsburgh, PA 15260. Applications should be received before January 1. 2003 to ensure full consideration. Nominations are welcome. The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer. Women and members of minority groups underrepresented in academia are especially encouraged to apply.

#### TENURE-TRACK POSITIONS CELL/MOLECULAR BIOLOGY University of Toledo

The newly configured Department of Biological Sciences at the University of Toledo is seeking to fill two tenure-track faculty positions. We anticipate making one appointment at the ASSISTANT PROFES-SOR rank and one at a more senior level. Candidates should have a research focus in the area of signal transduction to complement existing strengths in transcription regulation, cancer biology, cellular immunology, nematode molecular biology and biochemistry, and plant molecular biology. Facilities include a new \$33 million research complex with stateof-the-art laboratories and outstanding instrumentation centers including the new Center for Molecular Biology. Joint appointments with the Departments of Medicinal and Biological Chemistry and Chemistry will be encouraged. Applicants must have a Ph.D. and postdoctoral experience. Successful candidates should have or will be expected to develop an externally funded research program and will participate in undergraduate and graduate instruction. The Department offers B.S., M.S., and Ph.D. degrees. Additional information is available on the departmental website: http://www.biosciences.utoledo.edu. Salary and setup funds are competitive. Review of applications will begin October 14, 2002, and continue until the position is filled. The starting date for this position will be August 2003.

Interested candidates should send a letter of application, curriculum vitae, statement of teaching and research interests, and arrange to have three letters of recommendation sent to: Chair, Faculty Search Committee, Department of Biological Sciences, MS 601, University of Toledo, Toledo, OH 43606-3390. E-mail inquiries may be directed to e-mail: pkomuni@utnet.utoledo.edu. The University of Toledo is an Affirmative Action/Equal Opportunity Employer; Minorities/Females/Disabled/Veterans. Qualified women and minorities are encouraged to apply.

**POSTDOCTORAL RESEARCH FELLOW-SHIP**: Postdoctoral positions are available for candidates who have experience in molecular biology or immunology and have obtained a Ph.D. and/or M.D. The research undertaken involves the viral and immunologic features of HIV pathogenesis. The position is in the Laboratory for Tumor and AIDS Virus Research at the University of California, San Francisco. The candidate must meet the NIH qualifications for Fellowships (a citizen or permanent resident of the United States).

Interested candidates should send curriculum vitae and the names of three references to: Dr. Jay A. Levy, University of California, San Francisco, 513 Parnassus Avenue, Box 1270, San Francisco, CA 94143-1270. E-mail: levylab@itsa.ucsf.edu.

Extracellular signal-regulation transcription activation. NIH-funded **POSTDOCTORAL FELLOW-SHIP** available to study hormonal regulation of gene expression. Molecular genetic and biochemical approaches are being used to determine how phosphorylation of CREB promotes the isomerization of polymerase complexes to an active state and release and reinitiation of the polymerase to transcribe target genes. Contact: Patrick G. Quinn, Ph.D., Department of Cell and Molecular Physiology, Penn State University College of Medicine, Hershey, PA 17033. E-mail: pquinn@psu.edu; Telephone: 717-531-6182. Penn State University is an Affirmative Action/Equal Opportunity Employer. POSITIONS OPEN



COMPETITION FOR THE J. EVANS ATTWELL-WELCH POSTDOCTORAL FELLOWSHIPS

We announce a competition for two J. Evans Attwell-Welch Postdoctoral Fellowships. These are twoyear Fellowships to work with faculty in the Center for Nanoscale Science and Technology (CNST), encompassing the School of Engineering, the Wiess School of Natural Sciences, the Jones School of Management through the Rice Alliance for Technology and Entrepreneurship, and the James A. Baker III Institute for Public Policy. Candidates for these competitively awarded Fellowships must submit a research proposal (three pages maximum) and a letter of support for the candidate and endorsement of the proposed research from a Rice University faculty member in CNST. Applicants must submit a résumé and three letters of recommendation and must have received the Ph.D. within the past three years. Please see the CNST website: http://www.cnst.rice.edu for a complete list of eligible faculty members. All applications should be received by December 20, 2002, at: Center for Nanoscale Science and Technology, MS 100, Rice University, 6100 Main Street, Houston, TX 77005. Electronic applications are acceptable by email: cnst@rice.edu but the letters of support and recommendations must be on paper.

Rice University strongly encourages minority and women applicants to apply. We are an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL FELLOW/ RESEARCH ASSOCIATE

Postdoctoral Fellow/Research Associate positions for two to three calendar years (funded through NIH grants) are available immediately. Duties for these positions include research to determine the effects of estrogen, ethanol, and other environmental factors on cell-cell communicaton and differentiation of neuroendocrine cells using immunocytochemical, in situ hybridization, laser-captured microscopy, and digital microscopy methods. Salary: \$30,000 to \$40,000 per year depending on experience and qualifications. Candidate must have a Ph.D. degree with experience in immunocytochemistry, in situ hybridization and digital microscopy, and knowledge of handling rats or mice. Please send curriculum vitae and three reference letters to: Dipak K. Sarkar, Distinguished Professor and Director, Endocrinology Program, 84 Lipman Drive, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901. E-mail: sarkar@aesop.rutgers.edu.

#### PARASITOLOGY

**POSTDOCTORAL RESEARCHER.** A Ph.D. in parasitology or related field is required. The successful candidate will contribute to research examining the role of parasites in wild vertebrate populations. Familiarity with molecular techniques is desirable. Send a letter of application, curriculum vitae, statement of research interests, and three letters of reference to: Dr. Isaac Schlosser, Department of Biology, Box 9019, University of North Dakota, Grand Forks, ND 58202-9019. Review of applications will begin on 21 October 2002 and continue until the position is filled.

**POSTDOCTORAL** and **RESEARCH ASSO-CIATE** positions available to conduct research on the role of sphingolipids as signal transducers during stress responses in *Saccharomyces cerevisiae* (J. Biol. Chem. **272:30196** and **273:19437**; Ann. Rev. Biochem. **67: 27**). Experience with yeasts, lipids, enzymology, or signal transduction is required. Send résumé with names of three references to: **Robert Dickson, Department of Biochemistry, University of Kentucky, Lexington, KY 40536-0298**. The University of Kentucky is an Equal Opportunity Employer and encourages applications from qualified women and minorities.

#### POSITIONS OPEN

#### ORGANIC CHEMIST SEARCH The University of New Mexico Department of Chemistry

The Chemistry Department at the University of New Mexico invites applications for a full-time, ten-ure-track ASSISTANT PROFESSORSHIP in organic chemistry to begin January 1, 2003, or later. The position is contingent upon anticipated funding. A Doctorate in chemistry or a related field is required by appointment start date and postdoctoral experience preferred. All areas of organic chemistry will be considered. However, preference will be given to applicants who have interests ranging in bioorganic chemistry or organic materials chemistry. Desirable qualifications include potential for developing a nationally competitive research program, ability to work in an interdisciplinary environment, interest in and potential to teach organic chemistry at the undergraduate and graduate levels and train doctoral students, and collegiality. Applicants must submit curriculum vitae; clear descriptions of teaching interests, past research activities, and proposed future research plans; a list of required infrastructure/major instrumentation support facilities; and a list of persons from whom letters of reference have been requested. Address all application materials to: Chair, Organic Chemistry Search Committee, The University of New Mexico, Department of Chemistry, Albuquerque, NM 87131. For best consideration, all materials (including reference letters) must be received by Monday, October 28, 2002 (however, the position will remain open until filled). The University of New Mexico is an Equal Opportunity/Affirmative Action Employer and Educator.

#### ASSISTANT PROFESSOR OF BIOLOGY

The Department of Biology at Shippensburg University invites applications for a tenure-track Toxicologist position starting August 2003. Responsibilities include teaching toxicology, introductory biology courses, and an additional upper-division course in an area of specialty. Ability to teach other courses such as mammalogy or ichthyology preferred. The successful candidate will be expected to have a Doctorate completed by December 31, 2002; a strong commitment to undergraduate instruction; and teaching experience at the college level. A terminal degree from an accredited institution is required for tenure. Scholarly activity will be required. A successful demonstration of teaching effectiveness and a scholarly seminar will be required as part of the on-campus interview. Applicants should send curriculum vitae; official undergraduate and graduate transcripts; a statement of teaching philosophy and research interests; and the names, addresses, and telephone numbers of three references to: Biology Search Committee, Department of Biology, Shippensburg University, 1871 Old Main Drive, Shippensburg, PA 17257-2299. Receipt deadline for application materials is January 10, 2003. Shippensburg University is an Equal Opportunity Employer. Candidates must furnish proof of eligibility to work in the United States upon appointment.

#### POSTDOCTORAL POSITION Fungal Gene Expression

To study homologous and heterologous expression of P450 monooxygenase genes of basidiomycete fungi. Studies will involve gene expression in *E. coli* or yeast, gene regulation using reporter system, and gene disruption in filamentous fungal host. Apply to: Dr. Jagjit S. Yadav, Department of Environmental Health, University of Cincinnati Medical Center, Cincinnati, OH 45267. Telephone: 513-558-4806; FAX: 513-558-4397; email: jagjit.yadav@uc.edu.

A POSTDOCTORAL POSITION is available immediately to study signal transduction mechanisms of ischemia-induced neuronal death. Ph.D. in cell/ molecular biology and experience with primary neuronal or microglial cell cultures, transfections, and immunofluorescence are required. Expertise in immunology/inflammation and use of transgenic animals is desirable. Send résumé to: Dr. Zena Vexler, University of California San Francisco, 521 Parnassus Avenue, San Francisco, CA 94143-0663. E-mail: zinaida@itsa.ucsf.edu.

The University of Connecticut Health Center Department of Neuroscience encourages applications for funded **POSTDOCTORAL POSITIONS**, directly to individual faculty members, in cellular, molecular, neuroanatomical, and systems neuroscience as detailed at **website:** http://neuroscience.uchc.edu. Located in Farmington, Connecticut, near Hartford, the scientific community is growing, vibrant, and interactive. UCHC is an Equal Opportunity Employer; Minorities/Females/Veterans/Persons With Disabilities.





# Biophysics Biophysics at the University of Michigan

The University of Michigan is building a multidisciplinary Program in Bioinformatics (http://www.bioinformatics.med.umich.edu) bringing together advanced computational technology and experimental molecular bioscience. In particular we are recruiting in the area of Computational Biophysics. Integrated experimental and computational approaches are encouraged. The candidate will be a member of the Bioinformatics and Biophysics Programs with research interests in computational modeling and analysis of biomolecular systems. The University of Michigan is one of the world's finest research institutions with an energetic community of students, scholars, and scientists. Faculty positions are available at all levels in multiple departments. There are opportunities for candidates in Medical School departments with a primary focus on research as well as departments in schools with significant involvement in undergraduate education. Successful candidates will be expected to develop an innovative research program, to engage in teaching, and to share administrative functions of the Bioinformatics Program. Teaching responsibilities and research areas vary by department.

Candidates should send a biographical sketch, three letters of recommendation, research plan and a statement of career goals to: Chair, Computational Biophysics Search Committee Medical Science Building II Room 5622 University of Michigan Medical School Ann Arbor, MI, 48019-0621, USA

The University of Michigan is an Equal Opportunity Employer and is committed to maintaining diversity in its hiring and training programs.





# Biomedical Systems Modeling at the University of Michigan

The University of Michigan is building a multidisciplinary Program in Bioinformatics (http://www.bioinformatics.med.umich.edu) bringing together advanced computational technology and experimental biosciences. In particular we are recruiting candidates with research interests in the Modeling of Complex Biomedical Systems. Integrated experimental and computational approaches are encouraged. The candidate will be a member of the Bioinformatics Program. The University of Michigan is one of the world's finest research institutions with an energetic community of students, scholars, and scientists. Faculty positions are available at all levels in multiple departments. There are opportunities for candidates in Medical School departments with a primary focus on research as well as departments in schools with significant involvement in undergraduate education. Successful candidates will be expected to develop an innovative research program, to engage in teaching, and to share administrative functions of the Bioinformatics Program. Teaching responsibilities and research areas vary by department.

Candidates should send a biographical sketch, three letters of recommendation, research plan and a statement of career goals to: Chair, Systems Modeling Search Committee

Medical Science Building II Room 5622 University of Michigan Medical School Ann Arbor, MI, 48019-0621, USA

The University of Michigan is an Equal Opportunity Employer and is committed to maintaining diversity in its hiring and training programs.

#### UNIVERSITY OF CALIFORNIA SAN FRANCISCO Cardiovascular Research Institute (CVRI)

We are searching for a new faculty member to be appointed at the Assistant, Associate, or Full Professor level. Membership in graduate programs and a joint appointment in an appropriate basic science or clinical department will be offered. Individuals working in areas broadly related to cardiovascular biology, including but not limited to cellular signaling pathways and networks, developmental biology related to the heart or lungs, endothelial, smooth or cardiac muscle, or leukocyte biology, or human, mouse or model system genetics related to the cardiovascular system, will be considered. Candidates should hold an M.D. or Ph.D. and will be expected to establish a dynamic research program and to actively contribute to CVRI and graduate training programs.

By November 15, 2002, submit a curriculum vitae, summary of research accomplishments, description of future research plans, reprints of major publications, and three to five letters of recommendation to: Henry Bourne, M.D., and Shaun R. Coughlin, M.D., Ph.D., c/o Julie Tom, CVRI, University of California, San Francisco, CA 94143-0130.

The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.



#### **Computational Scientist**

SAIC-Frederick works at the forefront of biomedical research at the National Cancer Institute (NCI) Frederick Cancer Research and Development Center in Frederick, MD. We currently have an opening for a Computational Scientist to develop computational tools for novel drug discovery and to consult with colleagues and other scientists on problems of mutual interest. Position is also responsible for critical evaluation, presentation, and publication of research findings. Requirements include PhD degree in Computational Biology or Computational Chemistry; 2 years post-graduate level experience; and strong capacity in software development, data management, and statistical analysis.

At Science Applications International Corporation, we believe people are our greatest resource. If you desire to be part of an organization that is moving into the future, email your resume to sallwein@mail.ncifcrf.gov. Visit our Website at http://saic.ncifcrf.gov.

> "We value cultural diversity in the workplace."



The Department of Neurosurgery and the Huntsman Cancer Institute are seeking an exceptional candidate to fill a tenure-track position

at the Assistant or Associate Professor level to study brain and spinal tumors. The position is offered to interface with current areas of research involving cell and molecular biological aspects of growth regulation, and regulation of angiogenesis and invasion of malignant gliomas and meningiomas. The candidate will have the unique opportunity to develop collaborations with existing outstanding faculty of the Huntsman Cancer Institute with interests in other tumor systems. Requirements are a doctoral degree (MD and/or PhD), and a strong record of research accomplishments including active research funding and an interest in teaching.

