NEW PRODUCTS

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New Primer Pairs are available for reverse transcriptase-polymerase chain reaction

Promega For more information call 800-356-9526 or circle 146 on the Reader Service Card analysis (RT-PCR) of mediator and receptor RNA. Each primer pair includes a 5' and 3' oligonucleotide primer in individual vials at 100 μM. They provide optimized primers for ana-

lyzing the expression of specific mRNAs. Primer Pairs available include gp130, TrkA, TrkC, and NT-4/5.

ANTIBODIES FOR NEUROSCIENCE RESEARCH

Twenty-eight new antibodies have been added to a product line for neuroscience research. The additions include antibodies to protein kinase isoforms, specific sub-

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units of the NMDA glutamate receptor, dopamine- β -hydroxylase, and synapsin I. The

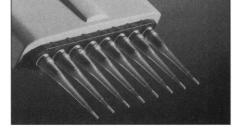
antibodies are provided as monoclonals, polyclonal antisera, and purified polyclonal antisera, and are available in liquid and lyophilized forms.

PIPETTE TIPS FOR SAMPLE PREPARATION

ZipTip pipette tips for sample preparation can desalt a few microliters of femtomole-level peptide in less than 60 seconds. ZipTip_{C18} is a 10-µl pipette tip with

or Millipore an For more information call 781-533-6000 or circle 148 on the Reader a Service Card

0.6 μl of C18 resin fixed at its end such that there is no dead volume. To operate,



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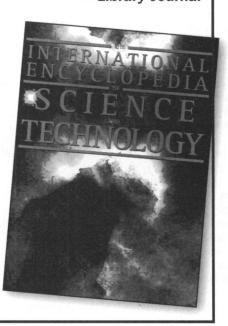
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ZipTip is placed on a standard single or multichannel pipettor. The sample is aspirated and dispensed through the resin to bind and wash peptides or small proteins. ZipTip is suitable for preparing samples for mass spectroscopy or other analytical techniques.

DRY RESIN LOADERS

New *FlexChem* Resin Loaders are for the FlexChem system for performing high throughput, parallel synthesis of small molecules. The "flip" style loader is designed for loading dry resin into an empty FlexChem 96 reactor block. The loader consists of a flat anodized aluminum plate with

96 depressions that holds resin in the corresponding locations of the wells in the block. The volume of the depression determines the amount of resin that will be deposited into the well. The loader is easy to use. The dry resin to

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be used is spread evenly across the surface of the plate of the FlexChem block placed upside down onto the plate. The entire assembly is then quickly inverted so the resin falls into the wells. Four "flip" loaders are available that deliver 25, 50, 75, or 100 mg of dry silica into each well.

LITERATURE

Concepts, Instrumentation, and Techniques in Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) is a 128-page

Perkin-Elmer For more information call 800-762-4000 or circle 150 on the Reader Service Card booklet that provides practical information for new ICP-OES operators. Topics covered include an overview of the technique, general characteristics of ICP-OES, instrumentation, methodologies, and several

applications, including agricultural, biological, clinical, geological, environmental, and metallurgical.

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



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POSITIONS OPEN

ASSOCIATE PROFESSOR FACULTY POSITION IN COMPARATIVE MEDICINE Department of Comparative Medicine Stanford University School of Medicine

The Department of Comparative Medicine, within the School of Medicine, is seeking a tenure-track basic science faculty position as Associate Professor. Candidates must have received the Ph.D. degree and have a demonstrable record of research productivity as evidenced by grant support and publications in peerreviewed journals in the area of neuroscience/neurobiology as applied to disease. The D.V.M. or V.M.D. degree from an institution accredited by the American Veterinary Medical Association is desirable, but not required. Applicant whose research focuses on neurologic/psychiatric diseases based on systems of neuroanatomy and neuropsychological approaches to behavior are especially encouraged to apply.

The mission of the Department of Comparative Medicine is (1) to advance the health of all species; (2) to make significant contributions to our knowledge of vertebrate biology and pathobiology through independent and multidisciplinary research; (3) to foster a collegial, synergistic environment for its faculty.

The Department of Comparative Medicine also has a University-wide mission: (1) to use its diverse veterinary expertise to provide excellent quality humane care for laboratory animals; (2) to promote animal welfare and improve the quality and integrity of animal-based research; (3) to share its comparative biological and veterinary expertise through teaching and consultations with faculty, students, and staff.

In addition to its academic functions, the Department of Comparative Medicine provides the clinical care and management for a large, modern, AAALACaccredited, central animal facility, which includes a critical care unit staffed by Veterinary Technicians. Research strengths at Stanford include genetics, neuroscience, molecular biology, noninvasive nuclear and magnetic imaging, and transgenic mouse studies among others. Interested candidates should send a letter containing a description of their career goals and research interests, their curriculum vitae, and names and addresses of five references, to: Linda C. Cork, D.V.M., Ph.D., Professor and Chairman, Department of Comparative Medicine, MSOB X347, Stanford University School of Medicine, Stanford, CA 94305-5415. Applications will be reviewed upon receipt and searches will be continued until the position is filled. Stanford University is committed to increasing representation of women and members of minority groups on its faculty, and particularly encourages applications from such candidates.

TENURE-TRACK FACULTY POSITION IN PHARMACEUTICAL SCIENCES University of Arkansas for Medical Sciences College of Pharmacy

The Department of Pharmaceutical Sciences at the University of Arkansas for Medical Sciences (UAMS) is seeking applicants for a tenure-track position. The appointment may be made at any level. The successful candidate will be expected to develop an independent, extramurally funded research program, and to teach in both professional and graduate-level courses. The ability to teach pharmaceutics or pathophysiology in the professional curriculum would be beneficial, but individuals with the ability to teach any area in the pharmaceutical sciences are encouraged to apply. The area of research interest is open; expertise in any of the pharmaceutical/biomedical sciences is acceptable. Applicants must have a Ph.D. or equivalent degree. Postdoctoral experience is desirable.

Applications should include a curriculum vitae, bibliography, description of future research plans, and names of three individuals capable of evaluating the applicant's potential for success in this position. Please send applications to: Richard Kennedy, Ph.D., Professor and Chair, Department of Pharmaceutical Sciences, University of Arkansas for Medical Sciences, Mail Slot 522, 4301 West Markham Street, Little Rock, AR 72205-7199. E-mail: kennedyrichardh@exchange.uams.edu. UAMS is an Equal Opportunity Employer.

POSITIONS OPEN

ASSOCIATE DEAN FOR RESEARCH

The College of Veterinary Medicine (CVM) at Kansas State University is seeking an Associate Dean for Research and Graduate Affairs. The successful candidate will hold a tenured position in one of the aca-demic Departments of the CVM and will have the opportunity to continue their research program, if desired. We seek a dynamic and creative individual to provide leadership in the development of research goals and policies, to coordinate and facilitate collaborative research activities within the College, and to promote and represent the College's research pro-grams to funding agencies. The Associate Dean will also work with the graduate programs within the College to promote graduate education opportunities and to develop interdisciplinary research training programs. Qualifications: a Doctoral degree or equivalent, excellent administrative and communication skills, and an outstanding record of scholarship, research productivity, and research funding history. To apply, submit a letter of application describing your interest, your curriculum vitae, and names and addresses of three references to: Dr. Harish C. Minocha, Chair, Associate Dean Search Committee, c/o Office of the Dean, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506. Review of applications will begin on September 1, 1999, and continue until the position is filled. For further information, visit our website: http://vet.ksu.edu/dean/research.htm. State University is an Equal Opportunity Employer. Kansas

FACULTY POSITIONS BIOCHEMICAL GENETICS DIVISION OF PEDIATRIC GENETICS University of Michigan Department of Pediatrics

A newly organized Division of Pediatric Genetics is soliciting Physician Scientists to apply for a faculty position with research and clinical biochemical genetc responsibilities. Applicants should have either an M.D. or M.D.-Ph.D. degrees, and demonstrated clinical and research expertise in the molecular and biochemical genetics of human disease. We are recruiting tenure-track faculty in broad areas of human genetic research including (but not limited to) functional genomics, organelle biogenesis, and gene therapy. Applicants should be certified or eligible for certification in biochemical genetics by the American Board of Medical Genetics. Positions will be filled by Investigators at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR of pediatrics, level depending on qualifications.

Interested applicants should send curriculum vitae, a short statement of research plans, and the names of three references to: Chair, Division of Pediatric Genetics Search Committee, Department of Pediatrics, 3570 MSRBII, Box 0688, The University of Michigan, Ann Arbor, MI 48109-0688.

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

YALE UNIVERSITY SCHOOL OF MEDICINE Department of Genetics and Center for Human Genetics

The Yale University Medical School Department of Genetics and the newly established Yale Center for Human Genetics are seeking outstanding candidates to fill a tenure-track position at the ASSISTANT PROFESSOR level. The successful applicant will be provided generous start-up funds and will establish strong independent research program broadly relevant to the genetics of human disease. Approaches employing human and model systems are encouraged. Applications should include a curriculum vitae, a statement of research plans, and three letters of recommendation. Application materials should be sent to: Richard P. Lifton, Chairman, Department of Genetics, Yale University School of Medicine, P.O. Box 208005, New Haven, CT 06520-8005. An Equal Opportunity/Affirmative Action Employer. We strongly encourage applications from women and minority candidates.

Molecular Immunologist

The academic Department of Medicine wishes to recruit a full-time molecular immunologist to work with our Platelet Immunology Research Group. The successful candidate will have a PhD in a relevant area and a proven track record of research in Molecular Immmunology and/or Protein Chemistry. The Platelet Immunology Research Group at McMaster is composed of scientists and physicians who collaboratively study autoimmune platelet disorders, other immune thrombocytopenias, and transfusion medicine issues as they relate to patient care.

This is a full-time, University supported scientist position in a basic and clinical laboratory and provides a competitive salary and benefit package. Apply directly by May 31, 1999, to: Dr. J. Kelton, Professor and Chair of Medicine, McMaster University, HSC-3W10, 1200 Main Street West, Hamilton, Ontario L8N 3Z5

> We thank all applicants in advance and advise that only those to be interviewed will be contacted by telephone.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

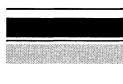
McMaster University is committed to employment equity and encourages applications from all qualified candidates, including aboriginal peoples, persons with disabilities, members of visible minorities, and women.

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three references to:





POSTDOCTORAL RESEARCH ASSOCIATE OPPORTUNITIES WAYNE STATE UNIVERSITY **DEPARTMENT OF PATHOLOGY**

Y.Q. CHEN tumor suppressor genes & prostate cancer

F.SARKAR molecular biology of solid tumors L.SCHUGER

smooth muscle

differentiation

M.L. CHER prostate cancer & bone metastasis

R.FRIDMAN metalloproteinases & tumor metastasis

S. SHENG tumor suppressor genes & tumor invasion A.A.F. SIMA

H.R.KIM growth factor signaling & apoptosis

diabetes and dementia neuropathology

T.H. KUO mechanisms of cell death

A.RAZ

J.R. TURNER tight junction regulation & GI cell physiology

R.VANDERHEIDE cell injury & adaptation mechanisms of cancer

metastasis K.B. REDDY

J. VIRGIN

signal transduction & breast cancer

chromosomal instability & prostate cancer

cardiac pathology

Please contact investigators at: Dept. of Pathology, 540 E. Canfield, Detroit, MI 48201 ww.med.wayne.edu/Pathology/pathresearchers.html equal opportunity/affirmative action employer



RESEARCH LEADER

USDA, REE, Agricultural Research Service Northern Plains Area, Red River Valley Agricultural Research Center, Sugarbeet and Potato Research at Fargo, North Dakota seeks a permanent full time scientist with demonstrated expertise in plant genetics, plant physiology or plant pathology to serve as Research Leader.

The incumbent will be responsible for all aspects of the unit's management including: planning, conducting and reporting original research, leading research programs and supervision of scientists within the unit on relevant research problems; determining research needs and customer expectations; evaluating, reviewing, and recommending and/or implementing changes in the research programs as needed. Incumbent's personal research program will be consistent with the unit's mission and include the development and transfer of new germplasm information and technology related to disease resistance and quality of sugar beets or the post harvest quality of potatoes. The incumbent will maintain a research program in his/her area of speciality.

US citizenship is required and a Ph.D. or equivalent is desired. Salary commensurate with experience (\$67,298-\$102,907). Comprehensive benefits package includes paid sick and annual leave, life and health insurance, and a savings and investment plan (401K type) is available with the Federal retirement plan. For information on the research program and/or position contact Dr. Will Blackburn at 907-229-5557 or via e-mail at blackbuw@ars.usda.gov. A full copy of the vacancy announcement will be available on the ARS website: www.ars.usda.gov/ afm/hrd/resjobs.

For information on application procedures contact Melanie Nyquist at (701) 239-1203. Applications must be postmarked by the closing date and need to be mailed to USDA, ARS, HRD, WOB, 5601 Sunnyside Avenue, Beltsville, MD 20705-5106. The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation and marital and family status. Persons with disabilities who require alternative means for communication of program information should contact USDA's TARGET Center at (202) 720-2600 (voice or TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

MAYO CLINIC

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POSTDOCTORAL POSITION Two molecular virology laboratories in the Molecular Medicine Program are seeking a highly motivated individual to fill a joint postdoctoral position. The overall aim of the Molecular Medicine Program is the development of novel therapeutic genes and novel gene transfer strategies for eventual application in the clinic. The aim of the research project is to develop the technology to target retroviral vectors to specific tumor cells. The project will involve the use of retroviral display technology in model retroviral vector systems both in vitro and in vivo. Applicants must have a recent Ph.D. degree and be proficient in advanced molecular biology and tissue culture techniques. Research experience in virology, especially retrovirology, is highly desirable. Competitive salaries with full benefits are available to the successful candidates. Send letter of application, curriculum vitae, and names and contact details of

Mark J. Federspiel, Ph.D. or Stephen J. Russell, M.D., Ph.D. **Molecular Medicine Program Mayo** Clinic 200 First Street SW Rochester, MN 55905 E-mail: federspiel.mark@mayo.edu

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mithKline Beecham, who pioneered the bioinformatics revolution in the pharmaceutical industry, continues to recruit top bioinformatics professionals. Positions are available in both the U.S. at our R&D facility (outside Philadelphia, PA), and in the U.K., at our new science complex at New Frontiers Science Park, Harlow (outside London).

Director, Target Discovery (U.K.)

Reporting directly to the Vice President and Director, Bioinformatics, this individual will lead a transnational group of 10+ PhD level scientists. The Target Discovery group plays a vital role in identifying and characterizing novel human targets for drug discovery, supporting and working closely with bench scientists of the various therapeutic departments, and also interacting extensively with the remainder of our 80+ bioinformatics scientists and engineers. The successful candidate will have a substantial track record in bioinformatics, preferably as a group leader in industry or academia, and will be experienced in the discovery and characterization of genes from sequence databases by computational means. Especially important is a deep knowledge of protein families from a biochemical and/or structural standpoint, and in either case within a physiological context. Also required are strong management skills, and a willingness to participate energetically in the broader scope of discovery activities across SmithKline Beecham R&D. (Ad Code: NB\BIX\007S)

Bioinformatics Scientist (U.S.)

We are seeking a PhD level molecular curator/sequence analyst with experience in the analysis of large molecular data sets. The ability to do careful, correct curation of sequence data is critical. An ideal background could include a biology PhD with an emphasis in bioinformatics, molecular evolution, or molecular systematics. Basic biochemistry and extensive knowledge of sequence analysis and sequence classification are required. Knowledge of GCG, Unix, Perl and SQL is highly desirable, but not required. This position will entail curation and classification of large gene families. The applicant must be able to collaborate closely and communicate effectively with wet-bench scientists. (Ad Code: 970670)

Bioinformatics Software Engineer (U.S.)

We are seeking computer scientists and software engineers at the BS or MS (preferred) level with proven track records of success on both large and small scale projects in a research setting. A background in bioinformatics or biology is desirable but not required. Individuals in these positions will be providing software solutions related to the analysis and display of genomic data using a variety of technologies. Experience in many or all of the following is desired: CORBA, RMI, CGI, Java, Servlets, HTML, C/C++, PerI5, and SQL. (Ad Code: 981602)

Bioinformatics Support Analyst (U.K.)

As a member of our Alliance Support group, this individual will provide infrastructure and user support for discovery scientists both within SmithKline Beecham and at alliance partner sites in France, Germany and Japan. This individual should have an interest in computational analysis as applied to biological problems, and a degree in either a biological discipline or computer science. Strong computational skills in a Unix environment will be required; knowledge of Perl and SQL would be an advantage. (Ad Code: NB\BIX\010S)

Bioinformatics Systems Analyst (U.S.)

This individual will be responsible for database administration functions such as creating Sybase databases, managing backups and restores, problem resolution and performance tuning. This will include maintaining database systems, allocating and managing resources for all the ongoing projects and applications in the Department; recommending the appropriate integration of systems, databases and/or application modules to improve operational performance; and providing technical support and expertise to application developers. Knowledge of Unix and Sybase is required. (Ad Code: 990356)

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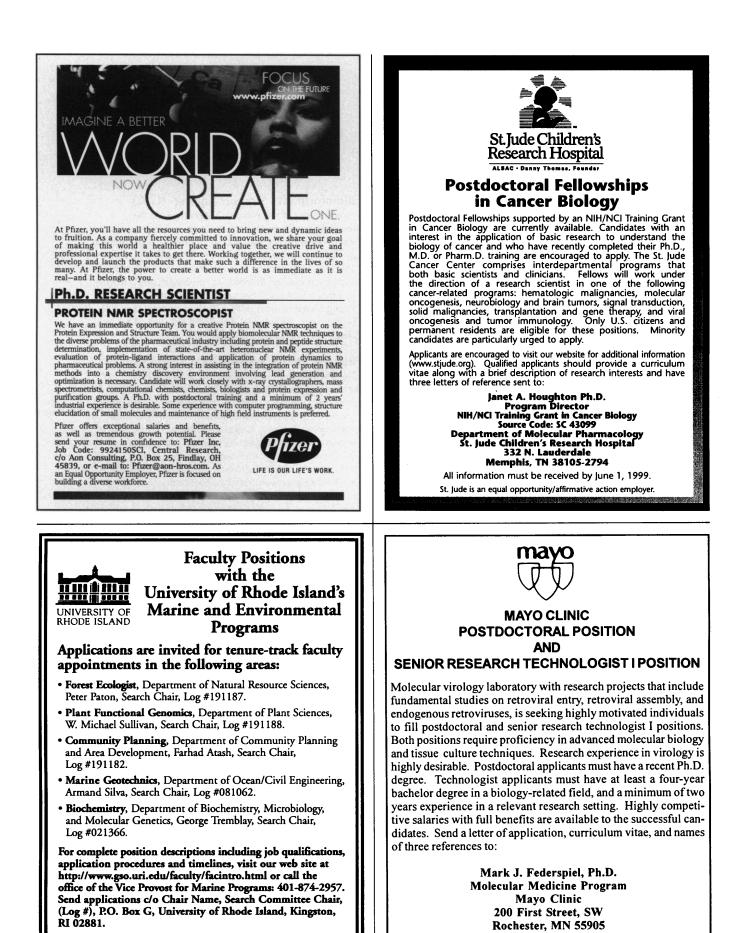
To be considered for U.K. opportunities, please forward your CV to: The U.K. Recruitment Manager, SmithKline Beecham, (Ad Code), c/o A.E.P., Suite 6, Silk Mill House, 21 Marsh Parade, Newcastle-under-Lyme, Staffordshire ST5 1BT.

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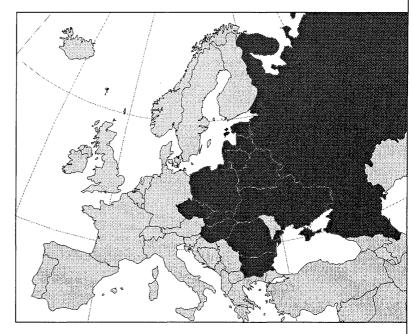
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Baltics, Central and Eastern Europe, and Former Soviet Union

The Howard Hughes Medical Institute is accepting applications for biomedical research grants under its International Research Scholars Program. It is expected that approximately 40 grants—each for a term of five years and providing from \$40,000 to \$90,000 annually—will be made. The grant term is anticipated to be

from 2001 to 2005.



Eligible Countries	The Howard Hughes Medical Institute is accepting applications for international research grants in 12 selected countries: Belarus, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Russia, Slovakia, and Ukraine.
Eligible Scientists	Applicants must:
•	 hold full-time appointments at non-profit, scientific research organizations in any one of the eli- gible countries;
	 have made significant contributions to basic, disease-oriented, or patient-oriented biomedical research;
	devote most of their professional time to research and teaching;
	▶ have research careers that are still developing, rather than be in the later phases of a distinguished career;
	▶ show promise of future contributions to research;
	 provide evidence of their research achievements by listing references for a minimum of three scientific articles published since 1994 in peer-reviewed, English-language biomedical journals; and have no major administrative duties.
	Applicants must not be citizens or permanent residents of the United States.
Eligible Research Areas	Research must be in one of the following broad fields: cell biology and regulation, genetics, immunology, neuroscience, or structural biology. Clinical trials and research on health education, health care delivery, or health care services are not eligible.
Other Requirements	Applicants must have Web access to apply to the competition and to fulfill reporting requirements if a grant is awarded. Applications will be accepted only through HHMI's Web-based competition system.
	the application/competition systems are available on the Web at www.hhmi.org/international . nitted via ннм1's Web-based competition system by November 15, 1999 . Awards will be announced
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The Howard Hughes Medical Institute welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

S&E IV Environmental Spectroscopy Position Pacific Northwest National Laboratory Operated by Battelle for the U.S. Department of Energy Richland, Washington

The William R. Wiley Environmental Molecular Sciences Laboratory (EMSL) at PNNL is seeking an experienced environmental spectroscopist to work within its Environmental Dynamics and Simulation (ED&S) group. The EMSL is a U.S. Department of Energy national user facility with overall focus on environmental molecular science.

Candidates are sought to apply spectroscopic techniques including vibrational spectroscopy and microscopy, and/or optical spectroscopy/microscopy methods to the study of chemical reaction at the mineral-water or microbe-water interface to complement existing staff. However, individuals with strong reputations in other spectroscopic/molecular techniques used in environmental geochemistry will also be considered and are encouraged to apply. The position involves the oversight of a modern optical spectroscopy laboratory, the performance of original grant supported research and the mentoring and support of collaborators using the EMSL facility.

The EMSL and ED&S contain world-class capabilities and staff for research in the environmental and geochemical sciences. In addition to the optical spectroscopy laboratory, the successful candidate will have access to a wide variety of techniques for research including a synchrotron beamline with X-ray microprobe capability, state-of-the-art UHV microscopy and spectroscopy, EPR and Mossbauer spectroscopies, various scanning probe microscopies, and molecular modeling. The position requires a strong background in spectroscopy, and appreciation of environmental science issues, and an understanding of mineral-water or microbe-water chemistry.

A Ph.D. degree is required in chemistry, environmental chemistry, or the earth sciences, a strong background in spectroscopy with an appreciation of environmental science issues and an understanding of mineral-water or microbe-water chemistry with 10–15 years experience required. This position is senior and requires a strong record of publications and grantsmanship in the environmental/geochemical sciences, and documented program development skills in addition to the other criteria. Depending on credentials and candidate interest, the individual may be hired as a principal investigator or group leader.

Interested persons are encouraged to send a resume, publication list and letters of reference to Charlotte Peterson, Pacific Northwest National Laboratory, P.O. Box 999, MS K1-05, Richland, WA 99352, E-mail <u>charlotte.peterson@pnl.gov</u> or apply electronically via our external employment page, referencing position number 45715 <u>http://www.pnl.gov/hrpublic/.</u> Battelle PNNL is an *Equal Opportunity/Affirmative Action Employer* and supports diversity in the workplace. Women, minorities, disabled and Vietnam-era veterans, and disabled persons are strongly encouraged to apply.



Department of Pathology and Laboratory Medicine

POSTDOCTORAL SCIENTIST

A Postdoctoral Scientist skilled in molecular biology is required to join a team developing micro-fabricated devices for diagnostic applications.

The team has considerable experience in design, construction and testing of microchip devices and seeks a productive scientist to help develop highthroughput methods of cancer detection based on microchip technology. Experience in design and construction of micro-devices using photolithography is desirable but not essential. Experience with cell isolation and quantitative methods of analysis would be an advantage.

Applicants should possess a Ph.D. degree and relevant postdoctoral experience.

Applications and inquiries should be addressed to Dr. Peter Wilding or Dr. Larry Kricka at Department of Pathology and Laboratory Medicine, University of Pennsylvania Medical Center, 3400 Spruce Street, Philadelphia, PA 19104-4283; phone 215-662-6575 or fax 215-662-7529.

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



Faculty Position Department of Biochemistry and Molecular Biology Medical College of Ohio

Applications are invited for a tenure-track position at the Assistant or Associate Professor level. This appointment is the first step in a major expansion of the department following the recruitment of a new chairman. Candidates working in all areas of biochemistry or molecular biology will be considered. Applications are particularly encouraged from individuals working on regulation of cell growth, differentiation and gene expression, mechanisms of signal transduction in normal and transformed cells, control of the cell cycle or apoptosis, and molecular/cellular problems related to gene therapy. Excellent research facilities and start-up funds are available. Requirements include a Ph.D. or M.D. with postdoctoral experience and demonstrated research accomplishments. The successful candidate will be expected to establish a vigorous externally funded research program and participate in the teaching of medical and graduate students. Candidates at the Associate Professor level should have current grant support. Applicants should submit a curriculum vitae, description of research plans, selected publications, and names and addresses of three references to Faculty Search Committee

racuity search Committee c/o Carlene Thomas Department of Biochemistry and Molecular Biology Medical College of Ohio 3035 Arlington Ave. Toledo, OH 43614 Applications must be received by July 1, 1999 EO/AA employer, M/F/D/V



Molecular Oncology

Two research openings at levels commensurate with academic experience (Assistant Professor to Professor) in the Department of Pathology, Emory University School of Medicine. Candidates should have a background in basic science as it relates to cancer. There are no preferred sub-areas but approaches utilizing molecular cell biology and/or genetics preferred. Applicants should possess M.D., Ph.D. or M.D./Ph.D. degrees and some experience with or training in pathology is preferred but not required. Candidates are expected to have (or be able to develop, if just leaving post-doc) a strong NIH/NSF funded research program — thus candidates should qualify for funding from these sources. Individuals should be interactive with a record indicating productivity. The Department is research intensive and provides an atmosphere of scholarship and collegiality at a Medical School with outstanding resources and facilities (including research cores), graduate students, interactive programs and Departments, and location. Applicants should submit a curriculum vitae and statement describing current and future planned research and arrange to have three letters of recommendation sent to: Dr. James L. Madara, W.P. Timmie Professor and Chair, Department of Pathology, Emory University School of Medicine, 1364 Clifton Road N.E., Room H184, Atlanta, GA 30322.

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Postdoctoral Associates Vector Biology at YALE

Highly motivated postdoctoral associates with recent Ph.D. degree in a relevant discipline are sought to participate in research on arthropod disease vectors and the pathogens they transmit.

Positions are available with the following faculty members:

Serap Aksoy: Tsetse flies, bacterial symbionts and African trypanosomes.

- Durland Fish: Epidemiology of tick-borne disease, ecology and evolution of vectorborne pathogens.
- Scott O'Neill: Wolbachia infections in insects and nematodes, bacterial genetics, modification of vector competence.
- Liangbiao Zheng: Molecular genetics and innate immunity of mosquitoes.