A letter of interest, curriculum vitae, a brief statement of educational and research goals, and the names and addresses of 3 references should be directed to:

William T. Couldwell, MD, Ph. D, Chairman, Department of Neurosurgery, University of Utah, Suite 3B409, 30 North 1900 East, Salt Lake City, UT 84132-2303 (e-mail: william.couldwell@hsc.utah.edu)

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

The Department of Biomedical Engineering (BME) at Boston University is currently searching for a tenure-track ASSISTANT to ASSOCIATE PROFES-SOR position in the protein and genomic engineering area with computational and experimental expertise in gene networks and/or protein engineering with applications to cellular regulation.

The BME Department recently announced the receipt of a \$14 million Whitaker Foundation Leadership Award in biomedical engineering. Prior to the Leadership Award, the BME Department had 23 fulltime primary faculty, generating over \$15 million annually in external support. Over the next five years, the Leadership Award will fund major expansions including the addition of 12 faculty at all ranks and new facilities for BioMEMs, imaging, and computational biology.

Qualified candidates must have a Ph.D. degree and significant research experience in the relevant discipline. Faculty are expected to develop a program of funded research in their area of expertise and contribute to planned innovations in our graduate and undergraduate curricula.

BME currently has approximately 115 graduate students and 300 B.S. majors. Excellent opportunities exist for collaboration with colleagues in outstanding research centers at Boston University, the Boston University School of Medicine, other universities/ colleges in Boston, and with industry throughout the Boston area. For additional information on the College of Engineering and BME Department, visit the College's websites: http://www.bu.edu/eng/ or http://bme.bu.edu.

http://bme.bu.edu. Send curriculum vitae, names of at least three references, and statements of research and teaching goals to: Chair, PGE Search Committee, Department of Biomedical Engineering, Boston University, 44 Cummington Street, Boston, MA 02215 U.S.A.

#### **POSITION ANNOUNCEMENT**

The Department of Veterinary Biosciences, College of Veterinary Medicine, University of Illinois, Urbana-Champaign, is seeking applications for two fulltime, annual tenure-track or clinical positions at the ASSISTANT or ASSOCIATE PROFESSOR level in the area of veterinary gross anatomy. The successful candidate(s) will teach gross anatomy in the veterinary medicine curriculum and will be expected to develop a research program and participate in graduate instruction. Candidates should possess the Ph.D. degree or equivalent. Preference will be given to those who also hold the D.V.M. degree or equivalent. Salary is commensurate with qualifications. To ensure full consideration, applications should be received by November 1, 2002. Starting date on or after January 21, 2003. Send curriculum vitae and names of three references to:

> Dr. Jo Ann Eurell Chair, Anatomy Search Committee Department of Veterinary Biosciences University of Illinois 2001 South Lincoln Avenue Urbana, IL 61802 Telephone: 217-333-7580 FAX: 217-244-1652 E-mail: j-eurell@uiuc.edu

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

#### MICROBIAL PATHOGEN RISK ASSESSOR

The U.S. EPA's National center for Environmental Assessment in Cincinnati, Ohio, seeks an individual who can contribute to the assessment of health risks from microbial pathogens. Full announcement available through website: http://www.epa.gov/ ezhire. EPA is an Equal Opportunity Employer. Selection for this position will be based solely on merit without regard to race, color, religion, age, gender, national origin, political affiliation, disability, sexual orientation, marital or family status, or other differences. EPA is an Equal Opportunity/Affirmative Action Employer.

#### POSITIONS OPEN

#### ASSISTANT PROFESSOR MARINE FISH BIOLOGY/ECOLOGY School of Aquatic and Fishery Sciences (SAFS) University of Washington

We seek a tenure-track faculty member whose teaching and research interests are in marine fish and/ or shellfish biology and ecology (broadly defined) to build a vigorous, externally funded field and laboratory program around species and ecosystems impacted by marine fisheries. We anticipate multidisciplinary opportunities for the new faculty linked to diverse research programs within the University and with Scientists in federal and state agencies working to rebuild and/or conserve marine fish stocks. SAFS is a growing academic department in new research and teaching facilities and with direct ties to premier marine and FW research programs. The position will be filled at the Assistant Professor rank (under extraordinary circumstances, Associate Professor rank may be considered contingent on funding) by a person with strong commitment to undergraduate teaching who is expected to carry an appropriate course load that may include marine fish ecology, general courses in biology and quantitative methods, and who will supervise/ support graduate students. An earned Ph.D. is required and candidates should submit (1) a statement of research and teaching interests, (2) curriculum vitae, (3) one copy of up to five significant publications, and (4) names and contacts of four potential references to: Dr. David Armstrong, Director, School of Aquatic and Fishery Sciences, Box 355020, University of Washington, Seattle, WA 98195-5020. Visit our website: http://www.fish.washington. edu for additional information. Review of applications will begin October 15, 2002, and continue until the position is filled. The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITION Toxicology

The Department of Environmental Health, University of Washington in Seattle (website: http:// depts.washington.edu/envhlth/), seeks applicants for tenurable, junior faculty appointment(s) (ASSIS-TANT or early ASSOCIATE PROFESSOR rank) for the Sheldon D. Murphy Chair in Toxicology and Environmental Health. Requirements include a Doctoral degree (M.D., Ph.D., D.V.M.) with at least two years of postdoctoral training in toxicology, pharmacology, or a closely related field. The successful applicant(s) will be expected to establish a strong, externally funded research program. Applicants with expertise in molecular toxicology (e.g., toxicogenomics, proteomics, metabonomics) are especially encouraged although candidates with other specialty areas in toxicology will also be considered. Strong preference will be given to candidates with interests in environmental and/or occupational health problems and studies in human populations. Teaching two or more courses in basic or advanced toxicology annually, collaborative interactions with other programs within the Department, and participation in one or more NIEHS-funded Centers at the University of Washington will be expected. Applications should be submitted by January 1, 2003, or until the position is filled. Interested candidates should send two copies each of curriculum vitae, statement of research and teaching interests and career goals, and names of four references to: Dr. Terrance J. Kavanagh, Chair, Toxicology Faculty Search Committee, Department of Environmental Health, University of Washington, 4225 Roosevelt Way N.E., Suite 100, Seattle, WA 98105-6099. The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. Equal Opportunity Employer.

#### POSITIONS OPEN

Brown University Department of Psychology is soliciting applications for two tenure-track ASSIS-TANT PROFESSOR positions to begin in July 2003. One position is in the area of animal behavioral neuroscience, specializing in mechanisms of motivation and affective behaviors including emotion and reward, pain, homeostasis and biorhythms, and learning and memory. The research program must include a strong focus on analysis of behavior in combination with either pharmacology, endocrinology, neurophysiology, or neuroanatomy. Applications should be submitted to: Professor A. M. Simmons, Chair of the Behavioral Neuroscience Search Committee.

The second position is in the area of human cognitive neuroscience, specializing in basic research on the cognitive and biological factors associated with human psychopathology including emotion, memory, attention, motivation, personality, and decision making. Methodological approaches include functional imaging (i.e., EEG, fMRI); neuropsychology; and human experimental psychology. Applications should be submitted to: **Professor W. C. Heindel, Chair of the Cognitive Neuroscience Search Committee**.

The successful candidates for both positions are expected to contribute to undergraduate and graduate teaching and mentoring and to develop an independent, funded research program. Applicants should submit curriculum vitae, copies of reprints and preprints of scholarly publications, a statement of research and teaching interests, and at least three letters of reference. The deadline for applications is December 15, 2002. Materials must be sent to: Chair of the Appropriate Search Committee, Department of Psychology, Brown University, Box 1853, Providence, RI 02912. Brown University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are strongly encouraged to apply.

#### ASSISTANT PROFESSOR Molecular and Cellular Biology Harvard University

The Department of Molecular and Cellular Biology (MCB) is seeking outstanding candidates for the position of Assistant Professor (entry-level appointment). Our department covers a broad range of topics including cellular biology, developmental biology, molecular biology, molecular evolution, molecular genetics, genomics, neurobiology, and structural biology. We are particularly interested in candidates working in the following areas: cell biological and evolutionary approaches to development, mechanistic analysis of biological action at the molecular and structural levels, and analysis of genome organization and function at the systems level.

Applications should include curriculum vitae, reprints of publications, and a statement of present and future research plans (one to three pages). Complete applications and three letters of recommendation (solicited by the applicant) should be received no later than October 18, 2002. Mail applications to:

> MCB Search Committee Harvard University 7 Divinity Avenue, Room 127 Cambridge, MA 02138

We strongly encourage application from women and minority candidates.

ECOLOGIST. The Department of Ecology and Evolutionary Biology at Rice University (website: http://www.ruf.rice.edu/~eeb/) is seeking to fill an anticipated tenure-track position at the ASSISTANT PROFESSOR level. We seek a highly qualified individual in the field of ecology broadly construed to include, for example, theoretical, empirical, and/or experimental approaches to the study of populations, communities, and ecosystems. Rice is a private research university with a strong commitment to the highest standards of education at the graduate and undergraduate levels. Applicants should submit curriculum vitae, statements of research and teaching interests, and request four letters of recommendation. All materials should be sent to: Ecologist Search Committee, Department of Ecology and Evolutionary Biology MS-70, Rice Univer-sity, P.O. Box 1892, Houston, TX 77251-1892 by November 30, 2002. Rice University is an Equal Opportunity/Affirmative Action Employer.

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#### ASSISTANT OR ASSOCIATE PROFESSOR IN COMPUTATIONAL BIOLOGY AND BIOINFORMATICS



Harvard Medical School Department of Biological Chemistry and Molecular Pharmacology Boston, Massachusetts, USA

The Department of Biological Chemistry and Molecular Pharmacology (BCMP) is searching for a new faculty member in the research area of computational biology and bioinformatics. Qualifications include a strong potential for imaginative research in the areas of bioinformatics, genetic epidemiology, computational functional genomics, biological network modeling, and/or computational research in chemical biology.

All departmental faculty have access to graduate students in Harvard Medical School's Biological and Biomedical Sciences program, in Harvard's Biophysics program, and in the Harvard-MIT Division of Health Sciences and Techology program.

BCMP is one of six basic science departments of Harvard Medical School. BCMP has a long and distinguished tradition of scholarship and teaching. It houses faculty members with diverse interests in a dynamic and rigorous research setting. For information about current faculty and research, please refer to http://bcmp.med.harvard.edu/.

Applicants for all positions should submit a curriculum vitae, bibliography, a brief description of research interests, and arrange to have **four** letters of recommendation sent to:

> Search Committee Chair BCMP, Harvard Medical School 240 Longwood Avenue, C-213 Boston, MA 02115

Agricultural Research Service

#### DIRECTOR WESTERN HUMAN NUTRITION RESEARCH CENTER

The U.S. Department of Agriculture, Agricultural Research Service, Western Human Nutrition Research Center, Davis, CA, invites applications for the position of Director, a Senior Executive Service vacancy, (\$126,549-\$138,200, includes locality pay). The Western Human Nutrition Research Center's research programs are directed toward development and evaluation of diet-based nutritional intervention strategies to improve health and provide reliable, reproducible research results for use in developing national nutritional policies.

The Center is located on the campus of the University of California at Davis and has a close working relationship with university administration and faculty. As Director, the incumbent works with ARS management and the National Program Staff in planning, coordinating and evaluating a number of human nutrition research projects that are carried out by the research scientists within the Center. In addition, the Center Director provides leadership and assures excellence of the research program, provides operational accountability with a view toward Federal-State partnerships and goals of the ARS National Program in Human Nutrition, and plans research with other Federal agencies, Land-Grant organizations, and other outside institutions.

Applicants must meet mandatory qualifications, as specified in the vacancy announcement, and address specific executive core and technical qualifications. A doctoral degree in biological sciences, medicine or allied disciplines pertinent to the work of the position to be filled is desired. This is a competitive, permanent appointment, and US. Citizenship is required. Applications must be marked "ARS-SES:02-04." For specific application procedures and requirements, please call Stacy Aldrich (301) 504-1448; OR you may obtain a copy of the vacancy announcement via the Internet at http://www.afm.ars.usda.gov/divisions/hrd/vacancy/02-04.htm. Applications must be postmarked by November 4, 2002.

ARS is an Equal Opportunity Provider and Employer. Women and minorities are encouraged to apply.

#### MONTANA STATE UNIVERSITY Bozeman

HEAD, DEPARTMENT OF ECOLO-GY, Montana State University. The Depart-ment seeks an excellent Scientist with strong academic credentials to provide leadership that will enrich a strong base of teaching and research activities in a dynamic, growing department. Candidates with active research programs are encouraged to apply. As a leader for ecology teaching and research in the Rocky Mountains, the Department offers B.S., M.S., and Ph.D. degrees with emphasis in organismal biology, ecology and evolution, and fish and wildlife management and has 386 undergraduates and 70 graduate students. Complete application directions can be obtained at website: http://www.montana.edu/msuinfo/ jobs/prof/ or from: Deb Brubaker, Ecolo-gy, 310 Lewis Hall, MSU, Bozeman, MT 59717. Telephone: 406-994-4548; FAX: 406-994-3190; e-mail dbrubaker@montana. edu. Screening begins November 15, 2002. Details on the Department can be found at website: http://www.montana.edu/ecology. Americans With Disabilities Act/Affirmative Action/Equal Opportunity/Veteran Preferred Employer.

#### FACULTY POSITIONS ASSISTANT/ASSOCIATE/ FULL PROFESSOR Cell, Molecular, and Developmental Biology

University of Rochester The Department of Biology (website: http:// www.rochester.edu/College/BIO/dept.html) invites applications for several tenure-track positions to be filled within the next two to three years. Current faculty employ genetic and molecular approaches to study cellular, developmental, and evolutionary biology. Additional colleagues with allied interests are located in the adjacent medical school. We will consider individual applicants as well as applications from groups of individuals working in the same general area, such as basic cellular processes using genetically tractable lower eukaryotes or developmental evolution (evodevo). Especially strong candidates may be considered at the Full Professor rank. Review of applications will begin immediately and continue until the positions are filled. Applicants should submit curriculum vitae, bibliography, summary of research and teaching interests, and request three references to send letters of recommendation to: Chair, CDM Faculty Search Committee, Department of Biology, Box 270211, University of Rochester, Rochester, NY 14627. The University of Rochester is an Equal Opportunity Employer.