Applicants should send a copy of their curriculum vitae, the names and addresses of three references, and a brief statement of research interests and goals to:

Ms. Maria C. Torres YALE University School of Medicine Dept. of Epidemiology and Public Health 60 College Street, Room 602 New Haven, CT 06520-8034 USA http://info.med.yale.edu/eph

MEDICAL UNIVERSITY OF SOUTH CAROLINA

Training Opportunities in Cardiovascular Biology

Postdoctoral research fellowships supported by a National Institutes of Health Training Grant are available for outstanding candidates with graduate degrees in the biological, chemical, medical or physical sciences. The training program focuses on the mechanisms of cardiovascular diseases and the development of experimental strategies and technologies to generate novel therapeutic attacks upon these diseases. Emphasis is placed upon an integrated training experience involving molecular concepts of cellular dysfunction in pediatric and adult cardiovascular diseases as well as during organ development. The program includes over 30 research laboratories supported by the National Institutes of Health, National Science Foundation, American Heart Association and private foundations. (http://www2.musc.edu/Pharm/postdoc.html)

CARDIOVASCULAR DEVELOPMENT

- VASCULAR DISEASE
- HYPERTENSION
- CARDIAC FAILURE

Developmental Biology of the Cardiovascular System

W. Scott Argraves, Ph.D. D. Woodrow Benson, Jr., M.D., Ph.D. Christopher Drake, Ph.D. Carol A. Eisenberg, Ph.D. L. Stephen Frawley, Ph.D. Robert G. Gourdie, Ph.D. Michael J. Kern, Ph.D. Edward L. Krug, Ph.D. Charles D. Little, Ph.D. Roger R. Markwald, Ph.D. Tim C. McQuinn, M.D. J. Philip Saul, M.D. Robert P. Thompson, Ph.D. Extracellular matrix and cell adhesion Human genetics and cardiac development Vascular developmental biology Cardiac progenitor cells Dynamics of gene expression in living cells Development of the cardiac conduction system Homeobox genes in cardiac development Mechanisms of myocardial secretion Vasculogenesis and heart development Cardiac morphogenesis Transcriptional control in the developing heart Autonomic regulation of the heart Cell biology of developing cardiac muscle

Cell Signaling

Gene Transfer

Computer Modeling

Human Genetics

Cell Biology

Bioimaging

Experimental Therapeutics

Mass Spectrometry

Signal Transduction Hypertension/Vascular Disease/Diabetes

James A. Cook, Ph.D. Rosalie K. Crouch, Ph.D. Brent M. Egan, M.D. W. Timothy Garvey, M.D. Perry V. Halushka, M.D., Ph.D. John D. Hildebrandt, Ph.D. Ayad A. Jaffa, Ph.D. David J. Jollow, Ph. D. David J. Jollow, Ph. D. Stephen M. Lanier, Ph.D. Harry S. Margolius, M.D., Ph.D. Kathryn E. Meier, Ph.D. Mark W. Nowak, Ph.D. Steven A. Rosenzweig, Ph.D. Kevin L. Schey, Ph.D. Ilya A. Vakser, Ph.D. Thomas Walle, Ph.D. Jerry G. Webb, Ph.D. Signal transduction pathways in shock Structure/function of retinoid-binding proteins Lipids and vascular reactivity in hypertension Human genetics of diabetes, obesity, and vascular disease Thromboxane A2 receptors G protein structure and function Cell signaling in vascular smooth muscle Molecular mechanisms of adverse drug reactions Mass spectrometry, protein structure & function Plasticity of signal transduction Kallikreins, kinins and cardiovascular disease Protein kinases and phospholipases in mitogenesis Structure/function of ion channels IGF signaling and binding proteins Mass spectrometry and biomolecular structure Computational structural biology Transport and metabolism of drugs and natural products Second messenger systems in blood pressure control

Cardiac Failure

George Cooper, IV, M.D. Dhandapani Kuppuswamy, Ph.D. Paul J. McDermott, Ph.D. Donald R. Menick, Ph.D. Terrence X. O'Brien, M.D. Francis G. Spinale, M.D., Ph.D. Michael R. Zile, M.D. Physiological properties of adult cardiac muscle Signaling mechanisms in myocytes Translational control in the hypertrophied heart Membrane transport proteins/Transcriptional regulation Genetic control mechanism in the myocyte Cellular mechanisms of heart failure Collagen and myocyte flexibility

Individuals must possess a PhD and/or MD degree and US citizenship/permanent residency. Applicants should send a curriculum vitae, a career statement and the names of three references to: Dr. Stephen M. Lanier, Program Director, Department of Pharmacology, Medical University of South Carolina, 173 Ashley Avenue, P.O. Box 250505, Charleston, SC 29425 laniersm@musc.edu

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Space Reservation Deadline	1 June 1999
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- 1 Science December 1998 BPA Publisher's Statement
- 2 6 March 1998, 23 May and 18 July 1997 Harvey Research *Science* Readership Survey as applied to *Science* December 1998 BPA Publisher's Statement, publisher's own data



Faculty Positions Department of Pharmacology School of Medicine Case Western Reserve University

The Department of Pharmacology, in conjunction with the CWRU NCI-funded Comprehensive Cancer Center, has immediate openings for tenure-track faculty positions, rank depending upon applicant qualifications. We are seeking candidates interested in participating in an interactive program focused on understanding the pharmacology and cell biology of hormone responsive tumors, including breast and prostate cancer. For either position, applications from candidates using genomic approaches or having a genetic component to their research are particularly welcome. Current faculty interests include study of reproductive endocrinology using transgenic animals, apoptosis, receptor regulation and assembly, membrane transport, bacterial pathogenesis, oxidative stress, sulfhydryl homeostasis, and regulation of the cytoskeleton via small G-proteins and chaperonins. For information on the Department, see http://pharmacology.cwru.edu/

Please send a C.V., up to 3 reprints, a short description of research interests, and names of 3 references to:

Dr. Clark W. Distelhorst Chair, Pharmacology Faculty Search Committee Department of Pharmacology Case Western Reserve University School of Medicine, Room W-319 10900 Euclid Avenue Cleveland, OH 44106-4965 E-mail: cwd@po.cwru.edu

Case Western Reserve University is an Affirmative Action/Equal Opportunity Employer. Qualified women and minority group members are encouraged to apply.



Major international health foundation is seeking a Scientific Program Manager to work in our Research Department. The successful candidate will assist in the planning of the research grants program, training grants program, projects and collaborations. Will help determine program priorities and funding levels as well as track and prepare analyses of research requirements. Coordinate programs and committees. Assist in the supervision of the grant administration process.

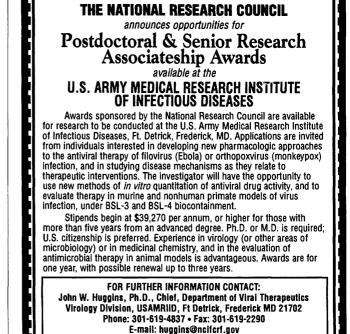
Post doctoral scientific research experience or equivalent is a must. PhD, MD or equivalent professional degree is preferred. Excellent written, verbal and interpersonal skills are essential.

Please forward your resume and salary requirement to: Carmel Simone, HR Director The Juvenile Diabetes Foundation International 120 Wall St, 19th Fir, New York, NY 10005-4001 or Fax to: (212) 785-9595 EOE M/F/D/V

National Institutes of Health National Eye Institute

The Laboratory of Ocular Therapeutics of the National Eye Institute has two fellowship position available for chemists to join a team in the isolation, characterization and identification of naturally occurring enzyme regulators in human and animal tissues. The position is available immediately. The incumbent should have a Ph.D. degree and postdoctoral experience in HPLC and Mass Spectroscopy for the characterization and identification of proteins, polypeptides and biochemical intermediates. Experience on a Finnigan LCQ Benchtop system is beneficial. The salary range, dependent on experience, is \$30,000 -\$50,000. U.S. citizens, permanent residents of foreign nationals may apply by sending a CV and list of references to Dr. Peter F. Kador, Chief, Lab. Ocular Therapeutics, 10 Center Drive MSC 1850, NIH, Bethesda, MD 20892-1850 Tel. 301-496-6993. FAX 301-402-2399. E-mail kador@helix.nih.gov

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Applications, submitted directly to the NRC, are accepted on a continuous basis throughout the year. Those postmarked by August 15 will be reviewed in the October competition, by January 15, 2000 in February, and by April 15 in June.

For application materials contact: NATIONAL RESEARCH COUNCIL ASSOCIATESHIP PROGRAMS (TJ-2114/UG) 2101 Constitution Avenue, NW, Washington, DC 20418 FAX : 202- 334-2759 • EMAIL : rap@nas.edu

National Institutes of Health National Eye Institute

A postdoctoral position is immediately available in the Laboratory Ocular Therapeutics, National Eve Institute, for the study on the role of capillary cells in the development of diabetic microangiopathy. The research will be focused on the effects of various growth/survival factors on the signal transduction an gene expression of capillary pericytes that regulates pericyte survival under various stress environments induced by hyperglycemia and/or hypoxia. Candidates with experiences in molecular biology and cell biology are encouraged to apply. The salary range, dependent on experience, is \$27,500 - \$38,000. U.S. citizens, permanent residents or foreign nationals may apply by sending a CV and list of references to Dr. Sanai Sato, LOT/NEI, 10 Center Dr., MSC 1850, Bethesda, MD 20892-1850. E-mail: sanai@helix.nih.gov

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AAAS SCIENCE AND TECHNOLOGY POLICY YEARBOOK

Albert H. Teich, Stephen D. Nelson, Celia McEnaney, and Tina M. Drake, editors

O overing major developments during 1998, the new AAAS Yearbook is a concise yet comprehensive source of information on current policy issues affecting science and technology. Included are papers from the 1998 AAAS Science and Technology Policy Colloquium together with other key articles and speeches critical to 1998. Working scientists, engineers, government policymakers and administrators, industrial managers, scholars and students of science and technology policy, and many others will find this book an invaluable resource. Special quantity discounts are available for classroom use. Call AAAS at 202-326-6600 for bulk rate purchases. And now you can browse the full text of the 1999 Yearbook on-line at www.aaas.org/spp/yearbook

1999; 340 pages; \$24.95 (AAAS member price \$19.96) Postage/handling per order \$4.00 AAAS Distribution Center, PO Box 521, Annapolis Junction, MD 20701 Order by phone (VISA/MasterCard only) call 1-800-222-7809 Fax orders to 301-206-9789



American Association for the Advancement of Science



UCR/UCLA PROGRAM IN BIOMEDICAL SCIENCES UNIVERSITY OF CALIFORNIA, RIVERSIDE

MOLECULAR MECHANISMS OF CELLULAR STRESS

The Division of Biomedical Sciences at the University of California, Riverside currently has four tenure-track faculty positions available at the Assistant Professor level for individuals wishing to join a group of multidisciplinary researchers investigating common stress responses. Outstanding applicants at the senior level (Associate and Full Professors) will also be considered. Recent research in many apparently divergent areas of biomedical science has begun to focus upon characterizing common molecular mechanisms of cellular stress. Various genes/proteins appear to be regulated through common signal transduction pathways in response to periods of both low and extreme cellular stress, which provide a means for the cell to recover normal function or lead to various pathologies. Strengths within the Division include cardiovascular disease (LDL, cigarette smoke and shear stress), cancer, ionizing and non ionizing radiation, hormonal and osmotic stress. We are interested in recruiting interactive faculty employing modern molecular biological techniques to study gene regulation with micro array technology or other approaches in order to define common stress pathways. Highly competitive start-up funds and laboratory space will be available for successful applicants. All new faculty will be expected to obtain substantial extramural funding.

The Division of Biomedical Sciences administers a joint accelerated 7-year B.S./ M.D. program with the University of California at Los Angeles. The faculty teach the first two years of medical school instruction. Faculty in the Division are expected to maintain a vigorous research program and to contribute to medical and graduate teaching programs. The program is seeking investigators who can provide teaching expertise in major medical school courses in immunology, neurosciences, histology, virology, gross anatomy and pathology. Initial review of applications will begin on May 15, 1999, and the positions will remain open until filled

Interested investigators should submit an application including: a *curriculum vitae*, a description of research history and future directions, a history and the status of current funding, and the names of three references. Please include your email address and fax number to: Michael B. Stemerman, M.D., Chairman, Search Committee, Division of Biomedical Sciences, University of California, Riverside, California 92521-0121. Telephone: (909) 787-5705, Fax: (909) 787-5504, Email: michael.stemerman@ucr.edu.

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Allelix Neuroscience Inc. is an established biopharmaceutical company devoted to developing novel therapeutics for neurological and neuropsychiatric disorders by integrating the latest advances in cell and molecular neurobiology, neuropharmacology and medicinal chemistry.

DRUG DISCOVERY BEHAVIORAL NEUROPHARMACOLOGY

We are seeking a research scientist at the Ph.D. level with an established background in learning and memory, conditioning and reinforcement and a good knowledge of functional neuroanatomy. You will be part of a multidisciplinary team using innocative technologies to discover novel therapeutic agents to treat CNS diseases. Along with your Ph.D., a minimum of 2 years of postdoctoral training is required. Industry experience is desirable.

We offer a competitive salary and benefits package, as well as excellent potential for career growth. Send your resume along with salary history and references to:

Allelix Neuroscience Inc. 7 Cedar Brook Drive, Cranbury, NJ 08512; Attn: Human Resources

POSTDOCTORAL POSITIONS IN CANCER MOLECULAR BIOLOGY/ENDOCRINOLOGY

Strang Cancer Prevention Center is dedicated to basic and biomedical research aimed at the prevention and treatment of cancer. It is affiliated with the New York Hospital-Cornell Medical Center and situated on The Rockefeller University Campus, providing a unique work environment. We are looking for energetic and enthusiastic people with a molecular biology/biochemistry background. Two positions are available immediately to develop the following projects:

- The breast and ovarian susceptibility gene product BRCA1 and its role in transcriptional activation. Experience in the field of transcription would be an advantage. For further information, see Proc. Natl. Acad. Sci. 93:13595-13599 (1996) and Proc. Natl. Acad. Sci. 95:2302-2306 (1998) or contact Dr. Alvaro Monteiro at: monteia@rockvax.rockefeller.edu
- The Wnt signaling pathway in cell transformation and cancer. For further information, visit http://www.med. cornell.edu/GSMS/fac/browna.html or contact Dr. Anthony Brown at: amcbrown@mail.med.cornell.edu

Applications with a CV and names of three references should be sent to: K. Meyer, Director of Human Resources, Strang Cancer Prevention Center, 428 E. 72nd Street, New York, NY 10021, USA. Applications should not be sent via e-mail.

Strang Cancer Prevention Center is an equal opportunity employer.





POSTDOCTORAL POSITIONS Cancer Experimental Therapeutics

Several postdoctoral positions are available within the Department of Experimental Oncology, Hollings Cancer Center, Medical University of South Carolina. Each position is within an established laboratory and requires a recent Ph.D. with molecular biology experience.

Judith A. Belt, Ph.D. – Molecular studies of nucleoside transporters and the role of nucleoside transport in the action of antimetabolites in cancer chemotherapy.

Daniel J. Fernandes, Ph.D., D.Sc. – Molecular mechanisms of gene amplification; interactions of anticancer drugs with nuclear matrix topoisomerase II.

Ahmad R. Safa, Ph.D. – Molecular mechanisms of apoptosis and drug resistance.

Qualified candidates should send a letter of interest, curriculum vitae, and names of three references to the appropriate faculty member at the address below:

Medical University of South Carolina Department of Experimental Oncology Hollings Cancer Center 86 Jonathan Lucas Street Charleston, SC 29425

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MEETING

Cold Spring Harbor '99 Fall Meetings

Yeast Cell Biology August 17 - 22 abstract deadline, May 26 Brenda Andrews, Chris Kaiser, Mark Winey Eukaryotic mRNA Processing August 25 - 29 abstract deadline, June 2 Adrian Krainer, James Manley, Timothy Nilsen Mechanisms of Eukaryotic Transcription September 1 - 5 abstract deadline, June 9

Nouria Hernandez, Robert Kingston, Richard Treisman Bridging the Gap Between Sequence & Function (Workshop) September 7 - 9 abstract deadline, June 16 Eugene V. Koonin, Edward Uberbacher, Michael Zhang

Eukaryotic DNA Replication September 15 - 19 abstract deadline, June 23 Thomas Kelly, Bruce Stillman

Microbial Pathogenesis & Host Response September 22 - 26 abstract deadline, June 30 P. T. Magee, Stanley Maloy, Ronald Taylor

Programmed Cell Death September 29 - October 3 abstract deadline, July 7 Hermann Steller, Craig Thompson, Eileen White Neurobiology of Drosophila

October 6 - 10 abstract deadline, July 14 Ulrike Heberlein, Haig Keshishian

Molecular Approaches to Vaccine Design December 2 - 5 abstract deadline, October 6 Rafi Ahmed, Dennis Burton, Margaret Liu Physiological Genomics and Rat Models December 9 - 12 abstract deadline, October 13 Howard Jacob, Doug Vollrath

Cold Spring Harbor Laboratory Meetings & Courses, 1 Bungtown Rd, Cold Spring Harbor, NY 11724 Email: meetings'a cshl.org SH8 Fax: 516-367-8845 Phone: 516-367-8346 http://www.cshl.org/meetings/

Director, The Institute for Clinical Research The Penn State Geisinger Health System/ Penn State University College of Medicine

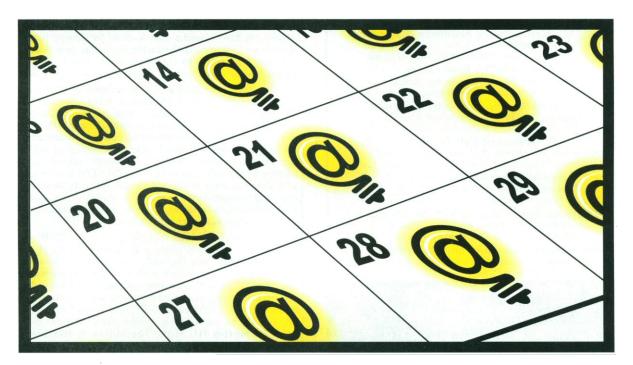
Bringing together the research capabilities of The Penn State University College of Medicine and the patient care and clinical research experience of the Penn State Geisinger Health System, there is an opportunity to provide the most advanced health services to the people of Pennsylvania. The Penn State Geisinger Health System (PSGHS) and Penn State University College of Medicine (PSUCOM) have formed a joint Institute for Clinical Research (The Institute) which signals the partnering of the new Health System with the University to create an entity which will allow the application of new scientific discoveries to the care of patients.

The Director of The Institute will be responsible for stimulating and supporting the conduct of clinical research funded by NIH, foundations, and industry. Such clinical research will emphasize the mechanisms of human disease; patient (human subject) oriented research to include interventions (diagnostic, therapeutic devices) and new technologies; clinical trials; epidemiological and behavioral studies; and outcomes research and health services research. In addition he/she will represent PSGHS/PSUCOM to industry sponsors as a preferred place to conduct clinical research, facilitate contract and budget negotiations in regard to clinical trials, and represent PSGHS/PSUCOM in the explorations of new research partnerships with businesses and other organizations.

Candidate qualifications include an M.D. or Ph.D. degree(s); experience in clinical trials with understanding of regulatory and IRB issues; and the ability to build a clinical research infrastructure. Experience with investigator-initiated research and familiarity with industry contracts and procedures with significant experience and record of accomplishment in research are preferred. *PSGHS/PSUCOM is an AA/EOE*. To submit an application please send curriculum vitae to John H. Moxley III, M.D., The Milton S. Hershey Medical Center – H184, 500 University Drive, Hershey, PA 17033-2390.



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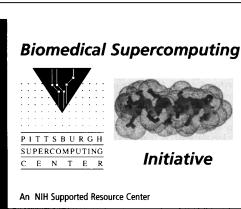
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ANNOUNCEMENT



DEVELOPING AND USING PC CLUSTERS AS A BIOMEDICAL RESEARCH TOOL June 17-19

- Creating an operating environment
- System and message passing software
- Administration issues
- Evaluating needs and performance

Application deadline: May 20

SINGLE PARTICLE RECONSTRUCTION FROM ELECTRON MICROSCOPE IMAGES July 21-24

- SPIDER and parallel processing
- Alignment and classification
- Determination of orientations
- 3D reconstruction and refinement
- Visualization and interpretation
- Automated processing with EMAN

Application deadline: June 9

NUCLEIC ACID AND PROTEIN SEQUENCE ANALYSIS August 1-6

- Database searches and pairwise alignments
- Multiple sequence alignments
- Pattern representation and identification
- Sequence-structure alignments
- Statistics and significance of alignments
- Visualization of macromolecules and sequence alignments

Application deadline: June 9

applications, detailed information, level of support at: http://www.psc.edu/biomed/workshops.html

direct inquiries to:

Nancy Blankenstein Pittsburgh Supercomputing Center 4400 Fifth Avenue, Room 230C Pittsburgh, PA 15213 biomed@psc.edu or 412-268-4960 At Monsanto, we share a common goal-to help people lead longer, healthier lives. We are pioneering the use of life-science technologies to understand how the connections between human health, nutrition and agriculture can be used to develop products to improve the quality of life for everyone, everywhere. To achieve this goal, we are selectively hiring the best and the brightest people in the world-people who can make a difference and want to leave their mark. Can you see yourself working on our dream of helping to improve food, health and hope in the world? Do you think about what you can achieve and the difference you, personally, can make? All of us at Monsanto ask these questions daily. It's what brought us together and keeps us together. Imagine the possibilities-a better world, healthier families, a more enjoyable life. We are a team with a dream, and we would like you to be a part of it.

Regulatory Science Project Leader

We seek senior scientists with extensive experience in plant biotechnology, biochemistry or molecular biology to lead the development and implementation of science-based safety assessment strategies and the completion of scientific studies necessary to establish the food, feed and environmental safety of plant biotechnology products.

Candidates must have a Ph.D. with 4-7 years experience in a relevant field. A demonstrated record of project leadership is essential. Must work well within a multi-disciplinary team and communicate effectively with diverse audiences. Knowledge of risk assessment, food safety, US and International regulations and data requirements for genetically modified plants is advantageous.

For the above position, please send your resume to: Monsanto, Job Code: MKT-3440, 800 N. Lindbergh Blvd., Mail Zone: E2NB, St. Louis, MO 63167; Fax: 314/694-2014.

Bioanalytical Chemist

The major responsibility of this position will be to develop and perform characterization assays to support a wide range of functions involving experimental design, data analysis, technical report writing and SOP generation. You will use your expertise to explore new stateof-the-art characterization techniques and apply them to meet current and future needs. Additional responsibilities include maintaining and troubleshooting current assay capabilities, managing projects, and providing scientific leadership for research platforms. Must have extensive experience in protein characterization techniques, HPLC, immunoassays, MALDI/MS, residual component testing, and gel electrophoresis. You should have above average writing and communication skills and excel in a fast-paced, team environment. A Ph.D. or equivalent experience is required.

For the above position, please send your resume to: Monsanto, 700 Chesterfield Pkwy North, Mail Zone: BB2I, St. Louis, MO 63198; Fax: 314/737-6838.

Plant Transformation Biologist

Monsanto has an opening for an experienced Ph.D. scientist to lead a transformation program in ornamental plants at Monsanto's newlyestablished research center in Bangalore, India. The successful candidate will be responsible for the development and improvement of transformation systems to generate genetically modified crops. The qualified candidate will have experience with tissue culture, plant transformation and regeneration techniques. Excellent communication and leadership skills are a must, as is experience in ornamental plants. **Job Code: 99-883**

Plant Physiologist

Monsanto is currently looking for an experienced BS/MS scientist to coordinate the evaluation of transgenic ornamental plants in Bangalore, India. The successful candidate will be responsible for evaluating ornamentals genetically modified with value-added, consumer traits and identifying commercial candidates. The qualified candidate will have experience with tissue culture and greenhouse grown plants, plant physiology and molecular analysis techniques such as Elisa and PCR. The ability to work in a team-based environment and interact with several different groups developing transgenic plants as products will be necessary. Experience in ornamental crops would be highly desirable. Job Code: 99-884

For the above 2 positions, please send your resume to: Monsanto, Job Code: (insert from above), 700 Chesterfield Pkwy North, Mail Zone: BB3M, St. Louis, MO 63198.

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MOLECULAR SYSTEMATIST TEXAS A&M UNIVERSITY

The Department of Entomology, Texas A&M University is seeking an ASSISTANT PROFESSOR to provide research leadership in the area of insect molecular systematics. Duties include developing an aggressive, externally funded research program, teaching a graduate course in theory of insect systematics, and an existing undergraduate course appropriate to the needs of the department and the candidate's abilities. Suitable research areas include investigation of phylogenetic relationships, modes of speciation, and improved classifications of insects at any taxonomic level. Successful candidate will be expected to recruit and train graduate students. Candidates who combine molecular methods with morphological and collection-based research are preferred, as are candidates that apply research results to issues in applied entomology. Technical competence in a variety of molecular techniques including sequencing of appropriate gene regions' and phylogenetic analysis of gene se-quence data is expected. Ph.D. required. Postdoctoral experience, a proven record of research productivity, and demonstrated ability to secure external research funding preferred. Interested individuals should submit a curriculum vitae, statement of research and teaching interests, and the names, addresses, and telephone numbers of four people who can be contacted for references by 1 August 1999 to: Dr. Ray Frisbie, Department of Entomology, Texas A&M Univer-sity, College Station, TX 77843. Telephone: 409-845-2516; FAX: 409-845-6305; e-mail: r-frisbie@ tamu.edu. Texas A&M is an Equal Opportunity Employer.

HEAD OF THE DEPARTMENT OF CHEMISTRY

University of Illinois at Urbana-Champaign

Applications and nominations are invited for the position of Head of the Department of Chemistry at the University of Illinois at Urbana-Champaign. The minimum qualifications for this position are the academic credentials or equivalent of a Full Professor in chemistry at a major research university, a national and international reputation for scholarly productivity in research, and the promise of leadership and administrative excellence. Salary open. Preferred starting date August 21, 1999.

To ensure full consideration, nominations and applications should be submitted by July 1, 1999. Applications and nominations should be sent to:

Professor James J. Coleman, Chair Search Committee c/o Renee Schum School of Chemical Sciences 505 South Mathews Avenue Urbana, IL 61801

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

FACULTY POSITIONS IN AUDITORY/VESTIBULAR NEUROSCIENCE

The Oregon Hearing Research Center at Oregon Health Sciences University is seeking two faculty members in auditory/vestibular neuroscience. Special consideration will be given to those candidates with research emphases in molecular and cellular approaches to ear development/regeneration/function, molecular genetics of hearing, or inner ear diseases, aging processes, homeostatic mechanisms, or functional morphology. We actively encourage applications from candidates trained in other fields who are developing research programs in the auditory and vestibular neurosciences. Requirements: Ph.D. or equivalent; three years of postdoctoral experience; record of peer-reviewed publications; and funded or fundable research program. Appointments are available at the ASSIST-ANT, ASSOCIATE, or PROFESSOR level. Submit a statement of research interest, curriculum vitae, and names of three references to: Alfred L. Nuttall, Ph.D., Oregon Hearing Research Center, NRC04, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201-3098 by August 1, 1999, although the search will continue until positions are filled. OHSU is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

IMMUNOLOGIST ASSISTANT OR ASSOCIATE PROFESSOR DEPARTMENT OF MICROBIOLOGY The University of Iowa

The University of Iowa, Department of Microbiology invites applications for a tenure-track faculty position in immunology at the rank of Assistant or Associate Professor. The successful applicant will also be appointed to a Howard Hughes Institute-funded program in signal transduction at The University of Iowa, and will also participate in graduate and undergraduate teaching of immunology. The Department of Microbiology is housed in newly renovated space, and consists of faculty with research efforts in diverse areas, including immunology, virology, pathogenic bacteriology, bacterial physiology, and genetics. The immunology community at The University of Iowa consists of a collaborative and supportive group of over 30 scientists with primary appointments in both basic and clinical departments, and oversees NIHfunded training programs for both Doctoral and postdoctoral students. Applicants should possess a Ph.D. or M.D., and have several years of postdoctoral experience. The successful applicant will have a record of productivity and peer-reviewed publications in English language journals, and the potential to develop a strong extramurally funded research program. Competitive salary and start-up funds will be provided. Applicants should submit a current curriculum vitae, statement of research plans, and names of three references to:

Dr. Gail Bishop Chair, Search Committee Department of Microbiology University of Iowa College of Medicine Iowa City, IA 52242

For best consideration, please send materials by July 15, 1999. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.

The Department of Pharmacology of the University of Tennessee, Memphis is enlarging its neuropharmacology faculty. The Department is seeking to fill a tenure-track position at the ASSOCIATE or AS-SISTANT PROFESSOR level. Applicants must have a Ph.D. or M.D.-Ph.D. and demonstrated capability to support and direct a competitive research program. Individuals using molecular, cellular, and/ or electrophysiological approaches, who look forward to collaboration in a highly interactive research environment with a large, well-funded neuroscience community, will be given preference. This is a 12-month appointment that includes teaching responsibilities in both the professional and graduate colleges. Excellent laboratory facilities and start-up funding are available. Applicants should submit curriculum vitae, three reference letters and a detailed description of their research program by July 1, 1999, to: Burt Sharp, M.D., Chairman, Department of Pharmacology, University of Tennessee, Memphis, 874 Union Avenue, Memphis, TN 38163. The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer. Women and minorities are especially encouraged to apply.