#### ASSISTANT PROFESSOR OF BIOCHEMISTRY University of Washington

Applications are invited for a tenure-track position as an Assistant Professor of Biochemistry at the University of Washington School of Medicine. We seek applications from creative Scientists with strong research credentials who will focus on molecular or structural aspects of important biological problems. Our department also teaches at the undergraduate, graduate, and medical school levels. Applicants should have a Ph.D. in biochemistry, structural or molecular biology or a related field, or an M.D. Submit curriculum vitae; research prospectus; reprints and preprints; and three letters of recomendation (to be forwarded separately) by November 15, 2002, to: Alan Weiner, Chair, Department of Biochemistry, University of Washington, Seattle, WA 98195-7350. Telephone: 206-543-1768; FAX: 206-685-9231. The University of Washington is an Affirmative Action/Equal Opportunity Employer.

#### POSITIONS OPEN

#### CHAIR, DEPARTMENT OF BIOLOGICAL SCIENCES Auburn University

The Department of Biological Sciences at Auburn University, located in Auburn, Alabama, invites applications and nominations for the position of Chair of the Department of Biological Sciences within the Col-lege of Sciences and Mathematics. The Department of Biological Sciences has 36 faculty with strengths in conservation biology, ecology and evolutionary biology, cell and molecular biology, microbiology, and physiology. Applicants should have a Ph.D. in biological sciences or in a closely related life sciences discipline. In addition, the applicant should have creden-tials for appointment as FULL PROFESSOR; be a dynamic leader with strong interpersonal skills; and have a record of academic excellence. The Chair will be expected to function as an administrative scholar, providing leadership for programmatic development through collaboration with faculty. Applicants should submit detailed curriculum vitae; a statement that addresses administrative philosophy, personal teaching and research goals, and a vision statement (see website: http://www.auburn.edu/academic/science\_ math/biology/); and have three letters of reference sent to: Search Committee Chair, Department of Discrete and Statistical Sciences, 235 Allison Laboratory, Auburn University, Auburn, AL 36849-5307. Review of applications will begin November 15, 2002, and continue until a candidate is recommended for appointment.

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

#### THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER The Endowment for Scholars in Biomedical Research

UT Southwestern is pleased to announce the continuation of the Endowed Program for Scholars in Biomedical Research. The Program, which is fully funded from private endowment, will provide \$600,000 over four years to support the research activities of each new **ASSISTANT PROFESSOR** (tenure track) appointed to the Program; five will be appointed annually. In addition, regular funding for salary as well as research space will be provided by the medical school department or research center offering the appointment. Positions in both basic science and clinical departments are available. The goal of the program is to assure a successful beginning of the research careers of an ever-growing cadre or outstanding young Investigators at UT Southwestern.

For detailed information about currently available faculty positions, please access our website: http:// www.utsouthwestern.edu/home\_pages/scholars/. Southwestern, The University of Texas Southwestern Medical Center at Dallas.

UT Southwestern is an Equal Opportunity Institution.

#### HARVARD MEDICAL SCHOOL Department of Microbiology and Molecular Genetics

The Department of Microbiology and Molecular Genetics invites applications for two tenure-track po-sitions at the ASSISTANT PROFESSOR level. The Department is interested in outstanding candidates from all areas of microbiology including microbial pathogenesis, virology, bacterial physiology and genetics, microbial biological chemistry, and parasitology. Successful candidates will conduct independent research programs and will teach graduate and medical students. Applicants should have a Ph.D. or M.D. degree and at least two years of postdoctoral training. Applicants should send curriculum vitae; copies of two publications; a brief summary of research interests; and the names, e-mail addresses, and mailing addresses of four references to: Junior Faculty Search Committee, Department of Microbiology and Molecular Genetics, Harvard Medical School, 200 Longwood Avenue, Boston, MA 02115. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Women and underrepresented minorities are strongly encouraged to apply.



Applications are invited for a **TENURE-TRACK FACULTY POSITION** in microbial cell modeling to begin September 2003. Researchers applying genomic and physiological data to the development of models to predict the behavior of prokaryotic microorganisms of environmental or medical significance are encouraged to apply.

Applicants should have strong research accomplishments; capability of establishing a vigorous, extramurally funded research program; and a serious commitment to education at the graduate and undergraduate levels. This appointment is expected to be filled at the **AS-SISTANT PROFESSOR** level; however, appointment at a higher rank will be considered for highly qualified individuals. Candidates must have a Ph.D. plus at least two years of postdoctoral experience. Salary commensurate with qualifications and experience.

Please provide your curriculum vitae, a brief outline of research interests plus recent reprints, and arrange to have three letters of reference sent to: Microbial Cell Modeling Search Committee, Department of Microbiology, University of Massachusetts, Amherst, MA 01003-5720. E-mail: microbiodept@microbio.umass.edu; website: http:// www.bio.umass.edu/micro. Review of applications will begin on October 15, 2002, but later applications may be considered.

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

#### FACULTY POSITION Molecular Biophysics Johns Hopkins University School Medicine

The Department of Biophysics and Biophysical Chemistry (website: http://biophysics.med.jhmi. edu) seeks outstanding candidates for the position of ASSISTANT PROFESSOR. Applications are sought in all areas of molecular biophysics and biophysical chemistry including structural biology. Priority will be given to applications received by November 30, 2002. Please submit curriculum vitae, a summary of current and proposed research, and arrange to have three letters of recommendation sent to:

Search Committee Department of Biophysics and Biophysical Chemistry Johns Hopkins University School of Medicine WBS 713 725 North Wolfe Street Baltimore, MD 21205-2185 FAX: 410-502-6910

The Johns Hopkins University is an Equal Opportunity Employer.

ASSISTANT PROFESSOR: Department of Exercise Science, The University of Iowa. Applications are invited for a tenure-track faculty position commencing in August 2003. Applicants must have a Ph.D. or equivalent degree and a strong potential to attract external funding. The successful applicant will be expected to develop a strong, independent research program in his/her area of expertise and teach biomechanics at the undergraduate and graduate levels. Submit applications to: Dr. Warren G. Darling, Department of Exercise Science, 526 Field House, The University of Iowa, Iowa City, IA 52242. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply.

# FACULTY POSITION McGovern Institute For Brain Research

McGovern Institute is seeking outstanding scientists with a strong record of research accomplishments for positions at any level. Positions are joint appointments with the MIT Department of Brain and Cognitive Sciences and Assistant Professor positions are tenure-track. Successful applicants will be expected to develop a significant and independent research program and have a commitment to excellence in undergraduate and graduate education.

The applicant's research program should involve studies of the higher functions of the brain. We are particularly interested in candidates pursuing research in the area of experimental and computational investigations of integrated neural systems underlying complex behavior.

Applicants should submit curriculum vitae, including a summary of current and proposed research programs, and should arrange for three letters of recommendation to be sent to: MIBR Search Committee, Attn: Donna Wells, MIT, Room E25-435, 77 Massachusetts Avenue, Cambridge, MA 02139-4307.

Consideration of completed applications will begin on October 18, 2002. Qualified women and minority candidates are especially encouraged to apply.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY An Equal Opportunity/Affirmative Action Employer Non-Smoking Environment web.mit.edu/personnel/www

# John B. Pierce Laboratory / Yale University School of Medicine





The John B. Pierce Laboratory, an endowed research institute affiliated with Yale University, seeks an outstanding scientist with an active research program in lung biology. Possible areas of research interest include, but are not restricted to, lung injury and repair, innate immunity, genetic engineering, pulmonary cell biology, and tissue remodeling. The level of the appointment is open, although a mid-level to senior-level scientist is preferred. The Laboratory offers competitive salary, benefits, and start-up, as well as an outstanding work environment. Joint appointment is anticipated in the Department of Epidemiology and Public Health and/or the Section of Pulmonary and Critical Care, Department of Internal Medicine, Yale University School of Medicine. Applicants should submit a CV and description of research interests, along with representative publications and the names of at least three references, to:

Search Committee Chair The John B. Pierce Laboratory Inc. 290 Congress Avenue New Haven, CT 06519

The review of applications will begin October 1, 2002, and continue until the position is filled.

EOE/AA

www.jbpierce.org



One of the oldest institutions of higher education in this country, the University of Delaware today combines tradition and innovation, offering students a rich heritage along with the latest in instructional and research technology. The University of Delaware is a Land-Grant,

Sea-Grant, Urban-Grant & Space-Grant institution with its main campus in Newark, DE, located midway between Philadelphia and Baltimore.

#### Assistant / Associate Professor Department of Plant and Soil Sciences

Delaware Biotechnology Institute (DBI)

The Department of Plant and Soil Sciences and the Delaware Biotechnology Institute (DBI) invite applications for a tenure-track faculty position at the ASSISTANT or ASSOCIATE professor level. The successful candidate will be expected to develop a vigorous extramurally funded research program with a high potential for unique fundamental discoveries, and participate in teaching. All areas of contemporary plant biology will be considered. Applications are particularly welcomed from candidates who could help solidify the ties between areas of Plant Biology that are developing at UD. These include plant / microbe interactions, RNA dynamics, cell surface biology, and the biology of the plant/soil interface. Candidates whose research would be maximally enhanced by the interactions within a new multidisciplinary institute are particularly encouraged to apply, as are those interested in exploring systems approaches to biological problems and/or the collaborative application of basic research would be maximally enhanced by the interactions within a new multidisciplinary institute are particularly encouraged to apply, as are those interested in exploring systems approaches to biological problems and/or the collaborative application of basic research for crop improvement. The University of Delaware is committed to building a world-class research and education program in plant biology through the combined efforts of the University of Delaware Biotechnology Institute (DBI), and other units on campus. DBI-associated faculty hold appointments at the University of Delaware Indones, Chemical Engineering, Computer and Information Sciences, Biological Sciences, Chemical Engineering, Material Science and Engineering, and Mechanical Engineering. For more information on the DBI and its faculty, see (www.dbi.udel.edu). Competitive salary/start up packages, new modern lab space, and state-of-the art facilities for microarray/gene chip analysis, proteomics, biolomaging and computational biology are available. Candidates must have a Ph.D

Pamela J. Green, Chair, Plant Biology Search, c/o Kathy Fleischut, University of Delaware - Delaware Biotechnology Institute, 15 Innovation Way, Newark, DE 19711. The review of applications will begin October 15, 2002 and continue until a suitable candidate is identified. The curriculum vitae and letters of reference shall be shared with departmental faculty.

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.

#### Predoctoral, Postdoctoral, and Clinical Fellowships

Following the appointment of **Dr. Richard Pestell** as its new Director, the Lombardi Cancer Center at Georgetown University is recruiting for predoctoral, postdoctoral, and clinical fellows in positions funded by grants from the National Institutes of Health and Department of Defense. The goal of these programs is to develop strong basic and translational scientists with an interest in cancer research. Successful applicants will choose a mentor from an interdisciplinary group of investigators who are committed to cancer research. Research programs include the development of novel anticancer therapies, the genetic and molecular mechanisms of malignant progression, the role of growth factor signal pathways, invasion and metastasis, the development of hormone and drug insensitivity, the etiology of cancer, biomarkers, and molecular epidemiology. Salary is competitive and commensurate with qualifications and experience. *Minorities and women are strongly encouraged to apply*.

Predoctoral candidates should contact:

Predoctoral Training Program c/o Dana Connors Lombardi Cancer Center Research Building 3970 Reservoir Road, NW Washington, DC 20007-2197 (dac9@georgetown.edu)

**Postdoctoral and Clinical Fellows** should send a curriculum vitae, a short statement of research interests and career goals, and the names and addresses of three references to either:

Postdoctoral Training Program c/o Helen Bishop, PhD (bishoph@georgetown.edu) Lombardi Cancer Center Research Building 3970 Reservoir Road, NW Washington, DC 20007-2197 Clinical Oncology Research Career Development Program c/o Kevin Cullen, MD (bishoph@georgetown.edu) Lombardi Cancer Center Research Building 3970 Reservoir Road, NW Washington, DC 20007-2197

For more information and a list of faculty, please visit the Lombardi website at Lombardi.Georgetown.edu.



#### FACULTY POSITION Structural Biology

The Department of Biochemistry and Molecular Biology at Penn State invites applications for a tenured/tenure-track position at ASSISTANT, ASSO-CIATE, or FULL PROFESSOR level in structural biology. We are particularly interested in individuals using structural biology methods such as macromolecular crystallography to address biologically important questions. Applications should include current curriculum vitae, a summary of past research experience, and a statement of future research goals. In addition, three letters of reference should be sent to:

Chair, Structural Biology Search, Box SS Department of Biochemistry and Molecular Biology 108 Althouse Laboratory The Pennsylvania State University University Park, PA 16802

Completed applications received by December 13, 2002, will receive priority.

Affirmative Action/Equal Opportunity Employer.

TRINITY COLLEGE: ASSISTANT PROFES-SOR IN PSYCHOBIOLOGY. The Department of Psychology seeks to fill a tenure-track position in behavioral neuroscience. Four-fifths of the FTEs of this position are housed in the Psychology Department with one-fifth in the Neuroscience program. The position will start in August 2002. We are looking for a Ph.D. (or Ph.D. expected) in behavioral neuroscience who will develop and maintain a program of excellent empirical research and who will engage bright, motivated students in the research. The successful candidate will teach courses in biological psychology and neuroscience and will contribute to such service courses as the First-Year Seminar and General Psychology. Send curriculum vitae; a statement of your research and teaching interests; three letters of reference; evidence of teaching effectiveness; and representative research papers to Dr. William Mace, Department of Psychology, Trinity College, Hartford, CT 06106 before October 15, 2002. Trinity College is an Affirmative Action/Equal Opportunity Employer

#### PHYSIOLOGIST

The Department of Biological Sciences at Marquette University has a tenure-track ASSISTANT PROFESSOR position available August 16, 2003, for a Ph.D. with postdoctoral experience. The successful applicant is expected to develop an extramurally funded research program and to teach at the undergraduate and graduate levels. Each year, the successful applicant will teach an undergraduate laboratory course in neurobiology or physiology in one semester and a graduate lecture course or seminar course in the applicant's area of expertise in the other semester. Areas of expertise desired include cellular and molecular approaches to neurobiology, muscle biology, or endocrinology (website: http://biology.marquette.edu). Send curriculum vitae; statement of research interests; and three letters of reference by December 1, 2002, to: Dr. Brian Unsworth, Chair, Department of Biological Sciences, WLS 112A, P.O. Box 1881, Milwaukee, WI 53201-1881

The Department of Ecology and Evolutionary Biology, Tulane University, invites applications for one tenure-track position of ASSISTANT PROFES-SOR in tropical biology (see website: http://www. tulane.edu/~eeob/faculty\_search.html). Send curriculum vitae, statements of research and teaching interests, selected publications, and names of three references to: David C. Heins, Chair, Department of Ecology and Evolutionary Biology, 310 Dinwiddie Hall, Tulane University, New Orleans, LA 70118-5698. Review of applications will begin October 14, 2002, and the search will remain open until the position is filled. Tulane University is an Affimative Action/Equal Employment Opportunity Employer.

#### POSITIONS OPEN

#### MONTGOMERY COLLEGE A Two-Year Public Community College Campuses at Takoma Park, Rockville, and Germantown, Maryland

Montgomery College is seeking applications for full-time biology faculty for the spring 2003 semester subject to final budget approval.

BIOLOGY: POSITION 2601, Rockville campus. Required: a Master's degree in biological sciences and at least one year of recent experience teaching college-level biology at a multicultural undergraduate institution. Teaching experience must address multiple learning styles. Candidates must demonstrate currency in the discipline and have excellent oral and written communication skills. Preferred: Ph.D. in biological sciences, a minimum of six graduate credit hours in animal or plant diversity, a minimum of six graduate credit hours in human anatomy and physiology. Duties and responsibilities: The biology faculty member will be expected to teach introductorylevel courses for biology nonmajors and majors. For more details, please visit our website: http://www. montgomerycollege.edu/employment/. Click on faculty vacancies.

Faculty application requirements: All applicants must submit the following documents: a completed Montgomery College faculty application, curriculum vitae or résumé, and unofficial undergraduate and graduate transcripts. Incomplete applications will not be considered. The faculty application can be obtained by accessing our website: http://www. montgomerycollege.edu/employment/; by calling our 24-hour Job Line at Telephone: 301-279-5374; or by coming to: Office of Human Resources, Montgomery College, 900 Hungerford Drive, Suite 130, Rockville, MD. Applications must be received by 5 p.m. on October 4, 2002.

Part-time faculty: Currently accepting faculty applications for part-time openings dependent upon enrollment.

Montgomery College is an Equal Opportunity Employer committed to fostering a diverse academic community among its student body, faculty, and staff.

The Department of Biological Sciences, University at Buffalo, The State University of New York, invites applications for a tenure-track ASSISTANT PRO-FESSOR position starting August 2003. We are seeking applicants with expertise in the broad area of intracellular or extracellular signaling in nervous systems. Outstanding research facilities and a substantial setup package will be provided to the successful candidate, who will be expected to develop an active, externally funded research program and participate in our graduate and undergraduate teaching programs. Applicants should have a Ph.D., at least two years of postdoctoral experience, and a scholarly publication record.

To apply, please submit curriculum vitae; a description of current and future research interests; up to three recent or in-press publications; and three reference letters to: Neurophysiology Search Committee, Department of Biological Sciences, 109 Cooke Hall, University at Buffalo, Buffalo, NY 14260. Application review will begin November 1, 2002, and continue until the position is filled. Information regarding the Department and the University can be viewed at website: http://www.biology. buffalo.edu. The University at Buffalo is an Equal Opportunity Employer/Recruiter.

CELL/MOLECULAR BIOLOGY, Bethel College (Minnesota). The Department of Biological Sciences invites applications for a faculty position in molecular and cell biology. Ph.D. is required; teaching/ postdoctoral experience desirable. Responsibilities include introductory and upper-division courses and supervision of undergraduate research. Must be strongly committed to the evangelical Christian orientation of the college as described at website: http://www.bethel.edu. A letter of application and curriculum vitae should be send by November 1, 2002, to: Dr. Debra Harless, Dean, 3900 Bethel Drive, St. Paul, MN 55112.

### POSITIONS OPEN

PENNSTATE

FACULTY POSITION Animal Cell Biology

The Department of Biochemistry and Molecular Biology at Penn State invites applications for a tenuretrack position in cell biology at the ASSISTANT **PROFESSOR** level. Meritorius applications at the level of ASSOCIATE or FULL PROFESSOR will also be considered. We seek an outstanding individual who uses contemporary approaches to probe the structure and function of vertebrate, invertebrate, or yeast cells. Areas of interest include but are not limited to cell-cell interactions, cytoskeletal dynamics, cell migration, intracellular trafficking, mechanisms of cell signaling, and cell growth/proliferation. Applications should include current curriculum vitae, a summary of past research experience, and grant support and teaching experience (if appropriate) as well as a statement of future research goals. Applicants at the level of Assistant Professor should also have three letters of reference sent to:

> Chair, Cell Biology Search, Box CS Department of Biochemistry and Molecular Biology 108 Althouse Laboratory The Pennsylvania State University University Park, PA 16802

Completed applications received by December 13, 2002, will receive priority.

Affirmative Action/Equal Opportunity Employer.

#### ASSISTANT PROFESSOR Smith College Department of Biological Sciences

Smith College invites applications for a full-time, three-semester position in biology at the Assistant Professor level. Teaching responsibilities will include a spring semester, intermediate-level cell physiology course (with laboratory) that emphasizes cell evolution and function; an upper-level developmental biol-ogy laboratory course in the fall; and possibly a seminar in the candidate's area of expertise. Applicants must have a Ph.D. and some college-level teaching experience. The appointment begins January 2003; completed applications need to be received by November 15, 2002. Smith College is a member of the Five College Consortium with Amherst, Hampshire, and Mount Holyoke Colleges and the University of Massachusetts. To apply, send résumé, letter of application, and three letters of recommendation to: Biology Search Committee, c/o Sue Beaumier, Clark Science Center, Smith College, Northampton, MA 01063/. Smith College is an Equal Opportunity Employer encouraging excellence through diversity.

The Psychology Department at Boston College invites applications for a tenure-track ASSISTANT PROFESSOR position in behavioral neuroscience, which will begin on September 1, 2003. Responsibilities will include research and undergraduate/graduate teaching. Applicants must have a Ph.D., postdoctoral experience, and an active research program. Those studying central mechanisms of learning and memory or the behavioral implications of neural plasticity in adult or developing animals using anatomical, molecular/genetic, or electrophysiological methods are especially encouraged to apply. Under exceptional circumstances, we would consider hiring at a more senior rank. For more information, see website: http://www.bc.edu/psychology. Submit letter of application, curriculum vitae, statements of research and teaching interests, reprints, and three letters of reference to: Behavioral Neuroscience Search Committee, Department of Psychology, 301 McGuinn Hall, Boston College, 140 Common-wealth Avenue, Chestnut Hill, MA 02467, Review of applications will begin in September 2002 and will continue until the position is filled. Equal Opportunity/ Affirmative Action Employer

## COLUMBIA UNIVERSITY College of Physicians and Surgeons

The Department of Biochemistry and Molecular Biophysics seeks to hire a new faculty member. Both junior (tenure track) and senior appointments will be considered. We are interested in persons studying the function of macromolecules, their interactions, or their molecular mechanisms of action. The research should use biochemical and/or biophysical approaches to address the functions of proteins, nucleic acids, or other macromolecules of biological interest. Applications should include a CV and a brief statement of research goals. Three or more letters of reference should be sent independently.

Our department integrates biological structure with function through highly interactive collaborations between individual faculty members. We encourage applicants who have a special desire to be in a highly interactive environment that integrates biophysical and biological disciplines. We will provide the necessary financial support to initiate a strong research program. The department Web site can be visited at: http://biochemistry.hs.columbia.edu

Material should be mailed to: Search Committee, Biochemistry and Molecular Biophysics, Box 36, 630 West I68th Street, New York, NY 10032. We take affirmative action toward equal employment opportunity.

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#### TENURE TRACK FACULTY POSITION IN BIOCHEMISTRY

Applications are invited for tenure-track faculty positions at the Assistant Professor level to study important biological processes using approaches that include bioinformatics, proteomics, combinatorial biochemistry, or mass spectrometry. Preference will be given to those working with eukaryotic organisms that have advanced genomic resources (genome database and genetic tools). Purdue is

building a strong faculty in genomic and post-genomic biology through the Purdue Genomics Initiative which has committed more than twelve positions to this research area. We anticipate that at least five new faculty positions in the Department of Biochemistry will be filled over the next five years.

The department is part of a large and vibrant life science community at Purdue, and our faculty participate in interdisciplinary graduate education programs in biochemistry and molecular biology, biophysics, genetics, plant biology, and neuroscience. Support facilities for DNA and peptide synthesis and sequence analysis, mass spectrometry, NMR, X-ray crystallography, image analysis, computation, and transgenic animal work are available. For more information about our department, see **www.biochem.purdue.edu**.

Applicants should have a Ph.D., a strong publication record, at least two years of post-doctoral experience or its equivalent, the potential to develop a vigorous extramurally funded research program, and a commitment to research and teaching excellence. To apply, send curriculum vitae, a two-page summary of research interests, and a statement of teaching interests to:

#### Biochemistry Search Committee Department of Biochemistry Purdue University West Lafayette, IN 47907-1153, USA

The applicant should request that three individuals familiar with the applicant's work send letters to the above address and the application should include the names and contact information for each of those three persons.

Electronic applications are welcome and may be sent to: **biochem-search@purdue.edu**, with a hard copy application also being sent to the above address. Screening of applicants will begin immediately and continue until the positions are filled.

Purdue University is an Equal Opportunity/Affirmative Action Employer fully committed to achieving a diverse workforce. Women and minority applicants are encouraged to apply.

#### DEPARTMENT OF NEUROSCIENCE UNIVERSITY OF MINNESOTA Tenure-Track Assistant Professor Developmental Neuroscience

The Department of Neuroscience at the UNIVERSITY OF MINNESOTA – Twin Cities is seeking a Tenure Track Assistant Professor to strengthen its existing program in Developmental Neuroscience. Applications are especially encouraged from individuals investigating vertebrate brain development, in particular, the development of cortical patterning, circuitry, and synaptogenesis. Although all excellent candidates will be considered, preference will be given to candidates with an interest in forming ties with developmental, behavioral, and cognitive neuroscientists based in the newly established Center for Neurobehavioral Development (www1.umn.edu/cnbd). The approximate starting date is July 2003.

The Department was established three years ago and consists of 29 faculty members, including 7 new hires. The Department is part of a larger, active community of neuroscientists on campus that includes over 80 laboratories as well as the Graduate Program in Neuroscience. See www.neurosci.umn.edu and www.neuroscience.umn.edu.

Applicants must have a Ph.D., M.D., or equivalent degree. Desired experience includes some postdoctoral or equivalent experience, and a strong publication record. Successful candidates must be able to secure permanent resident status or be U.S. citizens, and will be expected to develop a vigorous independent research program that will lead to external funding. Teaching of undergraduate, graduate, and/or professional students will be expected. Please send a curriculum vitae, a statement of research interests, and three letters of recommendation to: **Department of Neuroscience, Developmental Neuroscience Search Committee, University of Minnesota, 321 Church Street, S.E., Minneapolis, MN 55455, or murr0231@umn.edu**.

Electronic versions of the required information may be e-mailed but must be followed with a hard copy for the official files. Review of applications will continue until the position is filled.

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

# Diabetes Branch Tenure-Track Investigators Mechanisms of Diabetes/Obesity

With nation-wide responsibility for improving the health and well being of all Americans, the Department of Health and Human Services oversees the biomedical research programs of the National Institutes of Health and those of NIH's research Institutes.

The Diabetes Branch, NIDDK, NIH/DHHS in Bethesda, MD seeks to recruit two tenure-track scientists (one at the associate professor and one at the assistant professor level) who will use cellular, molecular, and/or genetic approaches to study molecular mechanisms relevant to type 2 diabetes and/or obesity. The investigator will be given resources and laboratory space to pursue a vigorous and effective research program. The position offers unparalleled opportunities for multi-disciplinary research and for interaction with a diverse group of outstanding scientists in the NIDDK and throughout the NIH. For information about the NIDDK and the Diabetes Branch, see http://www.niddk.nih.gov.

Candidates must have a Ph.D., M.D. or equivalent degree in the biomedical sciences, demonstrated research productivity, and capability of establishing an innovative and independent research program. Competitive salary and benefit packages are available. Applicants should send a Curriculum Vitae and list of publications, copies of three major publications, a plan for future research, and three letters of reference by November 1, 2002 to: Dr. Rick Proia, Chair of the Diabetes Branch Search Committee, c/o Christine Biser, Building 10, Room 8D12, 10 Center Drive, MSC 1758, Bethesda, MD 20892-1758.



NIH/DHHS is an equal opportunity employer.

#### ASSISTANT PROFESSOR POSITIONS CENTER FOR MEMBRANE BIOLOGY University of Texas Medical School at Houston

Applications are invited for four tenure-track Assistant Professor positions in the newly established Center for Membrane Biology at the University of Texas Medical School at Houston, with appointment in the Department of Biochemistry and Molecular Biology. The new faculty members will join an interactive group of interdepartmental faculty with established programs focused on membrane structure/function and will develop independent research programs on current aspects of membrane biology. Successful applicants will receive a competitive salary and start-up package of research funds and newly remodeled laboratory and office space. Research areas of special interest include membrane protein expression; insertion and folding; lipid function; membrane protein crystallography; and structure/function of G protein-coupled receptors, ligand-activated channels, multidrug efflux systems; and other receptors, channels, and transport proteins. Information on the Center for Membrane Biology can be found at the following website: http://www.uth.tmc.edu/cmb/. Complete curriculum vitae, statement of research plans, representative publications, and names of three references should be sent by November 1, 2002, to: Professor John Spudich, Director and Chair of Search Committee, Center for Membrane Biology, Attention: Joanette Payne, Department of Biochemistry and Molecular Biology, University of Texas Medical School at Houston, 6431 Fannin Street, MSB 6.130, Houston, TX 77030.

The University of Texas Health Science Center is an Affirmative Action/Equal Opportunity Employer committed to excellence through diversity.

Tenure-track ASSISTANT PROFESSOR position starting August 2003. Ph.D. or expectation of completion this academic year required; teaching and postdoctoral research experience desirable. The successful candidate will participate in an undergraduate course in environmental studies and will also contribute to ecology, conservation biology, and university-wide programs. We are particularly interested in individuals whose research involves plants or plant/animal interactions. The appointee will join a biology faculty deeply committed to a strong, research-oriented program involving undergraduate students and will contribute to this effort by offering a research course in their area of interest. Please forward a letter of application with curriculum vitae, transcripts, and separate statements of teaching philosophy and research interests to: Dr. Randy Fuller, Department of Biology, Colgate University, 13 Oak Drive, Hamilton, NY 13346 and also arrange to have three letters of recommendation sent to this address. Review of applications will begin October 7, 2002, and continue until the position is filled. We intend to begin interviewing candidates in late October 2002. Colgate University is an Equal Opportunity/Affirmative Action Employer. Developing and sustaining a diverse faculty and staff furthers the University's educational mission.