ASSISTANT PROFESSORS

Pace University (Westchester County campus) anticipates two openings for tenure-track positions at the Assistant Professor level, one for September 1999 and one for January 2000. Candidates must hold a Ph.D. in biological sciences and have expertise in biotechnology or environmental science. Teaching re-sponsibilities may include courses in biotechnology, cell biology, ecology, environmental science, microbiology, and physiology. Instruction will be primarily at the undergraduate level with some participation in a Master's program in environmental science. Applicants should send a letter, curriculum vitae, statement of teaching philosophy and research interest, and three letters of reference to: Dr. John Sharkey, Associate Dean, Dyson College of Arts and Sciences, Pace University, 861 Bedford Road, Pleasantville, NY 10570. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN NSERC UNIVERSITY FACULTY AWARD

SIMON FRASER UNIVERSITY Department of Biological Sciences

The Department of Biological Sciences of Simon Fraser University plans to nominate a female scientist for an NSERC University Faculty Award. Candidates are required to hold a Ph.D. degree in any area of the biological sciences at the time of appointment. Strong demonstrated research potential and teaching commitment are essential.

The Department website can be accessed via website: http://www.biol.sfu.ca.

A tenure-track appointment will accompany the award, effective on the start date. Candidates must be women and Canadian citizens or permanent residents of Canada.

The position would be expected to begin September 1, 2000. Interested applicants should, before June 30, 1999, submit an up-to-date curriculum vitae and descriptive statements on research plans and teaching to:

> Dr. N. H. Haunerland, Chair Department of Biological Sciences Simon Fraser University 8888 University Drive

Burnaby, British Columbia V5A 1S6 Canada

Please arrange for three letters of reference to be sent in confidence (FAX: 604-291-4312).

Further information on the award can be obtained from the department or directly from NSERC (also see the NSERC website: http://www.nserc.ca/ programs/sf/UFA_e.htm).

Simon Fraser University is committed to the principle of Equity in Employment.

The Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, is seeking a NEUROSCIENTIST/PSYCHIATRIST with outstanding skills in cellular and systems neurobiology to develop independent research programs in these areas to enrich and complement the department's existing basic and clinical research activities. This will be a full-time academic appointment at the ASSISTANT PROFESSOR level. The successful candidate will be responsible for developing a research program in the area of cellular and systems neurobiology of relevance to psychiatric disease. Additionally the individual will be expected to take an active part in teaching Stanford medical students and psychiatry Residents. Finally, the individual in this position will provide direct patient care, and patient and staff education. Applicants must have demonstrated expertise in relevant clinical training, teaching, and/ or research publications. Applicants must hold an M.D. or equivalent degree, and have extensive research experience. Candidates must be Board-eligible or Board-certified in psychiatry, and either hold or be eligible for a California medical licensure. Preference will be given to candidates who hold M.D.-Ph.D. degrees. Applicants should forward a curriculum vitae and the names of five referees to: Chris Hayward, M.D., M.P.H., Chairman of the Search Committee, c/o Department of Psychiatry, Stanford Medical Center, Stanford, CA 94305-5722. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

ASSISTANT PROFESSOR of medicine, University of Wisconsin, Section of Hematology/HSCT. M.D. or M.D.-Ph.D. with Board-eligibility in hematology or oncology. Clinical responsibilities and research program focused on hematopoietic stem cell transplantation (HSCT) and experimental manipulations of the hematopoietic stem cell. We are seeking someone who will interact productively with other clinical and basic scientists in studies related to HSCT. Reply with statement of clinical, academic, and research interests and names of three references to: Deane Mosher, M.D., Section of Hematology, H4/534, 600 Highland Avenue, Madison, WI 53792. Telephone: 608-263-1836; e-mail: hemesec@medicine.wisc.edu, University of Wisconsin-Madison. UW is an Equal Opportunity/Affinnative Action Employer.

Agricultural Research Service

The U.S. Department of Agriculture, Agricultural Research Service, (ARS), Beltsville Agricultural Research Center, Plant Sciences Institute, Insect Biocontrol Laboratory in Beltsville, Maryland is seeking a Botanist/Molecular Biologist/Microbiologist/Research Entomologist, GS-430/401/403/414-11/12/13. Salary is commensurate with experience (GS-11: \$40,714 - \$52,927 per annum/GS-12: \$48,796 - \$63,436 per annum/GS-13: \$58,027 \$75,433 per annum) plus benefits. Candidates must be U.S. citizens. Research focuses on the molecular phylogenetic analysis of entomopathogen genera, host range, virulence activity, molecular and classical epidemiology, and development of novel strategies for controlling insect pests of economic importance with insect fungi and fungal products. Applicants must have appropriate qualifying education in botany, molecular biology, microbiology, OR entomology and/or have professional research experience that provided (1) knowledge of botany and mycology; mi crobiology; OR entomology; (2) knowledge of molecular biology of fungi; (3) knowledge of insect fungi including both classical and molecular taxonomy, and pathology of inset fungi; and (4) ability to plan and conduct research and report results. IN ADDITION, applicants must document (5) skill in collecting fungi; and (6) ability to delineate insectfungi interactions and epidemiology of entomopathogenic fungi. For program information, contact Dr. Edward M. Dougherty at 301-504-5689. For complete application instructions, call 301-504-1484 to request vacancy announcement number ARS-X9E-9256, or print it from the internet at http://www.ars.usda.gov. All application materials must be postmarked by May 3, 1999. USDA ARS is an equal opportunity employer and provider.

POST-DOCTORAL POSITION

A post-doctoral position in biochemistry/ molecular biology is available immediately at the Gillette Research Institute, a division of The Gillette Company. The successful candidate will characterize the structure and activity of a bacterial enzyme using biochemical, molecular biological and other techniques as needed. This research project is part of an on-going program, but the post-doctoral scientist will be expected to work independently. Qualifications include a Ph.D. in Biochemistry, Molecular Biology or other appropriate field. Prior experience with molecular biology of bacteria or with enzyme active site characterization is desired.

Founded in 1901, The Gillette Company is a world leader in grooming products, writing instruments, correction products, toothbrushes, oral care appliances and alkaline batteries. Located in suburban Maryland, the Gillette Research Institute is part of a growing high tech community that has formed in the Washington DC metropolitan area. Qualified individuals should send their Curriculum Vitae and reference list to:

> Gillette Research Institute Human Resources Department 401 Professional Drive Gaithersburg, MD 20879 Fax: (301) 590-1575 Email: nancy_allen@gillette.com

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National Risk Management Research Laboratory Post Doctoral Program, FY-2000

The U.S. Environmental Protection Agency's, National Risk Management Research Laboratory (NRMRL) is recruiting post-doctoral candidates for positions at its research facilities in Cincinnati, OH; Edison, NJ; Research Triangle Park, NC; and Ada, OK. NRMRL is seeking candidates from a broad range of disciplinary backgrounds including water resources engineering/management, urban/regional planning, environmental science, chemistry, biology, microbiology, hydrology, ecology, applied mathematics and statistics, systems analysis, computer science, environmental, mechanical, civil or chemical engineering, and interdisciplinary fields including socioeconomic and integrated assessment science and engineering. The preferred candidate will have earned a Ph.D. in one of these areas within the past five years.

NRMRL investigates methods and their cost-effectiveness for preventing and controlling pollution to air, land, water and subsurface resources; protection of water quality in public water systems; remediation of contaminated sites, sediments and ground water; assessment, prevention, and control of indoor air pollution and global climate change, development of tools and technologies for preventing industrial pollution and for sustainable development; land use planning for sustainability, watershed management for sustainability, environmentally benign ("green") chemical synthesis; and restoration of ecosystems.

Qualifications and Benefits: These post-doctoral positions will be three-year term appointments at a salary range of \$39,960–\$63,695, commensurate with qualifications. Candidates must have completed all requirements for a Ph.D. prior to entrance on duty. Selected candidates will be eligible for a full benefits package, health insurance, life insurance, retirement, and vacation and sick leave. Selected candidates may be required to complete a Medical Monitoring health exam prior to entrance on duty. United States citizenship is a requirement for all of these positions. Additional information about NRMRL and associated benefits is available at http://www.epa.gov/ORD/NRMRL/.

Application Procedures: Send the following information to Ms. Pat Watson, ATTN: Post Doctoral Positions, National Risk Management Research Laboratory, U.S. Environmental Protection Agency, 26 West Martin Luther King Drive, Cincinnati, OH 45268:

1) a curriculum vitae; 2) a letter of recommendation from your senior research advisor or other comparable official; 3) a letter indicating your research focus; 4) preferred geographical location; 5) a copy of your transcript; 6) A resume which includes the following information: Full name, mailing address and phone number, Country of Citizenship, and Veterans preference if applicable (attach DD-214 or SF-15)

Applications sent via U.S. government postage-paid envelopes will not receive consideration. Applications must be postmarked by May 21, 1999. Applicants will receive written notice of the status of their application no later than July 9, 1999.

The U.S. EPA is an Equal Opportunity Employer

ANNOUNCEMENT

DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW?

"I suffered ridicule as I worked long hours in the lab in high school and college, and frank outrage when I received a grant to study bacterial genetics during my summers in college." "I have long been interested in science, and in helping people. During my training, I had a number of clinical experiences which convinced me that I wanted to specialize in immunology at the bench, but still have patient contact." "I was always tinkering with my toys, taking them apart, trying to fit the square peg in the round hole. NIH is the only place to be for cutting-edge training, creativity, and pure excitement."

These are statements excerpted from applications recently submitted to the NIH LOAN REPAYMENT PROGRAM. NIH, the world's leading biomedical research and research training facility, has trained thousands in areas such as neuroscience, pathology, immunology, molecular genetics, developmental biology, cell biology, molecular biology, virology, and structural biology,

to name only a sampling of areas in our intramural research program.

NIH Loan Repayment Benefits of \$35,000 Per Year

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

For more information on Loan Repayment Programs and postdoctoral training programs, visit our websites at:

http://www.training.nih.gov and http://lrp.info.nih.gov



Toll Free: 1-800-528-7689 • TTY: 1-888-352-3001

NIH is dedicated to building a diverse community in its training and employment programs.

ASSISTANT PROFESSOR. The Department of Dairy and Animal Science at The Pennsylvania State University seeks applicants for an Assistant Professor. The tenure-track position has an initial 70 percent research and 30 percent teaching responsibility in the area of genomics and bioinformatics applied to dairy cattle. The successful applicant will be expected to develop a strong research program in one or more of the following areas: development and implementation of statistical and mathematical methods for QTL mapping and detection; computational genomics; functional gene mapping; or genome scanning. The successful applicant will also be expected to provide expertise for incorporating genomic information into dairy cattle selection programs. The individual is expected to work closely with colleagues interested in quantitative and molecular approaches to animal improvement. In addition the successful applicant will be expected to advise undergraduate and graduate students and to contribute to the teaching of undergraduate and graduate genetics courses. Candidates must have a Ph.D. in animal science, genetics, statistical genetics, molecular biology with strong quantitative skills, or a related discipline and a minimum of two years of postdoctoral training in the appropriate field. The successful applicant must have the ability to complete successfully for external funding and must be able to communicate effectively with students, faculty, and industry groups. Salary will be commensurate with background and experience. Qualified applicants should submit a letter of application, résumé, academic transcripts, a statement of research and teaching interests, and have three letters of reference sent to: Dr. Gary Rogers, Chair of Search Committee, The Pennsylvania State University, Department of Dairy and Animal Science, 324 Henning Building, Department A, University Park, PA 16802. Telephone: 814-863-4204; FAX: 814-865-7442; e-mail: gwr4@psu.edu. Application deadline is June 1, 1999, or until a suitable candidate is identified. Penn State is committed to Affirmative Action, Equal Opportunity, and the diversity of its work force.

DIRECTOR CYTOGENETICS LABORATORY DEPARTMENT OF GENETICS Yale University School of Medicine

The Department of Genetics is seeking outstanding candidates for the position of Director of the Cytoge-netics Laboratory. This laboratory, housed within the Department of Genetics, combines superb clinical service and training with opportunities for research. The laboratory analyzes over 2,000 prenatal, bone marrow, peripheral blood, and solid tissue samples per year. The Director will have the opportunity to implement new technologies and to participate in independent and collaborative research. Applicants must be Board-eligible or Board-certified in clinical cytogenetics. Faculty rank will be commensurate with qualifications. Applications should include a curriculum vitae and a statement of clinical/research interests. Applications should be sent to: Cytogenetics Search Committee, Department of Genetics, University School of Medicine, P.O. Box 208005, New Haven, CT 06520-8005. An Equal Opportunity/Affirmative Action Employer. We strongly encourage applications from women and minority candidates

ASSISTANT PROFESSOR TENURE-TRACK FACULTY POSITION

A faculty position at the Assistant Professor level is available in the Department of Biochemistry at the University of Kentucky Medical Center. Preference will be given to individuals working in the areas of cell signaling, signal transduction, or cell proliferation and development. The successful candidate is expected to develop a strong extramurally funded independent research program. Applicant should send a curriculum vitae, a statement of research interests, and letters of recommendation from at least three references to: Biochemistry Faculty Search Committee, Department of Biochemistry-607B, University of Kentucky College of Medicine, Lexington, KY 40536-0289. The University of Kentucky is an Equal Opportunity Employer and encourages applications from qualified women and minorities.

POSITIONS OPEN

FACULTY POSITIONS ALBERT EINSTEIN COLLEGE OF MEDICINE

ASSISTANT or ASSOCIATE PROFESSOR faculty positions in Albert Einstein College of Medicine's Vascular Cell and Molecular Biology or Molecular Cardiology Programs are offered. Access to graduate programs and a joint appointment in a basic science or clinical department are available. Those working in systems related to cardiovascular biology, including angiogenesis and endothelial or smooth muscle biology, cardiovascular development, or genetics related to the cardiovascular system, are particularly encouraged to apply. Candidates should hold a M.D. or Ph.D. degree and will be expected to establish a dynamic research program. Generous start-up funds are available. Please submit curriculum vitae, a summary of research accomplishments, a description of future plans, and names of three references to:

> J. Anthony Ware, M.D. Chief, Cardiovascular Division Albert Einstein College of Medicine Jack and Pearl Resnick Campus 1300 Morris Park Avenue Bronx, NY 10461 FAX: 718-430-8989 E-mail: jaware@aecom.yu.edu

Equal Opportunity Employer.

FACULTY POSITION. The University of Pennsylvania is seeking a MEDICAL DOCTOR who is Board-eligible in nephrology with graduate training in immunology required to perform research on Tcell immunology, tolerance, costimulatory signals. Research involves use of transgenic animals for models of in vivo immune responses. Qualified candidates must have at least three years of laboratory experience in flow cytometry, tissue culture, T-cell adoptive transfers, and experience with transgenic and immunodeficient animals. Interested individuals should forward applications with curriculum vitae and at least three references to: Laurence Turka, M.D., Chief, Renal-Electrolyte and Hypertension Division, University of Pennsylvania Health System, 700 Clinical Research Building, 415 Curie Boulevard, Philadelphia, PA 19104-6144. The University is an Equal Opportunity Employer and actively seeks applications from all qualified persons.