The Department of Psychology at the University of Pennsylvania hopes to hire a tenure-track ASSIST-ANT PROFESSOR in the area of animal behavior. We are particularly interested in individuals addressing fundamental issues in the evolution of social behavior, behavioral ecology, learning, 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 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, 3815 Walnut Street, Philadelphia, PA 19104. Applications will begin to be reviewed on October 1, 2002. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

# Washington University in St. Louis

SCHOOL OF MEDICINE

#### TENURE-TRACK POSITIONS

The Department of Biochemistry and Molecular Biophysics is seeking tenure-track **ASSISTANT PROFESSORS** in the areas of experimental biophysics and experimental biochemistry including single molecule studies, kinetic mechanisms of enyzmes, protein-protein interactions, and nucleic acid-protein interactions.

Washington University forms an exceptionally interactive research environment. The Department has newly renovated laboratory space and can provide generous start-up funds from its endowment. Investigators will be expected to develop an independent research program to enhance current departmental interests (website: http://www.biochem.wustl. edu). Preference will be given to candidates who have an enthusiasm for participating in our interdisciplinary scientific community and for graduate student teaching. The anticipated start date for these positions is fall 2003. Applicants to the Department should submit curriculum vitae; selected reprints; a short summary of future research plans; and the names of three references by December 15, 2002, to:

Peter M.J. Burgers, Ph.D. Chair, Faculty Search Committee Washington University School of Medicine Department of Biochemistry and Molecular Biophysics 660 South Euclid Avenue, Box 8231 St. Louis, MO 63110 An Equal Opportunity Employer.

#### TENURE-TRACK FACULTY POSITION PROTEOMICS Indiana University Bloomington, Indiana

Indiana University has initiated a significant program in proteomics including the development of a new research and development center for new technologies and is seeking to fill a tenured or tenuretrack faculty position beginning August 2003. A qualified candidate could take advantage of significant state-of-the-art and prototype instrumentation across the fields of protein and separation science and mass spectrometry. Successful candidates will be expected to develop a vigorous, independent research program and contribute to teaching and curricular development.

ASSISTANT PROFESSOR candidates should include a summary of future research plans and arrange to have four letters of recommendation forwarded to the Department. Applications will be reviewed as received and will continue until the positions are filled. Send applications to: Chairman, Department of Chemistry, 800 East Kirkwood Avenue, Indiana University, Bloomington, IN 47405. FAX: 812-856-5050; e-mail: cemchair@indiana.edu. Indiana University is an Affirmative Action/Equal Opportunity Employer and especially encourages applications from women and members of minority groups.

The University of Washington's Department of Bioengineering invites applications for a new TENURE-TRACK FACULTY position. Applicants are sought throughout the Department's research programs in biomaterials, tissue engineering, nanotechnology, medical imaging, drug delivery, molecular bioengineering, BioMEMs, and computational bioengineering (website: http://depts.washington.edu/bioe). Applications in other areas representing future opportunities are also encouraged. Applicants should include curriculum vitae, a proposed research program, and contact information for five references to: Professor Patrick Stayton, c/o Heather White, Department of Bioengineering, Box 357962, University of Washington, Seattle, WA 98195. The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

# POSITIONS OPEN

Bucknell University invites applications for two entry-level, tenure-track ASSISTANT PROFESSOR positions beginning August 2003:

AQUATIC ECOLOGIST: Appointment in the Department of Biology and the Program in Environmental Studies. Ph.D. required. Applicants should be Aquatic Scientists working in the area of ecosystem ecology, trophic interactions, or limnology and have expertise in community and ecosystem ecology and human impact on ecological systems. Teaching responsibilities will include participation in the introductory level courses for biology majors and nonmajors, courses in environmental studies at various levels, advanced courses in ecology, and supervision of undergraduate research.

**INVERTEBRATE BIOLOGIST:** Appointment in the Department of Biology. Ph.D. required. Applicants should be broadly trained Invertebrate Biologists with expertise in systematics. We seek candidates using traditional and molecular tools in their research. Teaching responsibilities may include participation in the introductory-level courses for biology majors and nonmajors, advanced courses in invertebrate biology, an upper-division course in the area of expertise, and supervision of undergraduate research.

Applicants should submit a cover letter, statements of teaching philosophy and research goals, curriculum vitae, and three letters of recommendation to:

> Dr. Kathleen C. Page, Chair Biology Department Bucknell University Lewisburg, PA 17837 E-mail: kpage@bucknell.edu Telephone: 570-577-1124 FAX: 570-577-3537 Website:

http://www.bucknell.edu/department/biology Review of applications will begin on October 22, 2002. The search will remain open until the positions are filled. Bucknell University encourages applications from women and members of minority groups (Equal Employment Opportunity/Affirmative Action).

#### FACULTY POSITION Insect Neurobiology

The Arizona Research Laboratories, Division of Neurobiology, an interdisciplinary research and teaching unit in the University of Arizona devoted to behavioral, cellular, developmental, molecular, and systems neurobiology using insects as experimental models, invites applications for a tenure-track ASSIST-ANT PROFESSOR (see website: http://www. neurobio.arizona.edu/arldn/.

We expect to fill this position in 2003. While all areas of insect neurobiology are open to consideration, the fields of neuroethology, neurochemistry, neuropharmacology, and systems neurophysiology (particularly molecular and genetic studies of neural function in *Drosophila*) have priority in this search.

The successful candidate will be expected to conduct independent, externally funded. and productive research; teach undergraduate and graduate classes; supervise research trainces; and provide service to the Division and the University. Candidates must have a Ph.D. or equivalent degree, postdoctoral experience demonstrating commitment to and success in research, and teaching experience.

Review of applications will begin on 15 October 2002 and continue until the position is filled. Send curriculum vitae, list of publications, reprints of key papers, a statement of research and teaching accomplishments and future plans, and arrange for at least three letters of recommendation to be sent to: Faculty Search Committee, ARL Division of Neurobiology, University of Arizona, P.O. Box 210077, Tucson, AZ 85721-0077 U.S.A. E-mail: search@neurobio.arizona.edu.

The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer. Minorities/Women/ Disabled/Veterans.



#### Faculty Positions in Organic Chemistry University of Texas Southwestern Medical Center

The Department of Biochemistry at The University of Texas Southwestern Medical Center announces the availability of tenure-track appointments for Ph.D. level scientists having expertise in methods-based and/or targets-based synthetic chemistry. U.T. Southwestern maintains state-of-the-art facilities and employs a faculty including four Nobel Laureates and fifteen members of the National Academy of Sciences. The Biochemistry Department offers a vibrant environment for interdisciplinary research, strong start-up support, and participation in graduate-level teaching. For more information, visit http://biochemistry.swmed.edu.

Applicants should submit a curriculum vitae, a concise description of research plans (3 page limit) and three letters of reference by October 31, 2002 to: Steven L. McKnight, Chair, Department of Biochemistry, U.T. Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9038.

The University of Texas Southwestern Medical Center is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.





# STOWERS INSTITUTE PROTEOMICS

The Stowers Institute for Medical Research seeks more effective means of preventing and curing disease through basic research on genes and proteins that control fundamental processes of cellular life.

We are seeking an exceptional biochemist/protein chemist to lead the development of the Stowers Institute Proteomics Facility. Candidates should have demonstrated research capabilities in the use of mass spectrometry and related techniques for analysis of the structure and function of biologically important molecules and should be interested in establishing strong collaborative interactions with scientists at the Stowers Institute. Individuals with research interests in the development and application of improved methodologies for separation and analysis of biomolecules are particularly encouraged to apply. Minimum requirements are a Ph.D. degree in biochemistry, chemistry or a related area and two years of postdoctoral experience in protein biochemistry/proteomics; however, candidates at more senior levels of career development are strongly encouraged to apply.

Candidates should submit a curriculum vitae and the names and contact information of at least three references to:

Joan Conaway, Ph.D. Stowers Institute for Medical Research 1000 E. 50th Street Kansas City, MO 64110 or by e-mail at jlc@stowers-institute.org

More information may be found at:

### www.stowers-institute.org

The Stowers Institute is committed to equal opportunity in all its programs.



Myriad Proteomics is a biotechnology company focused on the discovery of protein-protein interactions and multi-protein complexes. The industrial scale characterization of protein interactions and complexes will lead to the discovery of novel therapeutic targets for numerous diseases.

We are seeing a uniquely qualified individual to help us with this challenging opportunity.

#### Sequencing Lab Manager, #2700-1121

You will coordinate all functions of the High Throughput Sequencing core facility, including automated sample preparation and operations of DNA sequencers, quality control, and sequence analysis. You should be proficient with sequencing reactions, PCR, and template purification, as well as familiar with DNA instruments/software and standard sequence analysis software.

You will develop, manage, and supervise a highly integrated, efficient, and cost effective production High Throughput Sequencing operation. You will assume an active leadership role, ensuring effective, timely, and maximal performance in areas such as production workflow processes and cost management; staffing, employee retention and development; human resources deployment; materials and production progress reporting and optimal utilization of equipment and resources in all areas will also be required.

You must have a B.S. or M.S. in Molecular Biology, Genetics, or related discipline, with 5 years' experience. You must also demonstrate extensive knowledge in genomics, proteomics, automation, and high-throughput technologies, production supervisory experience in a high throughput industrial setting, and demonstrated experience implementing high throughput sequencing operations.

If you would like to be part of a company that is pursuing this once-in-a-lifetime project, we invite you to forward your resume or CV via e-mail to: jobs@myriad-proteomics.com



Equal Opportunity Employer



#### **Faculty Positions** in Chemical and Structural Biology The Institute for Cellular and Molecular Biology Department of Chemistry and Biochemistry

The Institute for Cellular and Molecular Biology and the Department of Chemistry and Biochemistry invite applications for tenure track faculty positions at a rank commensurate with experience. Researchers who study nucleic acids or nucleic-acid protein interactions, and use X-ray crystallography as a research tool, are particularly encouraged to apply. Exceptional candidates in other areas will also be considered. The successful applicants will be expected to develop an aggressive research program, to participate in undergraduate and graduate education, and to contribute to a dynamic and interactive academic atmosphere. Chemical and Structural Biology are areas of emphasis within the Institute for Cellular and Molecular Biology headed by Dr. Alan Lambowitz. Exceptional start-up packages are available. Austin is located in the Texas hill country and is widely recognized as one of America's most beautiful and livable cities.

Candidates should submit a current curriculum vitae and a summary of research experience and future goals, together with at least three letters of recommendation. To assure full consideration applications should be received by October 18, 2002. Material should be sent to:

Dr. Jon Robertus Chair of the Search Committee Department of Chemistry and Biochemistry The University of Texas at Austin Austin TX 78712

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

#### PHARMACOLOGY FACULTY POSITION

The Division of Pharmacology, University of Missouri-Kansas City (UMKC) School of Pharmacy invites applications for a tenure-track position at the ASSIS-TÂNT/ASSOCIATE PROFESSOR level. Candidates should have a Ph.D. degree (preferably in pharmacology or toxicology), at least two years of postdoctoral experience, and will be expected to develop or continue an independent/fundable research program and contribute to the teaching of professional and graduate students. Candidates with research emphasis in the core areas of Kansas City life sciences initiative (aging and related diseases, neurodegenerative and cardiovascular diseases, cancer and infectious diseases) are encouraged to apply. Applications should be received by September 27, 2002. Review of applications will begin on October 1, 2002, and continue until the position is filled. This position is available beginning October 1, 2002. Faculty rank and salary will be commensurate with prior experience. Please mail a letter of intent, curriculum vitae, a statement of research and teaching objectives, and names and addresses of three references to: Dr. Yuen-Sum Lau, Chairman, Division of Pharmacology, UMKC School of Pharmacy, 2411 Holmes Street, M3-111, Kansas City, MO 64108. For inquiries: Telephone: 816-235-1798; e-mail: lauy@umkc.edu. UMKC is an Affirmative Action/Equal Opportunity Employer.

#### FACULTY POSITION Harvey and Bernice Jones Eye Institute University of Arkansas for Medical Sciences

The Department of Ophthalmology invites applications for a full-time, tenure-track position at the AS-SISTANT or ASSOCIATE PROFESSOR level to establish an independent research program with sustained extramural funding in the area of immunology/pathogenesis of corneal disease caused by virus infection (e.g., recurrent HSV-1 keratitis or adenovirus conjunctivitis or age-related macular degeneration). The successful candidate will hold a joint appointment in the Department of Microbiology and Immunology and augment the existing research programs of the Arkansas Center for Eye Research. A competitive start-up package with exceptional laboratory space in a modern ophthalmology research facility is available. Candidates must have a Ph.D. or M.D. degree and at least two years of postdoctoral experience. Review of applications will begin September 1, 2002, and continue until the position is filled. Candidates should send complete curriculum vitae, a statement of research interests and goals, and the names of three references to: Dr. Richard Dix, Ph.D., Jones Eye Institute, University of Arkansas for Medical Sciences, 4301 West Markham, Mail Slot 523, Little Rock, AR 72205. E-mail: dixrixhardd@ uams.edu.

#### FACULTY POSITION Molecular Biology

The Department of Biology at the University of Missouri-St. Louis invites applications for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level beginning August 2003. Applicants must have a Ph.D., postdoctoral experience, and a record of research accomplishments. Outstanding candidates whose research focuses on any area of molecular biology, cellular biology, microbiology, immunology, or virology will be considered. The successful candidate will be expected to establish a strong, externally funded research program; supervise graduate students; and teach undergraduate and graduate courses. Applicants should submit curriculum vitae, statement of research plans and teaching interests, and three letters of reference to: Shirley Bissen, Ph.D., Chair of Molecular Biology Search Committee, Department of Biology, University of Missouri-St. Louis, 8001 Natural Bridge Road, St. Louis, MO 63121-4499. Review of applications will begin in December 2002 and continue until the position is filled. Visit our website: http://www. umsl.edu/~biology. The University of Missouri-St. Louis is an Affirmative Action/Equal Opportunity Employer committed to excellence through diversity.

#### POSITIONS OPEN

The Department of Biochemistry, Duke University Medical Center, invites applications for a faculty position at the level of ASSIS-TANT PROFESSOR. We welcome candidates in all areas of biochemistry. The candidates will be expected to establish strong, independent research programs and to participate in departmental teaching. Send résumé, summary of research interest, and three letters of reference to: Christian R.H. Raetz, Department of Biochemistry, P.O. Box 3711, Duke University Medical Center, Durham, NC 27710. Consideration of applications will commence in November 2002. Duke University is an Equal Opportunity/Affimative Action Employer.

#### ENVIRONMENTAL CHEMIST Tenure-Track Faculty Position Bowdoin College

Bowdoin College invites applications for a tenuretrack position in environmental chemistry at the AS-SISTANT or ASSOCIATE PROFESSOR level beginning fall 2003. Postdoctoral experience preferred. The position is a joint appointment between the Environmental Studies Program and the Department of Chemistry and is open regarding areas of specialization. We are seeking applicants committed to undergraduate education and an interdisciplinary approach to environmental science in a program that stresses student/faculty research. The successful candidate will normally teach three courses (some with laboratories) each year and contribute to the environmental studies and chemistry curriculum at both the introductory and advanced level. Applicants must demonstrate the potential to develop a strong, productive, externally funded research program that engages undergraduates. Opportunities exist for working at the College's nearby Coastal Studies Center. Bowdoin is a highly selective, coeducational undergradute liberal arts college located two and a half hours north of Boston, Massachusetts, on the Maine coast. Further information is available at websites: http://academic.bowdoin.edu/chemistry/ and http://academic.bowdoin.edu/environmental studies/

Review of applications will begin October 15, 2002. Please send curriculum vitae, a summary of proposed research, a statement on teaching philosophy, and arrange for three letters of recommendation to be sent to: Elizabeth A. Stemmler, Chair, Department of Chemistry, 6600 College Station, Bowdoin College, Brunswick, ME 04011-8466.

Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and minorities are especially encouraged to apply.

#### FACULTY POSITION Rice University Department of Biochemistry and Cell Biology

Applications or nominations are invited for an anticipated open-rank faculty position in cell and developmental biology, biochemistry, genetics, or related areas. Model systems can include any animal, plant, or microbial organism. Candidates must have completed a Ph.D., have postdoctoral training, and exhibit outstanding potential in research and teaching. The successful candidate will be expected to develop and maintain a vigorous research program supported by extramural funding and participate in graduate and undergraduate teaching. Review of submitted applications will commence on November 1, 2002, and continue until the position is filled. Please send letter of application, curriculum vitae, summary of past research and statement of future research plans, and arrange for four letters of reference to be sent to:

Faculty Search Committee Department of Biochemistry and Cell Biology Rice University, MS-140 P.O. Box 1892 Houston, TX 77251-1892

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

#### POSITIONS OPEN

#### JUNIOR FACULTY POSITION Section of Immunobiology Yale University

The Section of Immunobiology seeks applicants for a Junior Faculty position. Qualified applicants in all areas of immunobiology are invited to apply. We are particularly interested in candidates who will complement the existing faculty. Research interests represented within the Section of Immunobiology include innate immunity; lymphocyte activation, differentiation, and tolerance; T and B lymphocyte development; antigen processing and presentation; signal transduction; transcriptional regulation; cytokines; immunoglobulin gene rearrangement; and autoimmunity. Candidates are expected to develop an independent research program and to participate in departmental teaching. A candidate's application package must include curriculum vitae, a summary of present and future research interests, and three letters of recommendation. Completed applications should be received at the address below no later than January 1, 2003.

Kim Bottomly, Ph.D. Chair, Search Committee Section of Immunobiology Yale University School of Medicine P.O. Box 208011 New Haven, CT 06520-8011

An Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply. The Section of Immunobiology is committed to increasing representation of members of minority groups and women on the faulty and particularly encourages applications from such candidates.

#### TENURE-TRACK POSITION BIOLOGY

The Biology Department of Hobart and William Smith Colleges invites applications for a tenure-track position in biology at the level of ASSISTANT **PROFESSOR**. Individuals with broad experience in using molecular approaches to address biological questions are encouraged to apply. Responsibilities include participating in the introductory cells and molecular biology, a course in the candidate's specialty that complements the Department's offerings, and contributing to the Colleges' general curriculum.

Successful candidates will be expected to demonstrate excellence in teaching and establish a productive research program that involves undergraduates. Applicants must have a Ph.D. by the starting date. Hobart College for men and William Smith College for women are coordinate residential colleges that share a campus on Seneca Lake in the Finger Lakes region of New York. For more information, see the departmental website: http://www.hws.edu/aca/depts/bio/index.html. Applicants should send curriculum vitae, statements of teaching philosophy and research interests, official tran-scripts for all degrees received, and three letters of reference to: Dr. David Droney, Biology Department, Hobart and William Smith Colleges, Geneva, NY 14456. E-mail: droney@hws.edu; Telephone: 315-781-3597; FAX: 315-781-3860. To ensure full consideration, applications should be received by 15 October 2002. Hobart and William Smith value diversity and especially encourage applictions from women and minorities.

UNIVERSITY OF SOUTHERN CALIFORNIA. The Department of Chemistry of the University of Southern California invites applicants for a tenure-track position at the level of ASSISTANT or ASSOCIATE PROFESSOR in inorganic chemistry to start in the fall of 2003. We are interested in candidates in all areas of inorganic chemistry including nanoscience, bioinorganic/biomaterials, and related interdisciplinary fields. Evidence of outstanding research accomplishments and potential as a scholar and dedicated teacher is essential. Interested candidates should send curriculum vitae, a detailed description of research plans, and three letters of recommendation to: Professor Mark Thompson, Inorganic Chemistry Search Committee, Department of Chemistry, University of Southern California, Los Angeles, CA 90089-0744. We will begin evaluation of applications on October 14, 2002. USC is an Equal Opportunity/Affirmative Action Employer.



### University of Calgary Research Prize for Schizophrenia Research

On behalf of the Novartis Chair in Schizophrenia research, the Faculty of Medicine at the University of Calgary is pleased to announce a Research Prize of \$2,000US to be awarded for outstanding research on Schizophrenia or Psychosis. In addition to receiving the Award, the recipient will present a research seminar, as well as a lecture to the general public in Calgary. Applicants are requested to submit a current curriculum vitae to:

Dr. Gerald W. Zamponi, Novartis Chair for Schizophrenia Research, University of Calgary, Department of Physiology and Biophysics 3330 Hospital Dr. N.W., Calgary, AB T2N 4N1 zamponi@ucalgary.ca

The recipient will be chosen by a panel comprised of both basic and clinical researchers. The deadline for applications is November 15, 2002.





### PHYSIOLOGY UCLA

#### **Assistant Professor**

The **Department of Physiology** at the **David Geffen School of Medicine at UCLA** invites applications for a tenure track faculty position, preferably at the level of Assistant Professor.

We are especially interested in candidates in molecular physiology with interests in functional genomics, proteomics, or transgenics. Candidates are expected to have a strong background in cellular and molecular biology and a demonstrated interest in the study of physiological systems in model organisms. However, we will consider applicants in all areas of modern physiology.

The successful candidate will be expected to develop an independent research program and participate in the teaching mission of the Department for medical, dental, and graduate students.

Interested applicants should email their curriculum vitae, a letter with a statement of research interests and career goals, and the names of three references to:

Dr. Ernest Wright at PhysiologySearch@mednet.ucla.edu.

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

# medicine

seeks a **News Editor** to join its full-time editorial group in New York City.

The successful candidate will have an innate appreciation of cuttingedge topics in the field of biomedical research. He or she will not only understand the molecular aspects of disease and possible treatments, but will also know how to gain the trust and comment of the world's leading research experts. Moreover, he or she will be able to gain insight into the financial and political aspects of a particular research field. Every month the News editor will be able to deliver a News section for the community that is proactive and not reactive. In overseeing the News section, the editor will determine which stories from the biomedical community are most relevant for a monthly news section, commission and edit stories from a team of freelance writers around the world, and also report and write some of the articles.

The candidate will be required to have completed a PhD in biomedical research with broad-based interest and expertise in the areas covered by *Nature Medicine*. The ideal candidate will also have journalism experience and outstanding writing and oral communication skills. Along with managing the News section, he or she will commission Commentaries and Reviews, write some Editorials and write the journal's press releases. He or she will attend meetings and conferences and maintain acquaintance with the international scientific community and press.

Please submit a curriculum vitae, a concise cover letter explaining your interest in the post, and a sampling of recent articles you have written to:

The Editor, Beatrice Renault, *Nature Medicine* 345 Park Avenue South, New York, NY 10010-1707 (fax: (212) 683-5751; email: medicine@natureny.com)

The deadline for application is 30 September 2002.



# Universität Heidelberg

In der Fakultät für Biowissenschaften/Studienbereich Molekulare Biotechnologie ist am Institut für Pharmazie und Molekulare Biotechnologie der Universität Heidelberg die

# C 3-Professur für "Funktionelle Genomik"

erstmalig zu besetzen.

Der (die) Stelleninhaber(in) soll die Lehre im Bereich der funktionellen Genomik im Fach Pharmazie und im BSc/MSc-Studiengang Molekulare Biotechnologie erbringen und in der Forschung auf einem aktuellen Gebiet der Fachrichtung ausgewiesen sein.

Es wird erwartet, dass erfolgreiche Bewerberinnen und Bewerber drittmittelfinanzierte Forschungsprojekte etablieren. Bereitschaft zur interdisziplinären Zusammenarbeit und zur Mitarbeit in zentralen wissenschaftlichen Einrichtungen der Universität wird erwartet. Eine Beteiligung am Graduiertenkolleg "Biotechnologie: Biochemische und molekulare Grundlagen" ist erwünscht.

Die Stelle steht unbefristet zur Verfügung. Bei der ersten Berufung in ein Professorenamt ist das Dienstverhältnis gemäß § 67 Abs. 1 UG grundsätzlich zu befristen. Ausnahmen sind insbesondere möglich, wenn Bewerber/innen aus dem Ausland oder aus dem Bereich außerhalb der Hochschulen sonst nicht gewonnen werden können. Soll das Dienstverhältnis nach Fristablauf fortgesetzt werden, bedarf es nicht der erneuten Durchführung eines Berufungsverfahrens.

Die Ruprecht-Karls-Universität ist bestrebt, den Anteil der Frauen am wissenschaftlichen Personal zu erhöhen.

Bewerbungen mit Lebenslauf, Zeugnissen, Urkunden, Schriftenverzeichnis, Kopien von den 5 wichtigsten Publikationen, Darstellung der Forschungsgebiete und Drittmitteleinwerbungen und Nachweis der Lehrerfahrung werden bis zum **01.10.2002** an Prof. Dr. M. Wink, Vorsitzender der Berufungskommission, Institut für Pharmazeutische Biologie der Universität Heidelberg, Im Neuenheimer Feld 364, 69120 Heidelberg (e-mail: <u>wink@uni-heidelberg.de</u>) erbeten.

ASSISTANT PROFESSOR of biochemistry. McDaniel College, founded as Western Maryland College, a selective, private, liberal arts and sciences college located near Baltimore, Maryland, and Washington, D.C., invites applications for a tenuretrack position at the level of Assistant Professor to begin in August 2003. Ph.D. in biochemistry or a related field and a demonstrated potential for excel-lence in teaching are required. Teaching responsibilities for this position will include continuing development of a two-semester biochemistry sequence with laboratories and participation in both introductory chemistry and the development of a course designed for nonscience majors. The successful candidate will be expected to develop and sustain an active undergraduate research program in experimental biochemistry and have a commitment to attracting external funding. Submit a letter of application, curriculum vitae, philosophy of teaching and research at a liberal arts and sciences college, academic transcripts, and three letters of recommendation to: Chair, Biochemistry Search Committee, Office of Academic Affairs, McDaniel College, 2 College Hill, Westminster, MD 21157. Review of applications will begin on October 15, 2002, and will continue until the position is filled. Questions about the position may be directed by e-mail: chemsrch@mcdaniel.edu. McDaniel College is an Affirmative Action/Equal Employment Opportunity and an award-winning Americans With Disabilities Act Employer. Women and minorities are encouraged to apply.

The Vanderbilt Institute of Chemical Biology (VICB) and the Department of Chemistry at Vanderbilt University are seeking applicants for a tenured position at the level of ASSOCIATE PROFESSOR or above or a tenure-track position at the level of ASSISTANT PROFESSOR. A goal of the VICB is to build on institutional strengths in proteomics, structural biology, and toxicology and interface with world-class centers in cancer, diabetes, and clinical pharmacology by the application of organic chemistry, e.g., bio- or synthetic organic chemistry to relevant biological problems. Individuals who bridge the chemistry-medicine interface are of particular interest. Junior candidates are expected to develop a vigorous, internationally recognized research program, whereas senior candidates will already have established such a program. Successful candidates must demonstrate a commitment to excellence in teaching in the graduate and undergraduate programs of the Department of Chemistry. Applications will be evaluated on a rolling basis and the search will continue until filled. Senior applicants should submit curriculum vitae to: Professor Ned A. Porter, Chair of the Search Committee, Vanderbilt Institute of Chemical Biology, Department of Chemistry, 7332 Stevenson Center, Vanderbilt University, Nashville TN 37235. Junior applicants should submit curriculum vitae and summaries of research and teaching plans. Vanderbilt University is an Equal Employment Opportunity/Affirmative Action Employer.

INVERTEBRATE ZOOLOGIST. Tenure-track position; ASSISTANT PROFESSOR beginning August 2003. Ph.D. required. Preference given to applicants with university/college teaching experi-ence, postdoctoral experience, record of publication and external funding, and an active research program involving invertebrates. Teaching responsibilities will include general zoology, advanced courses, and may include introductory nonmajors courses. The successful candidate will be expected to develop a research program involving undergraduates and Master's-level students. Demonstrable commitment to the teacher/ scholar model, public and University service, and a culturally diverse learning environment required. Applicants should send letter of application; curriculum vitae; undergraduate and graduate transcripts; three reference letters; and statements of teaching philoso-phy and research interests by November 15, 2002, to: Dr. C. T. Train, Department of Biology, South-east Missouri State University, Cape Girardeau, MO 63701. An Equal Opportunity/Minorities/Females/ Affirmative Action Employer.