EXECUTIVE DIRECTOR UNIVERSITY OF MARYLAND INSTITUTE FOR ECOLOGICAL ECONOMICS

Individual with broad knowledge of environmental science, economics, and sponsored research to serve as Executive Director of the Institute. Master's degree desired. See website: http://iee.umces.edu/miiee/ miiee.html for complete details. Salary and title commensurate with qualifications and experience. Résumé and four references to: Dr. R. Costanza, Director, University of Maryland Institute for Ecological Economics, Chesapeake Bio Lab, P.O. Box 38, Solomons, MD 20688. Contractual position. Open until filled. Affirmative Action/Equal Opportunity Employer.

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF PLANT SCIENCES MONTANA STATE UNIVERSITY-BOZEMAN

Montana State University–Bozeman seeks Assistant/Associate Professor of plant biochemistry, ninemonth tenure-track position. Responsibilities include coordinating undergraduate biotechnology course, teaching course on plant metabolism. Requires a doctorate in plant biochemistry or closely related field, significant publication record, and potential for excellence in undergraduate teaching. Must request complete application materials from: Sarah Briggs, Plant Sciences Department, 333 Leon Johnson Hall, Bozeman, MT 59717-3140. Telephone: 406-994-4833; FAX: 406-994-1848; e-mail: sarah@ montana.edu. Screening begins July 1, 1999, start date January 1, 2000. ADA/Equal Opportunity/Affirmative Action/Veterans Preference.

POSITIONS OPEN FACULTY POSITIONS

ASSISTANT PROFESSOR OF PHARMACEUTICAL SCIENCES College of Pharmacy The University of Michigan

The Division of Pharmaceutical Sciences at the University of Michigan College of Pharmacy is seeking applicants for tenure-track position(s) at the Assistant Professor level. Applicants should have a Ph.D. (or equivalent) in the pharmaceutical or biomedical sciences and a minimum of one year of postdoctoral experience. The successful candidate will be expected to develop an independent and extramurally funded research program, and to participate in the teaching and service missions of the professional and graduate programs. Research interests sought in this search include but are not limited to pharmacogenetics of enzymes, transporters, and receptors; drug delivery and targeting of macromolecules; biophysics of membrane transport and protein biochemistry; biomaterials and tissue engineering. Interested individuals should send a curriculum vi-

Interested individuals should send a curriculum vitae, future research plans, and arrange for three letters of recommendation to be sent to the Search Committee Chair, as noted below. Applicants are invited to view the College of Pharmacy World Wide Web page for more information about our programs (website: http://www.umich.edu/~pharmacy). The Search Committee will begin reviewing appli-

The Search Committee will begin reviewing applications immediately, and will continue until the position(s) are filled. Submit the requested information to: Professor Victor C. M. Yang, Chair, Search Committee, College of Pharmacy, 428 Church Street, The University of Michigan, Ann Arbor, MI 48109-1065. Telephone: 734-764-4273; FAX: 734-763-2022; e-mail: vcyang@umich.edu. The University of Michigan is an Equal Opportunity/Affirnative Action Employer.

TUSKEGEE UNIVERSITY

The Tuskegee University Biology Department seeks to fill three **TENURE-TRACK POSITIONS** beginning in summer or fall 1999. Expertise in immunology, biotechnology, or genetics is desired. Dedication to quality undergraduate teaching, including freshmen, is required. Development of a funded research program involving undergraduate and graduate students is expected. Rank and salary are open. One appointment will include duties of Department Head with appropriate rank and compensation. The Biology Department has 300 undergraduate majors, 15 M.Sc. students, 14 faculty, and a developing interdisciplinary Ph.D. Program. Send letter of application (including a statement of teaching and research philosophies), contact information for three references, and curriculum vitae to: Dr. John W. Williams III, Acting Head, Biology Department, Tuskegee University, Tuskegee, AL 36088. Telephone: 334-727-8829. Tuskegee University is an Equal Opportunity Employer; minorities and women are encouraged to apply,

RESEARCH ASSOCIATE FOR DAYTON-AREA UNIVERSITY

Maintain primary tissue/leukemia cell cultures; study tumor cell apoptosis/growth; investigate molecular mechnaism of ion channels using patch clamp technique; determine signaling pathways using biochemistry, molecular biology methods. Required: M.S. in physiology/biophysics, two years of experience in job offered or two years of research experience including recording/analysis of cell-attached patch, inside-out patch, outside-out patch, whole cell config and perforated patch, membrane potential measure and voltage clamp, primary and cell-lines cell culture, animal surgery, gene transfection, DNA fragmentation, radioimmunoassay, immunofluorescence stain, RT-PCR, DNA sequence, assay of protein activity, Southern, Northern, and Western blots. 40 hours per week, 8:30 a.m. to 5:30 p.m. \$42,860 per year. Send two résumés and cover letters (no calls) to: ES Sp Prgms, REF# 4468D, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

National Eye Institute National Institutes of Health

The Clinical Immunology Section, Laboratory of Immunology, has an opening for a Staff Scientist. This is a renewable position with a five year term. Candidates will be self-motivated individuals with an expertise in cellular and molecular immunological techniques using primary human cells and tissues. The successful candidate will be part of a highly interactive group of scientists and clinicians engaged in basic research and clinical trials aimed at developing novel immunotherapies for autoimmune diseases. Candidates must have a doctoral degree or equivalent training and be U.S. Citizens or resident aliens. Salary (base = \$58,027) is commensurate with qualifications and is accompanied with full benefits. Applicants should send their curriculum vitae, bibliography, and three letters of recommendation to:

> Jack A. Ragheb, M.D., Ph.D. Laboratory of Immunology/NEI/NIH Bldg.10, Rm.10N112A 10 Center Dr. MSC-1857 Bethesda, Maryland 20892-1857 (e-mail) jr50b@nih.gov

Deadline for receipt of applications is 5/31/99.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

HEALTH SCIENTIST ADMINISTRATOR/MEDICAL OFFICER

The National Institute of Child Health and Human Development (NICHD), National Institutes of Health (NIH), is seeking a Geneticist who will be responsible for directing a multimillion dollar portfolio of grants, cooperative agreements and contracts in the area of reproductive genetics. The salary range is \$48,796 to \$89,142 commensurate with experience. A recruitment/relocation bonus of up to 25% may be available to Federal and non-Federal applicants. Physicians are eligible for a comparability allowance.

Applicants must have a Ph.D., M.D., or a full 4-year course of study leading to a bachelor's or higher degree in a health-related science, and at least 3 years of experience in biomedical research in genetics. Training in reproductive sciences is desirable.

For additional information, contact Ms. Janice Balin at (301)435-3416 or e-mail

Janice_balin@nih.gov. The complete vacancy announcement may be found on the NICHD website at http://www.nih.gov/nichd/jobs. All applications must be postmarked by June 14, 1999.

NIH is an Equal Opportunity Employer

University of Wisconsin–Madison College of Agricultural and Life Sciences PVL #31216

The University of Wisconsin–Madison, College of Agricultural and Life Sciences, invites applicants for the position of Associate Dean for Agriculture and Natural Resource Extension. As Associate Dean, the individual has responsibility to provide leadership for the organization, content, and effectiveness of extension programs relating to agriculture and natural resources. The individual in the position reports jointly to the Dean of Cooperative Extension (CE) and the Dean of the College of Agricultural and Life Sciences (CALS).

Specific Statewide Extension Responsibilities Include:

1) Provide leadership for statewide program planning, implementation, evaluation and reporting of agricultural and related natural resources areas. Collaborators in these tasks may include faculty and staff in the counties and throughout the UW system. 2) Foster both ad hoc and on-going issue-focused teams of county and campus based personnel, UW research faculty/staff and, when appropriate, constituent interests. 3) Serve as a member of CE Administrative Committee, and other administrative groups as appointed by the Dean of CE.

Specific CALS, UW-Madison Responsibilities Include:

1) Serve as the primary CALS and CE representative in matters relating to budget and personnel for all Extension appointments in CALS, manage inter-institutional agreements and seek new funding from public and private sources in support of CE activities. 2) Serve as a member of the CALS Executive Committee, and other administrative groups as appointed by the Dean of CALS. 3) Encourage innovation in Extension/outreach programming within CALS and ensure that Extension/outreach activities are recognized as an important and integral component of departmental responsibilities and receive appropriate recognition in the performance appraisal process for CALS faculty and staff. 4) Foster integrated research/extension teams to address important agriculture and natural resource problems.

Qualifications: 1) Ph.D. and qualifications necessary to be tenured in a college department. 2) Distinguished extension/research career and evidence of administrative ability. 3) Evidence of successful partnerships with government units and/or private sectors. 4) Appreciation for extension/outreach excellence and contributions. 5) Understanding of the mission of extension and a land grant university in a multi-campus system.

Availability: The position will be available immediately. The closing date for nominations and applications is June 15, 1999. Please submit a resume, cover letter and names and addresses of five references to:

Search Committee for Associate Dean for Agriculture and Natural Resource Extension c/o Craig Grau, Search Committee Chair Office of the Dean 140 Agriculture Hall, 1450 Linden Drive University of Wisconsin – Madison Madison, WI 53706-1562

The University of Wisconsin–Madison is an Equal Opportunity and Affirmative Action Employer. Women and minorities are encouraged to apply. Unless confidentiality is requested in writing, information regarding applicants and nominees must be released upon request. Finalists cannot be guaranteed confidentiality.

TENURE-TRACK POSITION

The Department of Pharmacology and Toxicology and Institute for Drug and Alcohol Studies at the Medical College of Virginia, Virginia Commonwealth University invite applications for a tenure-track faculty position. Rank is open, with candidates being considered for rank based upon experience and qualifications. The primary duties will be to implement an independent, high-quality program of neuroscience research, teach in professional and graduate school courses in cellular and molecular biology and pharmacology, and to perform the normal service functions expected of faculty. The successful applicant must have a Ph.D. or equivalent, with at least two years of relevant postdoctoral experience. The successful applicant will also have an outstanding record of research accomplishments appropriate for his/her years of experience, as judged by the quality and quantity of research and scholarly publications. The individual selected must have research funding or be able to quickly establish a fully funded laboratory. Neuroscientists using molecular approaches, such as transgenic/knockout mouse models, receptor cloning, neurotransmitter signaling, and whose work is relevant to drug and alcohol abuse are especially encouraged to apply. Applicants should submit a curriculum vitae and the names and addresses of three references, by June 15, 1999 (although applications will be accepted until a suitable candidate is found), to: Search Committee (F0128), Virginia Commonwealth University, P.O. Box 980613, Richmond, VA 23298-0613. Position description available. VCU is an Equal Opportunity/Affirmative Action Employer and encourages women, minorities, and persons with disability to apply.

FACUL/TY POSITION ASSISTANT/ASSOCIATE/PROFESSOR UNIVERSITY OF FLORIDA Functional Magnetic Resonance Imaging Physicist

The Department of Psychiatry and the University of Florida Brain Institute (UFBI) are seeking a Physicist to play a central role in the expansion of the Functional Magnetic Resonance Imaging Program. This individual will maintain an independent research program to develop MRI methods for analysis of human brain function. Specific areas of interest are the development of high-speed and real-time imaging techniques, improved methods of or the functional imaging of deep brain structures, and ways of integrating different brain measurement techniques (e.g., fMRI and EEG). Opportunities exist for collaborations with Basic Neuroscientists performing imaging studies in rodents. Facilities currently available include two Siemens 1.5T whole-body MRI systems, one GE 1.5T whole body MRI and one GE 3T MRI with multinuclear capability. Salary and rank of this full-time tenure-track position are commensurate with experience. Starting date as soon as September 1, 1999. Send curriculum vitae and cover letter by July 1, 1999, to: John M. Petitto, M.D., Chair, Search Committee, Department of Psychiatry, Brain Institute, University of Florida College of Medicine, Box 100256, Gainesville, FL 32610-0256. Equal Employment Opportunity / Affirmative Action Employer.

RESEARCH SCIENTIST-1999-19 IMMUNOLOGIST

Corixa Corporation is a biotechnology company that is discovering and developing vaccines and therapies for cancer and infectious diseases. The Immunology Department is seeking a SCIENTIST with experience in the generation of T cell responses. The position will emphasize *in vito* human T cell responses to tumor antigens. Relevant experience may include studies of murine or human T cells, APC, or animal models. The applicant must have a Ph.D. and at least two years of postdoctoral experience. Competitive salary and benefits. Please send curriculum vitae, statements of research interests, experience, and names of three references by May 30, 1999, to: Corixa Corporation, Attn: 1999-19, 1124 Columbia Street, Suite 200, Seattle, WA 98104. FAX: 206-754-5715; website: www.corixa.com. *An Equal Opportunity Employer.* POSITIONS OPEN



SENIOR SEQUENCING MANAGER

The Department of Energy (DOE) Joint Genome Institute (JGI) in conjunction with the Life Sciences Division of the Lawrence Berkeley National Laboratory (LBNL) has an opening for a Senior Biologist with sequencing experience. The JGI represents the merger of the DOE Genome Centers at Los Alamos National Laboratory, Lawrence Berkeley National Laboratory, and Lawrence Livermore National Laboratory. Its dual biological goals are to develop largescale genomic sequencing and functional genomics. To support these efforts, a 60,000–square foot Production Sequencing Facility (PSF) is being constructed in Walnut Creek, California, the first 30,000– square foot increment of which is now functioning.

You will perform duties regarding sequencing leadership, including overseeing and providing technical guidance for the completion of genomic clones from their draft/shotgun phase to their finished phase. Additionally, you will develop standards and metrics for the finishing process that considers the DOE's position in the genome community and available resources. This includes the definition of automation, new biochemical approaches, and software that facilitates the completion of significantly larger volumes of genome sequence than is possible today.

Requires a Ph.D. in biochemistry, molecular biology, a closely related discipline or equivalent experience, and an extensive background managing largescale research and/or production programs. Must have demonstrated expertise in various sequencing, automation, and software applications applicable to high-throughput genomic sequencing, proven leadership experience, and superb interpersonal and verbal/written communication skills. Prefer a knowledge of ABI and Amersham DNA sequencers.

Please send curriculum vitae, cover letter, names, addresses, and telephone numbers of three references and Job# LSD10408/JSCI to: Ernest Orlando, Lawrence Berkeley National Laboratory, Staffing Office, Job# LSD10408/JSCI, One Cyclotron Road, MS 938A, Berkeley, CA 94720. E-mail: employment@lbl.gov; FAX: 510-486-5870. You may see the full position description and qualification requirements on our LBNL website: http://www. lbl.gov/CJO. Berkeley Lab is an Equal Opportunity Employer committed to the development of a diverse work fore.