#### POSITIONS OPEN

#### DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY Denison University

Two tenure-track faculty positions. The Department of Chemistry and Biochemistry at Denison University invites applications for two tenure-track positions at the ASSISTANT PROFESSOR level to begin in August 2003. Position One: Organic Chemist will include teaching responsibilities in introductory chemistry and organic chemistry. Position Two: Analytical Chemist will include teaching responsibilities in introductory chemistry and analytical/instrumental analysis. The successful candidates should be committed to excellence in scholarship and teaching in the context of a liberal arts environment. The Department has excellent facilities, computer resources, and instrumentation for teaching and research in all areas of chemistry and biochemistry. Instrumentation is available for separations (GC/MS and other GC methods, HPLC, electrophoresis); spectroscopy (FT-NMR, FT-IR, UV-vis, AA, and ICP-AES); and molecular modeling (SGI workstations) as well as surface microscopy and powder X-ray. Applicants should have earned a Ph.D. Postdoctoral experience is desirable. Applicants should submit current curriculum vitae, statements of teaching philosophy and research interests, and undergraduate and graduate transcripts. The applicant must also arrange for three letters of recommendation to be sent directly to the Department. The recommendation letters should speak to the candidate's experience as a teacher and potential for developing a research program. All materials should be sent to: Charles W. Sokolik, Chair, Department of Chemistry and Biochemistry, Ebaugh Laboratories, Denison University, Granville, OH 43023. Information about the University and the Department is available at the University's website: http://www.denison.edu. Our review of completed applications will begin October 15, 2002, and continue until the positions are filled. Requests for additional information may be sent by e-mail: sokolik@denison.edu. Denison University is an Affirmative Action/Equal Opportunity Employer and it encourages applications from women and members of minority groups.

#### FACULTY POSITION NEUROSCIENCE Department of Neuroscience University of Connecticut Health Center

The Department of Neuroscience at The University of Connecticut Health Center invites applications for tenure-track faculty position at the **ASSISTANT PROFESSOR LEVEL**. The new department has a strong commitment to excellence in research, scholarship, teaching of medical and graduate students, training health professionals at many levels, and community service. We are particularly interested in applicants with strong credentials in cellular and molecular approaches to genetic diseases of the nervous system, complementary to our departmental strengths (website: http://neuroscience.uchc.edu). Applicants are expected to have a Ph.D. in relevant basic sciences or an M.D. with appropriate training. In addition, applicants should have at least three years of postdoctoral experience; the demonstrated ability to develop a strong, competitive, and independent state-of-the-art research program to sustain extramural funding; and a plan for contribution to the teaching of medical and graduate students. Electronic applications are strongly encouraged; applicants should submit a copy of their curriculum vitae, reprints of two representative publications, a one-page statement of scientific goals and plans, and three letters of reference to: Chair, Search Committee, Department of Neuroscience, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3401. E-mail: neurosciencejob@nso.uchc.edu. Applications will be accepted until November 30, 2002.

The University of Connecticut is an Equal Opportunity/ Affirmative Action Employer. Women and people from diverse racial, ethnic, and cultural backgrounds are strongly encouraged to apply.

#### POSITIONS OPEN

#### ASSISTANT PROFESSOR Natural Resource Planning

Applications are invited for an Assistant Professor. tenure-track academic year appointment in the Department of Forestry and Natural Resources at Purdue University with research (major) and teaching responsibilities. Duties: Develop a nationally recognized research program, which examines how landuse decisions are made and key factors influencing those decisions. He/she will also teach an undergraduate course in natural resource and environmental planning, participate in the teaching of the capstone course for undergraduates, and teach a graduate course appropriate to research interests. Qualifica-tions: Candidates should have a combination of degrees or the equivalent in one of the natural resource sciences, regional planning (or the equivalent), and one of the social sciences. One of the degrees must be a Ph.D. International experience is desirable. Application: Applicants should submit a letter of application, a résumé, transcripts, copies of leading publications, and separate statements of teaching philosophy and research interest. In addition, applicants should arrange to have at least three letters of reference sent. Applications will be accepted through November 30, 2002, or until a suitable candidate is found. Inquiries, applications, nominations, and letters of reference should be sent to: Dr. William L. Hoover, Chair, Natural Resource Planner Search Committee, Department of Forestry and Natural Resources, 1159 Forestry Building, Purdue University, West Lafayette, IN 47907-1159. Telephone: 765-494-3580; FAX: 765-496-2422; e-mail: billh@fnr.purdue.edu.

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

The Waksman Institute of Rutgers, The State University of New Jersey, invites applications for a tenure-track ASSISTANT PROFESSOR position from individuals involved in structural and mechanistic studies of macromolecular machines responsible for fundamental biological processes including recombination, replication, transcription, splicing, and translation. We are especially interested in applicants whose research will involve microbial systems, X-ray crystallography, cryoelectron microscopy, and/or novel biophysical approaches. We seek individuals with demonstrated ability and commitment to conduct cutting-edge basic research and who have an interest in teaching at the undergraduate and graduate levels. Applications should include curriculum vitae, a publication list, a brief description of research plans, and confidential letters of reference from at least four professional references. Applications should be directed to: Dr. Richard H. Ebright, Chair, Macromolecular Machines Search Committee, Waksman Institute, Rutgers University, 190 Frelinghuysen Road, Piscataway, NJ 08854-8020. Rutgers University is an Equal Opportunity/Affirmative Action Employer.

BIOLOGY. Berry College has an opening starting August 2003 for a tenure-track ASSISTANT PRO-FESSOR of biology. Priority will be given to candidates with interest in teaching courses in cell and molecular biology. Successful candidates will be expected to develop a strong undergraduate research program. Those using molecular tools in the areas of biomedicine, developmental biology, animal physiology, or neurobiology are particularly encouraged to apply. Send cover letter, curriculum vitae, statement of teaching and research interests, and three letters of reference to: Dean, School of Mathematical and Natural Sciences, Berry College, Mount Berry, GA 30149-5036. Application deadline: 1 November 2002. Please visit our website: http://www2.berry.edu/ academics/science/. Berry College, located on 28,000 acres near Rome, Georgia, is an independent coeducational college with approximately 2,000 undergraduate and graduate students. The college's mission stresses academic excellence, practical work experience, and an interdenominational religion-inlife program. Equal Opportunity Employer.



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Università degli Studi di Milano and Agenzia Sviluppo Nord Milano invite applications for UNIMPRESA, a project aimed at encouraging researchers to adopt a business minded approach.

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Deadline: October 15, 2002.

For further information: Università degli Studi di Milano http://ricerca.unimi.it/spinoff/ Tel. ++39-02-50312754 e-mail: progetto.spinoff@unimi.it

Agenzia Sviluppo Nord Milano

www.asnm.com Tel. ++39-02-26266507 e-mail: spinoff@asnm.com

The project Unimpresa is supported by Regione Lombardia, Italian Government and the European Commission (ESF)









### Symposium on the Eukaryotic Nucleus **Coolfont Conference Center** Berkeley Springs, WV. March 8-11 2003

You are invited to the Third Symposium on the Eukaryotic Nucleus, a DHHS/NIH/NICHD sponsored conference concerning the cell and molecular biology of the nucleus. Confirmed speakers include:

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A single fee (\$483.84 single; \$451.14 double) covers registration, accomodation and shuttle bus travel from and to Dulles Airport. Applications deadline: Dec 1, 2002. Further information and registration at http://eclipse.nichd. nih.gov/nichd/lgrd/symposium/index.php. Or contact Ms. Jane Lin, LGRD/NICHD, Bldg 18T, Rm 106, MSC5431, Bethesda, MD 20892, USA Tel: 301 402 2722, Fax: 301 402 1323, E. mail: linja@mail.nih.gov

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School Ohio Northern University State University of N.Y., Buffalo University of Pittsburgh

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School Clemson University Colorado State University Duke University Florida A&M University Fordham University Harvard University Ithaca College McNeese State University Pennsylvania State University Stonehill College University of Maine University of Miami University of Rochester University of the Pacific Worcester Polytechnic Institute

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School Brandeis University Brandeis University Florida Institute of Technology Middlebury College Northwestern University Northwestern University University of Connecticut University of New Hampshire University of Utah Vanderbilt University

# COMPUTATIONAL CHEMISTRY

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School **Emory University** Hamilton College Harvard University New York University

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School Central Connecticut State University Clark University Juniata College Pennsylvania State University Saint Joseph College State University of N.Y., New Paltz University of Illinois University of Illinois University of Utah Vanderbilt University

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**EETINGS and ANNOUNCEMENTS** 

### GRANTS

# **Creating the future** of biotech–Together

**Invitrogen's Research Tools Development Grants Program** provides funding for investigators developing innovative tools for use in life science research, including investigators working in academics, not-for-profit institutions, and for-profit companies. Total funding is US\$5 million per year, with annual individual awards of up to US\$100,000. Grants are provided quarterly; each quarter focuses on a specific field of interest.

Fourth quarter 2002 funding is for the area of **amplification**, **labeling and quantitation** of nucleic acids—including proposals for the *in vitro* or *in vivo* applications of detection, expression, hybridization, microarrays, and screening. Deadline for full Grant Proposals is December 1. A preproposal is required prior to submitting a Grant Proposal. For more information, visit www.invitrogen.com, e-mail grants@invitrogen.com, or call 800 955 6288, ext. 66140 (760 476 6140).

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### AWARDS

#### Harold M. Weintraub Graduate Student Award

The Fred Hutchinson Cancer Research 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 fourth annual Award Symposium will be held May 2-3, 2003. 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 CV, a one page description of the thesis work conducted, and a recommendation letter from the student's mentor. Additional information concerning the Award and nomination process can be found at http://www.fhcrc.org/science/basic/weintraub.html. The nomination should be submitted by December 16, 2002 to:

Harold M. Weintraub Graduate Student Award Fred Hutchinson Cancer Research Center Division of Basic Sciences; A2M-015 1100 Fairview Avenue North Seattle, WA 98109-1024

Questions regarding this Award should be addressed to Susan Parkhurst (susanp@fhcrc.org) or Mark Groudine (markg@fhcrc.org).



### FOURTH ADVANCED VACCINOLOGY COURSE (ADVAC-4)

Veyrier-du-Lac (near Annecy, French Alps)

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The course aims to facilitate critical decision making in vaccinology by providing participants with a comprehensive overview of the field.

#### Who should apply ?

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The course is organized by the Fondation Mérieux, with the co-sponsorship of

Children's Vaccine Program at PATH, European Commission CDC, ESPID, EVM, IARC, NFID, NIAID, WHO, University Geneva, Institut Pasteur, Fogarty International Center, Johns Hopkins Bloomberg School of Public Health

Deadline for applications: 15 November 2002

#### Information: www.fond-merieux.org

#### FACULTY POSITIONS

The Biological Sciences Department at California Polytechnic State University is seeking two tenuretrack positions at the **ASSISTANT PROFESSOR** rank beginning September 2003 as listed below.

MICROBIOLOGIST with an emphasis in virology (Recruitment Code Number 4518). Primary teaching responsibilities will include virology, introductory microbiology, and other undergraduate and graduate courses as appropriate to background and training.

CONSERVATION BIOLOGIST, terrestrial vertebrate (Recruitment Code Number 4520). Primary teaching responsibilities include courses in conservation biology, wildlife biology, and/or terrestrial vertebrate biology and other undergraduate and graduate courses as appropriate to background and training. Experience in wildlife habitat modeling, endangered species management, remote sensing, GIS, and/or metapopulation ecology is desired.

The successful candidates must have a strong commitment to undergraduate teaching, curriculum development, and implementation of a studentcentered research program. Ph.D. in related field required at time of hiring. Postdoctoral or equivalent experience desirable. Salary is commensurate with qualifications and experience. Review of applicants will begin October 15, 2002; applications received after this date may still be considered.

Applicants should submit curriculum vitae, statement of teaching philosophy, statement of professional goals, Cal Poly Faculty Applicant Information form, and arrange to have official graduate transcripts and three letters of recommendation sent to: Dr. V. L. Holland, Chair, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA 93407. Telephone: 805-756-5241; e-mail: rwagner@calpoly.edu with your mailing address to request a Cal Poly Faculty Applicant Information form. Refer to Recruitment Code Number 4518 (Microbiologist) or Recruitment Code Number 4520 (Conservation Biologist) on all correspondence. For more information, visit our website: http://www.bio.calpoly.edu. Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of all qualified individuals. Equal Employment Opportunity Employer.

#### ASSISTANT PROFESSOR OF BIOLOGY Amherst College

The Biology Department of Amherst College invites applications for a tenure-track position at the Assistant Professor level for an Organismal Biologist. We desire candidates who study behavioral, physiological, or environmental questions involving animals or microbes in terrestrial, freshwater, or marine systems in order to complement our existing strengths in plant organismal biology. Teaching duties include participation in a team-taught, introductory organismal course with laboratory and two upper-level courses in the candidate's area, one with laboratory. Ph.D. is required and postdoctoral experience is preferred. Send curriculum vitae and a statement of research and teaching interests to: Organismal Biologist Search Committee, Department of Biology, Amherst College, Amherst, MA 01002-5000. Have three letters of recommendation sent separately. Review of applications will begin on October 15, 2002, and continue until the position has been filled. Further information on the Department can be found at website: http://www.amherst.edu/~biology.

Amherst College is a private, undergraduate liberal arts college for men and women with 1,600 students and 165 faculty. Located in the Connecticut River Valley of western Massachusetts, Amherst participates with Hampshire, Mount Holyoke, and Smith Colleges and the University of Massachusetts in the Five College Consortium. Amherst College is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities, and persons with disabilities to apply.

#### POSITIONS OPEN

#### MONTGOMERY COLLEGE A Two-Year Public Community College Campuses at Takoma Park, Rockville, and Germantown, Maryland

Montgomery College is seeking applications for full-time physics faculty for the spring 2003 semester subject to final budget approval. Physics: Position 2108, Takoma Park Campus. Required: A Master's degree or Doctorate in modern physics (nonhealthrelated), engineering, or a related field with coursework in graduate-level physics. Position requires the teaching of physics including laboratory and one or more other fields in the Physical Science Department such as physical science, astronomy, chemistry, engineering, geology, or geography. Community college teaching experience in a multicultural setting. For more details, please visit our website: http://www. montgomerycollege.edu/employment. Click on faculty vacancies.

Faculty application requirements: All applicants must submit the following documents: a completed Montgomery College faculty application, curriculum vitae or résumé, and unofficial undergraduate and graduate transcripts. Incomplete applications will not be considered. The faculty application can be obtained by accessing our website: http://www. montgomerycollege.edu/employment; by calling our 24-hour job line at Telephone: 301-279-5374; or by coming to: Office of Human Resources, Montgomery College, 900 Hungerford Drive, Suite 130, Rockville, MD. Applications must be received by 5 p.m. on October 4, 2002.