RESEARCH CHEMIST/MICROBIOLOGIST. The U.S. Army Medical Research Institute of Chemical Defense is the lead laboratory in the Department of Defense for research on the development of antidotes against chemical warfare threats. The Institute currently has an opening for a Principal Investigator and team leader in the Pharmacology Division at Aberdeen Proving Ground, Maryland. Only U.S. citizens may apply. It is desirable that the candidate demonstrate postgraduate research experience involving the identification, cloning, and expression of wild type or site-directed mutated genes and experience working with proteins that are postulated to have a therapeutic effect in vivo against a xenobiotic compound. Job announcement can be found at website: www. usajobs.opm.gov or you can Telephone: 410-306-0080 to request an application package. Initial consideration will be given to those received by May 14, 1999

ALTERNATE CAREER PATH

Dynamic, self-starting **SCIENTIST** to join scientific writing team in a fast-paced, entrepreneurial company based in New York City. Looking for ambitious individual with life science degree, ideally Ph.D. or M.D. Fluency in English and excellent scientific writing skills are absolute requirements. For immediate consideration FAX, e-mail, or send curriculum vitae to: Qualus, 420 East 51st Street, New York, NY 10022. FAX: 212-223-0893; e-mail: hgoldswe@ interport.net.

TWO TENURE-TRACK FACULTY POSITIONS IN BIOLOGICAL OCEANOGRAPHY University of Alaska Fairbanks

POSITIONS OPEN

The Institute of Marine Science (see website: http://www.ims.uaf.edu:8000) is seeking applicants for two tenure-track positions in biological oceanography in the areas of primary and secondary productivity. We are seeking energetic applicants with the potential to develop high-quality, seagoing research programs that would lead to productive collaboration with the present faculty, whose interdisciplinary research focuses primarily on the Arctic Ocean, Bering Sea, Gulf of Alaska, and North Pacific. The successful applicants are expected to seek external support for their research programs. Outstanding applicants in all areas of primary and secondary productivity are encouraged to apply. These areas may include, but are not limited to, remote sensing, ecological modeling of marine systems, bio-optics, zooplankton, and modern techniques of assessment of plankton populations. The positions will be filled at the **ASSISTANT PROFESSOR** level; however, in special cases, appointment at higher levels will be considered. The successful candidates will be expected to teach the graduate-level core course in biological oceanography and another graduate-level course in their specialty or an undergraduate survey course. Applicants should send a summary of research interests with a curriculum vitae and the names, addresses, and telephone numbers of three references by June 15, 1999, to: Dave Musgrave, Chair Biological Oceanography Search Committee, c/o Director's Office, Institute of Marine Science, University of Alaska Fairbanks, Fairbanks, AK 99775. The University of Alaska Fairbanks is an Equal Employment Opportunity/ Affirmative Action Employer and Educational Institution.

TENURE-TRACK POSITION LABORATORY OF CELLULAR AND MOLECULAR BIOLOGY

The Laboratory of Cellular and Molecular Biology (LCMB), Division of Basic Sciences (DBS), of the National Cancer Institute (NCI), National Institutes of Health has a long tradition of excellence in the investigation of signal transduction pathways involved in both normal cellular function and malignant transformation. The Laboratory now invites applications for a tenure-track position to study the cell biology of signal transduction. The applicant should have the potential to develop an independent basic research program in cellular and molecular biology, with emphasis on understanding basic signal transduction processes involved in normal or malignant proliferation. Preference will be given to candidates with expertise in the imaging of live cells. This position is available for a Ph.D., M.D., or M.D.-Ph.D. with a salary commensurate with education and experience. A one- or two-page statement of research interests and goals should be submitted in addition to three letters of recommendation and a curriculum vitae to: Ms. Michelle Porturica, Executive Secretary, Laboratory of Cellular and Molecular Biology, DBS, NCI, Building 41, Room A101, Bethesda, MD 20892-5055. Telephone: 301-435-2515; FAX: 301-435-2779; e-mail: porturim@dce41.nci.nih. gov. Candidates must be U.S. citizens or permanent residents. NIH tenure-track Investigators with educational debts may be eligible for the NIH Loan Repayment Program. Applications to be postmarked by June 14, 1999. The NCI is an Equal Opportunity Employer.

RESEARCHER position in Parkinson's disease and movement disorders. Appropriate candidate would be involved in studying the pathophysiological mechanism(s) of Parkinson's disease. Applicants must have a Ph.D. related to neuroscience with or without postdoctoral experience. Experience in behavioral, neurobiological, and electrophysiological measures preferred. Send curriculum vitae to: Daniel Truong, M.D., website: www.pmdi.org; FAX: 714-378-5061.

NHRINational Health Research Institutes
Taiwan, R.O.C. (http://www.nhri.org.tw)

Investigator / Postdoctoral Fellow / Director / Technology Transfer Officer

The National Health Research Institutes (NHRI), a rapidly growing non-profit academic organization, cordially invites motivated scientists to join its Research Divisions and explore the opportunity to work in surroundings where creativity and innovation drive research targeting critical human diseases and unmet therapeutic needs.

Investigator and Postdoctoral Fellow

Positions open at the level of Investigator, Associate Investigator, and Assistant Investigator (the equivalent of Assistant Professor, Associate Professor, and Professor in Universities) at the following Divisions. Postdoctoral Fellow positions are also available. Candidates should have a Ph.D., M.D. or equivalent degree in related fields with excellent publication records:

(A) Division of Biostatistics

The Division is seeking outstanding researchers for positions at different levels. These positions offer competitive start-up funds and access to core facilities. No teaching obligation is necessary. A Ph.D. or equivalent degree in statistics, biostatistics, or related fields is required. Established records of statistical and collaborative research in health related sciences are essential. Good skills in problem solving, interpersonal communication and coordination will be a plus. The Division actively engages in NHRI intramural and extramural research design, data management and analysis, and commits to the advancement of biostatistical research and education in Taiwan.

Correspondent: Dr. Jen-pei Liu E-mail: jpliu@nhri.org.tw

Tel: 886-2-2653-4401 ext.7620 Fax: 886-2-2789-0253

(B) Division of Biotechnology and Pharmaceutical Research

The Division is embarking on an innovative and integrated molecular biology, drug discovery program based on combinatorial chemistry, structure-based drug design and highthroughput bioscreening. Applicants are invited in the areas of tumor biology, cell biology, protein chemistry, virology, animal models, pharmacokinetics, drug metabolism, medicinal chemistry, and combinatorial chemistry. Synthetic, computation and analytical chemists are also welcome.

Correspondent: Dr. Ming-Chu Hsu, Director

E-mail: mingchu@nhri.org.tw Tel: 886-2-2653-4401 ext. 6110 Fax: 886-2-2789-0264

(C) President's Laboratory

Major research areas of this Laboratory are the study of HPV/ HCMV and tumor metastasis. Applicants should have background either in viral oncology, transcriptional regulation, or in cell biology.

Correspondent: Dr. Cheng-Wen Wu, President

E-mail: ken@nhri.org.tw Tel: 886-2-2653-4401 ext. 8000 Fax: 886-2-2651-3742

(D) Division of Clinical Research

Positions open at all levels. A Ph.D. and/or M.D. degree and postdoctoral training in infectious diseases are required for Investigator positions. Postdoctoral fellow positions are available to participate in speciation and testing of antimicrobial susceptibility of human yeast pathogens; to identify genes in the Cphlp and Efglp pathways of *C albicans* involved in viru-

lence of pathogenic yeast; and to investigate the antimicrobial resistance. Experience with recombinant DNA techniques, molecular biology, genetics, and/or diagnostic medical microbiology is preferred.

Correspondent: Dr. Monto Ho, Director

E-mail: hjlo@nhri.org.tw Tel: 886-2-2653-4401 ext. 7121 Fax: 886-2-2789-0254

(E) Division of Health Policy Research

A newly established multidisciplinary research division on health care policy, national health insurance, indicator development and program evaluation. Positions for Ph.D./M.D./ Dr.P.H. holders: Behavioral Scientist/Social Scientist, Senior Health Economist, Epidemiologist, Health Care Policy Analyst/Infrastructure Scientist.

Correspondent: Dr. Yaw-Tang Shih, Director E-mail: sun1125@nhri.org.tw Tel: 886-2-2652-4154 Fax: 886-2-2789-0252

Director, Department of Research Resources

The Department of Research Resources aims at providing integrated research resources, technical and material support, and training programs nationwide to medical and health researchers, The Department is composed of five Sections: Section of Planning and Development, Section of Computer and Information, Section of Education and Training, Section of International Cooperation, and Medical Library. Applicants should have experiences and strong coordination ability in building up these infrastructures for medical research. For more details, please visit our web site.

Correspondent: Dr. Cheng-Wen Wu, President

E-mail: ken@nhri.org.tw Tel: 886-2-2653-4401 ext. 8000 Fax: 886-2-2651-3742

Technology Transfer Officer

Available for person(s) that are familiar with technology transfer, licensing, patent applications or with proven skills in related medical management or research. The successful candidate should have a minimum of three years' experience in technology transfer. No age cap for this position. **Correspondent: Dr. Chung-Ming Chang, Director**

Dept. of Intramural Research Affairs E-mail: tonychang@nhri.org.tw Tel: 886-2-2653-4401 ext. 8300

Fax: 886-2-2789-0274

Application should include: A letter of intent, curriculum vitae with publication list, a brief research proposal, reprints of selected publications, and three reference letters sent directly to the correspondent.

Address:

National Health Research Institutes 128 Yen-Chiu-Yuan Road, Sec II Taipei 115, Taiwan

MEMBRANE BIOPHYSICS AND ALCOHOLISM

The Division of Intramural Clinical and Biological Research of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) invites applications to apply for a TENURE-TRACK POSITION in the Section of Fluorescence Studies (SFS) of the Laboratory of Membrane Biochemistry and Biophysics (LMBB). The mission of the LMBB includes investigations of alterations in membrane structure and function associated with changes in membrane polyunsaturated fatty acids and alcohol exposure. The SFS utilizes fluorescence techniques to investigate lipid-protein and lipid-lipid interactions with the goal of explaining the relationship between alcohol and compositionally induced membrane structure changes and associated alterations in receptor function. The successful candidate will be expected to establish an independent research program, utilizing a combined biophysical and biochemical approach to elucidate the mechanisms associated with altered membrane receptor function induced by changes in either membrane lipid composition or alcohol exposure. It is anticipated that these studies will be directed toward both natural and artificial receptor containing membrane systems. Significant experience in the area of optical spectroscopy and the reconstitution of integral membrane proteins is desirable. Proposed research programs should be designed, in part, to interface with ongoing studies in the LMBB, which utilize a variety of animal models to study the combined effects of essential fatty acid deficiency and alcohol consumption on behavior and function.

Applicants must have a Ph.D. and/or M.D. and should submit curriculum vitae, bibliography, names of three references, and a three-page statement of research interests and goals. All submittals must be postmarked no later than June 14, 1999, and addressed to:

Ms. Kathleen Hanratty NIH, NIAAA, Building 31, Room 1B58 31 Center Drive MSC 2088 Bethesda, MD 20892-2088

NIH is an Equal Opportunity Employer. Applications from women, minorities, and persons with disability are strongly encouraged. The DICBR/NLAAA is a smoke-free environment.

ASSISTANT COOPERATIVE EXTENSION VEGETABLE SPECIALIST. An 11-month, career-track 100-percent Cooperative Extension position that includes research, outreach, and education. The appointee will be located at the University of California/USDA Research Center in Salinas, and will be an integral part of the University of California Davis Department of Vegetable Crops. Research and education emphasis will be on economically and environmentally sound soil, nutrient, water, and crop management practices for cool-season vegetable crops in the Central Coast region of California. For full consideration, direct applications and inquiries by August 15, 1999, to: Dr. Timothy Hartz, Search Committee Chair, Department of Vegetable Crops, University of California, Davis, CA 95616-8746. Telephone: 530-752-1738; FAX: 530-752-9659; e-mail: hartz@vegmail.ucdavis. edu. For additional information, see the complete position description on the World Wide Web at website: http://veghome.ucdavis.edu/positions/ CESpecialist.html.

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

MICROBIOLOGIST position available immediately. B.S. in microbiology is required. Candidates with higher qualifications and experience in molecular virology research are encouraged to apply. Salary and grade commensurate with experience. This is a permanent state position and offers good benefits. U.S. ditzenship or permanent residence is required. To apply include curriculum vitae, college transcripts, names and telephone numbers of at least three references. Contact: Dr. S. Chowdhury, Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS 66506. Telephone: 785-532-4616; e-mail: chowdh@vet.ksu.edu.

POSITIONS OPEN

CANCER RADIATION BIOLOGIST

The Department of Human Oncology (DHO), University of Wisconsin Medical School, has an opening for a Cancer Radiation Biologist to establish an independent, innovative research program with a focus on ionizing radiation-related interactions. This is a tenured faculty position at the ASSOCIATE or FULL PROFESSOR level. The desired candidate will hold a Ph.D. and have research interests broadly related to cellular and molecular responses to radiation or other damaging agents. This could include, but need not be limited to, genetic aspects of cellular sensitivity, molecular response to damage, signal transduction, molecular prognostic markers of radiation damage/response, cell cycle control, or oxidative stress. In addition to research and teaching, this position also involves participation in graduate student and postdoctoral training programs.

The Department of Human Oncology is an interdisciplinary department of the Medical School of the University of Wisconsin with the mission of teaching, research, and service directed toward prevention, detection, diagnosis, and treatment of human malignant diseases. The DHO is a "bridging" department that fosters excellence in basic, translational, and clinical research, housing 23 faculty members including six basic scientists, 12 Physicians (four of whom also have laboratory research programs) and five Radiation Physicists. DHO faculty members are also members of the University of Wisconsin Comprehensive Cancer Center (UWCCC). All laboratory programs are housed in modern laboratory facilities within the UWCCC, and DHO faculty members participate in a number of major UWCCC programs.

Interested individuals should submit a letter of interest, curriculum vitae, and names of three references to: Jack Fowler, Ph.D., D.Sc. Professor, c/o Department of Human Oncology, University of Wisconsin Medical School, K4/310 Clinical Science Center, 600 Highland Avenue, Madison, WI 53792. E-mail: jffowler@humonc.wisc.edu; FAX: 608-263-9947. The University of Wisconsin is an Equal Opportunity Employer and encourages applicants from women and minorities.