Part-time faculty: Currently accepting faculty applications for part-time openings dependent upon enrollment. Montgomery College is an Equal Opportunity Employer committed to fostering a diverse academic community among its student body, faculty, and staff.

#### ASSISTANT PROFESSOR, ASTROBIOLOGY University of North Dakota

The Department of Space Studies is seeking a tenure-track Assistant Professor (entry-level) position in the broad area of astrobiology. A Ph.D. in a relevant discipline is required at the time of hire. Areas of potential focus include the origin or modification of prebiotic compounds in the early solar system and solar nebula, the inventory of potential solar system or solar nebula sources of such materials, the delivery of such materials to the early Earth, and/or the effects of inorganic extraterrestrial materials on the origin of life. The successful candidate will be one that will develop an active, externally funded research program and contribute to the interdisciplinary teaching focus of the Space Studies Department. Ongoing contact with the space community and broad teaching experience is desirable. Please see website: http://www. space.edu/ for more details.

Send a letter of application; curriculum vitae; teaching, research, and service statements; and names and contact information for three references to: Chair of Astrobiology Search Committee, Department of Space Studies, University of North Dakota, P.O. Box 9008, Grand Forks, ND 58202-9008 U.S.A. B-mail: search@space.edu. Review of applications will begin November 1, 2002, although the position will remain open until filled. UND is an Equal Opportunity/Affirmative Action Employer.

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#### POSITIONS OPEN

#### FACULTY POSITION IN PHYSIOLOGY University of Michigan Medical School

The Department of Molecular and Integrative Physiology at the University of Michigan seeks to fill a tenure-track faculty position (ASSISTANT/ASSO-CIATE PROFESSOR). Applications are invited from individuals using genetic manipulation and functional measurements to study the function and integration of gene products in a tissue or animal. The selected individual is expected to mount a vigorous research program and participate in the teaching of graduate and professional students. Applicants will be considered for appointment as a Biological Sciences Scholar at Michigan (see Science 297(5585):1411, 2002) and will receive a very generous start-up package. The individual will also participate in the Center for Integrative Genomics, which features facilities for sophisticated functional measurements in mice. The Medical School possesses an outstanding transgenic animal facility and the University is developing a new Life Sciences Institute, which will contribute to the superb research environment. Applicants should submit their curriculum vitae, a two-to-four-page summary of past and planned research, and three letters of recommendation to:

Dr. John A. Williams Chair, Department of Molecular and Integrative Physiology University of Michigan Ann Arbor, MI 48109-0622 E-mail: jawillms@umich.edu Website: http://www.med.umich.edu/phys/ The University of Michigan Medical School is an Affirmative Action/Equal Opportunity Employer.

#### FACULTY POSITIONS GENOME RESEARCH INSTITUTE

The Genome Research Institute (GRI) at the University of Cincinnati invites applications for tenure-track positions (ASSISTANT/ASSOCIATE/ FULL PROFESSOR). GRI is located on a separate 24-acre campus and features spacious state-of-theart laboratories and animal facilities. GRI faculty will have access to modern core facilities for genomics, proteomics, transgenic and gene knockout mice, and mouse phenotyping; an active graduate program; and opportunities to collaborate with basic and clinical Scientists in the College of Medicine. We are committed to developing a world-class genomic science program for studying complex physiological traits and disease processes. During the next several years, we plan to recruit 10 new faculty who will join with selected existing faculty to bring GRI membership to 40-50 Investigators. Individuals with research programs in neuroscience, endocrinology, cardiovascular/pulmonary biology, and/or cancer and who utilize zebrafish, C. elegans, or Drosophila in their research program are especially encouraged to apply. Salaries are competitive and the benefits package is very generous. Submit curriculum vitae, a description of research, and names of three references to:

> David E. Millhorn, Ph.D. Director, Genome Research Institute Chair, Department of Genome Science University of Cincinnati P.O. Box 670505 Cincinnati, OH 45267-0505

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#### RESEARCH POSITIONS Harvard Medical School

(1) SENIOR IMMUNOLOGIST. Senior Fellow/potential junior faculty. Expert in T cell biology, immunotherapy to oversee immuno-gene therapy group. (2) IMMUNOLOGY POSTDOCTOR-ALS: tumor expression library cloning, Ab phage display, animal models, GvH, TCR cloning. (3) GE-NETICS POSTDOCTORAL: gene expression, TFs, EMSAs, functional assays. Send résumé, names of three references by FAX to: Dr. R. P. Junghans; FAX: 617-432-7007.



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Pintex Pharmaceuticals is an early stage, privately held life science company focused on the discovery of new cancer diagnostic and therapeutics. We are looking for a highly motivated Ph.D. with a strong background in protein X-ray crystallography with zero to two years of postdoctoral experience. The positions will focus on the structure-aided design of therapeutic compounds. Must be willing to travel for data collection at outside facilities. Knowledge in medicinal chemistry and/or computational modeling is a plus. Join our team and gain valuable industrial experience along with an attractive benefit and compensation package. The position is immediately available. Please send your curriculum vitae and names of references to:

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E-mail: humanresources@pintexpharm.com No telephone calls, please. Equal Opportunity Employer.

#### FACULTY POSITION YALE UNIVERSITY Department of Molecular Biophysics and Biochemistry

The Department of Molecular Biophysics and Biochemistry at Yale University seeks applicants for positions at the **ASSISTANT PROFESSOR** level in the areas of X-ray crystallography or molecular biophysics. Our department, which is located in both the Faculty of Arts and Sciences and the School of Medicine of the University, spans a broad range of areas including biochemistry, biophysical chemistry, structural biology, molecular biology, and molecular genetics. Applications should include curriculum vitae, a statement of research interests, three letters of reference, and reprints or preprints. Completed applications should be sent to:

Faculty Search Committee (Biophysics) Department of Molecular Biophysics and Biochemistry Yale University 260 Whitney Avenue P.O. Box 208114 New Haven, CT 06520-8114 Telephone: 203-432-5593

Application deadline: October 31, 2002. Yale University is an Affirmative Action/Equal Opportunity Employer.

The Department of Pharmacology and Experimental Therapeutics at Boston University School of Medicine invites applications for a FACULTY POSI-TION (open rank). Individuals with an interest in applying the pharmacological principles to contemporary problems in neuroscience or in integrating neural systems with molecular pharmacology by utilizing chemical, molecular biological, behavioral, or electrophysiological techniques are encouraged to apply. The Department has strengths in a broad range of research areas including molecular, cellular, and behavioral pharmacology as well as in neurodegenerative diseases. The Department also has a very active graduate training program. The successful applicant should have a demonstrated ability to establish an externally funded research program, to train graduate students/Postdoctoral Fellows, and participate in the teaching activities of the Department. Interested individuals should send their curriculum vitae, reprints of three publications, a list of references, and a statement of current interests and future goals to: Dr. David H. Farb, Chairman, Department of Pharmacology and Experimental Therapeutics, Boston University School of Medicine, 715 Albany Street, Boston, MA 02118. An Equal Opportunity/ Affirmative Action Employer.

#### POSITIONS OPEN

#### COMPUTATIONAL AND SYSTEMS BIOLOGY EDUCATION Massachusetts Institute of Technology (MIT)

Seeking an innovative, energetic Master's or Ph.D.level Scientist to serve as CURRICULUM DEVEL-**OPMENT INSTRUCTOR** for MIT's new initiative in computational and systems biology. This two-year position emphasizes career development and will involve working with faculty to formulate, implement, and teach concepts in computational biology, bioinfor-matics, protein structure modeling, biological net-works, data processing, databases, and related subjects. Candidates must have a strong background in biology; experience in several of the areas mentioned above; and excellent math, computer, and Web skills. The job will involve preparation of both traditional and Web-based homework, lecture, and recitation materials and an active role in administering and providing supplementary teaching for two courses. Responsibilities will include instructing biology students in UNIX, Perl, and the use of Web-based computational biology tools. The fulltime position offers flexible scheduling and the opportunity to participate in a nascent Biology Curriculum Development group as well as interaction with research groups in the Departments of Biology, Bioengineering, and Electrical Engineering and Computer Science. To apply, send a statement of career goals and relevant experience, curriculum vitae, and three letters of recommendation to: Mary Markel Murphy, MIT Biology Department, MIT 68-132, 77 Massachusetts Avenue, Cambridge, MA 02139.

#### HUMAN GENETICS AT UCSD University of California San Diego School of Medicine

Professional RESEARCH SCIENTIST or PRO-FESSORIAL position available at the University of California, San Diego, in the Department of Medicine, Division of Nephrology/Hypertension. UCSD wishes to recruit an individual with experience in experimental genome technologies to assist our effort in characterizing allelic variants underlying human diseases and disease drug responses (pharmacogenetics). Professorial appointments will carry teaching responsibilities. Series/rank of appointment commensurate with experience and salary based on established UCSD salary scales. Qualifications include a Ph.D. degree and practical experience in applying such human genome technologies as genotyping (SNP and/ or microsatellites) or genomic DNA sequencing to discover SNPs. Reply by September 20, 2002, or until position is filled. Interested applicants should send a letter of interest, curriculum vitae, and names of three references to: Dr. Daniel T. O'Connor, UCSD and San Diego Health Care System MC111-H, 3350 La Jolla Village Drive, San Diego, CA 92161. FAX: 858-642-6331; e-mail: doconnor@ucsd. edu. Affirmative Action/Equal Opportunity Employer.

#### FACULTY POSITION Experimental Condensed Matter Physics

The Department of Physics and Astronomy at Dartmouth College invites applications for a tenure-track position in condensed matter physics at the ASSIS-TANT or ASSOCIATE PROFESSOR level. The successful candidate will be expected to establish a vigorous research program complementing research efforts in any of the areas of nanostructures, molecular materials, quantum information science, laser spectroscopy and imaging, and biophysics, balanced with a commitment to teaching at the graduate and undergraduate levels. Potential interactions with faculty in other departments including engineering, chemistry, and biology will be viewed favorably.

Applicants should submit curriculum vitae, including a full list of publications, statements of research and teaching interests, and a list of at least four references to the following address: Faculty Search, Department of Physics and Astronomy, Dartmouth College, 6127 Wilder Laboratory, Hanover, NH 03755-3528 U.S.A.

For full consideration, applications should arrive by December 1, 2002. Dartmouth College is an Equal Opportunity/Affirmative Action Employer. We encourage applications from women and minority Scientists.

#### POSITIONS OPEN

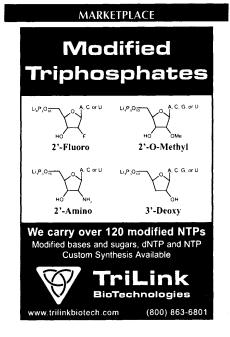
Carnegie Mellon seeks EXECUTIVE DI-RECTOR for the electricity industry center. Requires technical, economic, and regulatory knowledge of the industry as well as research and management skills. Résumé, sample papers, and references to: Granger Morgan, EPP, 129 Baker Hall, Carnegie Mellon, Pittsburgh, PA 15213.

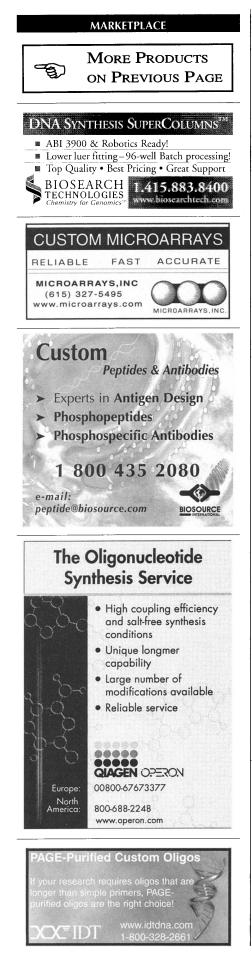
**RESEARCH MOLECULAR GENETICIST** (Plants). GS-440-11/12/13/14; U.S. Depart-ment of Agriculture, Agricultural Research Service (USDA/ARS), Western Cotton Research Laboratory, Phoenix, Arizona, has a permanent full-time vacancy. The incumbent will use molecular approaches in conjunction with conventional genetics to evaluate and enhance long and/or short staple cotton germplasm. Objectives may include (1) identification, characterization, and manipulation of genes that regulate biochemical pathways that impact cot-ton yield, fiber/seed quality, or tolerance to environmental stress; (2) utilize marker-assisted selection to accelerate germplasm improvement; (3) develop and evaluate new genetic resources. Incumbent will interact with team members conducting active programs in plant breeding and plant physiology/biochemistry. Salary range is \$45,285 to \$99,150 per year. The full text vacancy announcement and application instructions may be obtained via website: http://www.ars.usda.gov or call Michelle Worthen; Telephone: 602-437-1376, Extension 282; indicate Announcement Number ARS-X2W-2449. Incomplete applications will not receive consideration. Applications must be postmarked by December 3, 2002. For more information, contact: Dr. S. J. Crafts-Brandner; Telephone: 602-437-**0121, Extension 222.** Applicants must be U.S. citizens. USDA/ARS is an Equal Opportunity Employer.

#### WORKSHOP

#### BIOINFORMATICS TOOLS FOR COMPARATIVE GENOMICS November 4–8, 2002 University of California Berkeley/LBNL/NHLBI

For postdoctoral, medical, and especially cardiovascular Researchers wishing to apply bioinformatics tools in their research. Techniques include database searches, annotation, SNPs, microarray analysis, VISTA, and more. No tuition. See website: http:// pga.lbl.gov/workshop; e-mail: pgaworkshop@ lbl.gov or call Telephone: 510-486-4162. Apply before September 22, 2002.





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Leptin acts as a paracrine growth factor in the PROTEINE • Canine • Canine • FLOW CYTOMETRY KITS • Human • Mouse • MRNA QUANTITATION KITS • Human • Mouse • Rat • Human • Mouse • Rat • Human • Mouse • Rat • Human on available analytes, product inserts, and reviews/technical information. maintenance and regulation of vascular fenestrations in adipose tissue. It induces vascular permeability and synergistically stimulates angiogenesis with two potent angiogenic cytokines, FGF basic and VEGF. Leptin, VEGF and FGF basic each induce angiogenesis via distinct signal transduction pathways (Jak-STAT, protein kinase C and MAPK pathways, respectively). [Cao, R. et al. (2001)

MAPK

Pathway

FGF R1

**VEGF R1** 

Protein

Kinase C

Pathway

VEGE

Smooth muscle cel

Minneapolis, MN 55413, USA Tel: 612 379-2956 Fax: 612 379-6580 info@RnDSystems.com

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