NATIONAL EYE INSTITUTE NATIONAL INSTITUTES OF HEALTH

The intramural program of the National Eye Institute invites applications for a position as a RE-SEARCH SCIENTIST within the Laboratory of Sensorimotor Research. This position may be either tenured, or tenure-track with conversion to tenure anytime within six years. Applicants will be expected to establish a research program related to understand-ing the neurobiology of the visual and/or oculomotor system in monkeys. The Laboratory of Sensorimotor Research is devoted to understanding the organization of the brain related to the control of eye movements and visual perception. It has excellent facilities for the study of these systems in awake behaving primates, including dedicated computer systems, a machine shop, an electronics shop, and a histology laboratory. The Laboratory also provides the opportunity to collaborate on studies of human patients with diseases related to the visual and oculomotor systems. Candidates should send a brief cover letter, curriculum vitae, bibliography, a one- or two-page statement of current research interests, copies of recent, relevant publications, and three letters of recommendation to: Dr. Lance M. Optican, Search Committee Chair, 2/0 Ms. Jean Steinberg, Building 49, Room 2A50, NIH, Bethesda, MD 20892-4435.

The deadline for applications is August 1, 1999. NIH is an Equal Opportunity Employer.

COMPANY SCIENTIST and TECHNICIAN to research and supply DNA polymerases and improved PCR technology. Scientist must be qualified to apply for NIH/STTR funding in support of research consortium with the laboratory of Dr. Wayne M. Barnes at Washington University School of Medicine. Contact: W. M. Barnes, DNA Polymerase Technology, Inc., 4041 Forest Park Avenue, St. Louis, MO 63108. More details at website: http:// www.klentaq.com.

POSITIONS OPEN

RESEARCH IN NUTRITION AND MOLECULAR EPIDEMIOLOGY WESTERN HUMAN NUTRITION RESEARCH CENTER USDA/Agricultural Research Service University of California, Davis

The Western Human Nutrition Research Center invites applications for a permanent, full-time **RE-SEARCH SCIENTIST** to conduct research on the role of dietary, environmental, and genetic factors and the risk for chronic disease. The candidate is expected to be able to use molecular tools in studies of human populations to investigate the role of nutritional and genetic factors in the etiology of chronic disease and health status.

A Ph.D. or equivalent degree in epidemiology, nutrition, biochemistry, physiology, molecular biology, or related field is desired. The candidate is expected to develop a vigorous, independent research program and have demonstrated an ability to conduct research through publications in peer-reviewed journals. Base funding is available for a core research program and technical support. Opportunities exist for faculty appointments at the University of California at Davis. Two or more years of postdoctoral experience is preferred. U.S. diizenship is required. Salary is commensurate with experience in the range of \$48,977 to \$75,713.

Applicants must address and meet specific placement factors defined in official vacancy announcement #ARS-X9W-9255. The vacancy announcement and application forms can be obtained by **Telephone: 301-504-1484** or through the **website: www.ars. usda.gov**. Specific questions regarding the position may be directed to: **Dr. Nancy Keim, e-mail: nkeim@ whnc.usda.gov**. Applications should. include a description of research interests, curriculum vitae, and names of three professional references. All applications must be postmarked by July 2, 1999.

USDA is an Equal Opportunity Provider and Employer.

The National Center for Environmental Assessment/RTP Office (NCEA/RTP) of the U.S. Envi-ronmental Protection Agency (EPA) is seeking candi-dates for two **HEALTH SCIENTIST** positions, GS-12/13 (\$47,891 to \$74,035 per year, based on qualifications), located at Research Triangle Park, North Carolina. The principle duties of these nonlaboratory positions include support of Agency regulatory programs through conduct of detailed health hazard assessments of hazardous air pollutants and related chemicals and mixtures. These positions are also responsible for the development and conduct of research programs to improve health risk assessment practices, especially related to inhaled chemicals and air contaminants. Essential qualifications include an advanced degree with major study in toxicology or related health fields. Background and training in biometry, inhalation toxicology, or pharmacokinetic modeling would be strongly considered. Practical experience in health hazard assessment at the professional or postdoctoral level is desired. Experience in conducting chemical assessments, and related research, should be demonstrated by appropriate publications and presentations. Please submit a résumé, SF-171, or OF-612, transcripts, and supporting doc-umentation by June 1, 1999, to: **OPM, Washington** Service Center-Macon Office, 4685 Log Cabin Drive, Macon, GA 31204-6317, Attn: Announcement WA-CM-9-3277. For further information call: Jessie Hopkins, U.S. EPA, Telephone: 202-260-2965. Candidates must be U.S. citizens. EPA is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE position available. Novel approaches for altering gene expression in plants and manipulation of lipid metabolism. Candidates must have a Ph.D. in biochemistry, molecular biology, breeding/genetics, plant science, or related discipline and demonstrated productivity. Plant Biochemistry and Genetics Group, University of Kentucky, Lexington, KY 40546. Contact: David Hildebrand, N106 AGN, University of Kentucky, Lexington, KY 40546. E-mail: dhild@pop.uky. edu. Affinnative Action/Equal Opportunity Employer.

Plankton Ecologist

The University of Minnesota Duluth, seeks applicants for a tenure track faculty position at the assistant or associate professor level in the area of plankton ecology, as part of a major research focus in the area of freshwater studies We are seeking a person with strong quantitative skills and an interdisciplinary focus, coupling field or laboratory study of freshwater plankton with digital imaging and analysis. The position has expectations in research, teaching, service, and collaboration in the broadly defined area of Plankton Ecology. The specific area of research is open but could include dynamic interactions between physical, chemical, and biological processes of aquatic systems, modeling of plankton communities, or remote sensing of plankton in lakes. The successful candidate is expected to have or establish and maintain a vigorous externally funded research program which involves undergraduate and graduate students and generates international recognition. Opportunities exist to build collaborations with scientists at the University's Natural Resources Research Institute, the Large Lakes Observatory, and the new Digital Imaging Center, as well as the EPA's Mid-continent Freshwater Ecology Laboratory in Duluth. The successful candidate is expected to participate in teaching and to develop specialized upper division courses and graduate seminars related to freshwater ecology, plankton ecology and digital modeling or imaging. The successful candidate's background in field work, experimental methods, and digital imaging should represent important additions to UMD's expertise in aquatic sciences.

Candidates for the Assistant Professor position must possess an earned doctorate in biological science, oceanography, or related field; interest in digital imaging or modeling related to their area of research; communication skills to support quality teaching; a record of publication in refereed journals; strong potential to develop an externally funded research program and collaborate with other freshwater scientists. One year of postdoctoral experience, evidence of quality teaching, expertise in digital imaging or modeling, and success in establishing a strong integrative, externally funded research program is desired. Candidates for the Associate Professor position must have at least three years in a postdoctoral, research, or teaching position, including one year of teaching experience, a record of peer-reviewed publications at the cutting edge of plankton ecology, and proven success in establishing a strong integrative, externally funded research program. Expertise in digital imaging or modeling, five years in a postdoctoral, research, or teaching position, and evidence of quality teaching are desired.

Preferred starting date is September 1, 1999. The position is a tenure-track nine-month appointment at the rank of Assistant or Associate Professor. Applications must include a letter of application, a current resume, and the names and addresses and phone numbers of three references who may be contacted. The committee will begin its review of completed applications on May 25, 1999, and will continue until the position is filled. Completed applications must be mailed to: Sabra S. Anderson, College of Science and Engineering, 10 University Drive, University of Minnesota Duluth, 55812 2496. Questions may be sent via email to sanderso@d.umn.edu. The University of Minnesota is an equal opportunity educator and employer.

GLOBAL OPPORTUNITIES

INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE

The International Livestock Research Institute (ILRI) seeks nominations and applications for three senior positions within the institute. ILRI is a non-profit international research organisation, serving a global mandate to improve productivity of smallholder livestock systems and to protect the natural resources that support these systems. ILRI is one of the 16 research centres supported by the Consultative Group of International Agricultural Research (CGIAR), which comprises 58 member countries, international organisations and foundations. The co-sponsors for the CGIAR are the World Bank, the Food and Agriculture Organization (FAO), the United Nations Development Programme (UNDP) and United Nations Environment Programme (UNDP).

ILRI research programmes utilise an interdisciplinary systems approach, involving seventy internationally recruited scientists, plus visiting scientists and postdoctoral associates from the biological, socio-economic and environmental sciences. ILRI has established research capacity in livestock genetics and genomics (quantitative and molecular genetics), ruminant health (development of vaccines and diagnostics, epidemiology), strategic nutrition and feed resources (rumen ecology, forage genetic resources), and livestock systems research (systems analysis, livestock policy analysis, natural resource management), plus capacity in livestock research training and information services. ILRI programmes are primarily implemented in collaboration with other institutes and priority is given to partnerships with national research systems in developing countries.

ILRI operates principal laboratory and research station facilities in Kenya and Ethiopia. In addition, ILRI scientists are currently outposted with national and international research institutes in Burkina Faso, Niger, Nigeria, India, the Philippines, Columbia and Peru.

DEPUTY DIRECTOR GENERAL-PROGRAMMES (REF:DDG-P/04/99) This position provides excellent leadership opportunities in a development-oriented, science-based international research organisation. The Deputy Director General-Programmes (DDG-P), who reports to the Director General, has overall responsibility for the Institute's research and research-related programmes with an annual budget of approximately US\$20 million.

Qualifications: The successful candidate will have: vision, expertise and a successful record of research relevant to livestock in developing countries; demonstrated successful experience leading and mana; ing multidisciplinary, multi-site research and research related programmes; demonstrated ability in strategic planning and priority setting, excellent communications skills in both written and spoken English, an ability to lead and work effectively in teams, and a willingness to travel internationally for approximately 100 days per year.

Location: ILRI - Nairobi, Kenya

PROJECT COORDINATORS: ANIMAL GENETICS AND GENOMICS AND STRATEGIC NUTRITION AND FEED RESOURCES

ILRI Project Co-ordinators are senior positions reporting to the Deputy Director General-Programmes and responsible for leading a multi-disciplinary research team. Project co-ordinators provide the intellectual leadership and co-ordination of the research plan and manage all aspects of multi-partner projects from proposal preparation and research implementation through to reporting, ensure effective linkages amongst ILRI's projects, research sites and programmes for specific research area, with emphasis on the delivery of research outputs. Project Co-ordinators also manage project funds and to play a major role in identifying and obtaining new sources of funding. Development and co-ordination of collaborative projects with external laboratories, in both developing and developed countries are important components of the work.

Animal Genetics and Genomics is a project area which currently includes operational project based in Africa and Asia conducting research on the identification, characterisation and conservation of indigenous animal genetic resources; genetics of resistance to trypanosomosis in cattle and laboratory animals; and the genetics of resistance to helminths in small ruminants and laboratory animals. The project will also be strengthening its capacity in functional genomics, particularly in relation to genetic traits of indigenous livestock breeds. **Location:** Nairobi, Kenya

Strategic Nutrition and Feed Resources. This project area currently includes operational projects based in East and West Africa and Asia conducting research on improved forages, rumen microbiology, and conservation of forage genetic resources. The objective of the animal level research is to improve the efficiency of conversion of available feeds into animal products, including offspring, manure and work. Its current focus is rumen microbiology and ecology, taking advantage of ILRI's access to wild African ruminants and their potential to improve the efficiency of feed utilisation. The objective of the current plant level research is to improve the feed supply and quality in ways that support the alleviation of annual and seasonal shortages of nutrients to livestock through strategic research on: 1) forage genetic resources; and, 2) feed production from food crops. These plant and animal level activities link with the farming systems level research. Location: Addis Ababa, Ethiopia

Qualifications: A Ph.D degree or equivalent, with appropriate specialisation, 5 or more years relevant research and management experience, and a significant publication record are required. In addition, good communication and interpersonal skills, an ability to perform in a multi-disciplinary and multi-cultural research environment and fluency in spoken and written English are essential.

CONDITIONS: The initial contract for each position will be for a three-year term with the possibility of extension. ILRI provides a highly competitive salary and benefits package including medical, life and disability insurance, retirement housing, and education allowances.

APPLICATIONS: ILRI seeks both applications and nominations for these positions. Applicants should send a cover letter, curriculum vitae and the names and addresses (including telephone, fax and email) of three referees who are knowledgeable about the applicant's professional qualifications and work experience to the **Human Resources Manager, ILRI, P.O. Box 30709, Nairobi, Kenya; Telephone: 254-2-630743; Fax: 254-2-631499; e-mail: ILRI-KENYA@cgiar.org** Letters of nomination should be sent to the same address. The name and reference number of the position should be clearly marked on the envelopes of mailed, or on the fax or email applications. Screening of applications will begin on 15th June 1999 and will continue until the post is filled.

To find out more about ILRI, or for a more detailed position description, visit our Website at http://www.cgiar.org/ilri.

ILRI is an equal opportunity employer. Qualified women and other professionals from developing countries are particularly encouraged to apply.

RESEARCH IN DIET-GENE INTERACTIONS WESTERN HUMAN NUTRITION RESEARCH CENTER USDA/Agricultural Research Service University of California, Davis

The Western Human Nutrition Research Center invites applications for a permanent, full-time **RE**-**SEARCH SCIENTIST** to conduct research concerning the diet-gene interactions and the functional and health consequences of the interactions. The candidate should have a strong research interest in human genetics and nutrition and demonstrated scholarly achievement through publications in peer-reviewed journals. *Applicants nuts be U.S. citizens*.

A Ph.D. or M.D. is desired. Preference will be given to candidates who have research experience in developing and adapting new methodology to understand the molecular nachanisms of diet-gene interactions and to identify'sensitive markers of the genetic response to dietary changes. Specialized experience in molecular and genetic studies in tissue culture, experimental animals, and human populations studies is required. Base funding is available for a core research program and technical support. Opportunities exist for faculty appointments at the University of California at Davis.

Salary is commensurate with experience in the range of \$58,242 to \$89,472. Request application materials from Leo Rachal, e-mail: Irachal@whnrc. usda.gov or through website: www.ars.usda.gov. Refer to Announcement Number ARS-X9W-9265 Specific questions regarding the position may be directed to: Dr. Charles Stephensen, Telephone: 530-754-9266 or Leo Rachal, e-mail: Irachal@ whnrc.usda.gov. Applications should include a description of research interests, curriculum vitae, and names of three professional references. All applications must be postmarked by July 2, 1999.

USDA is an Equal Opportunity Provider and Employer.

STAFF PHYSICIAN NEUROIMAGING

The Clinical Brain Disorders Branch of the NIMH Intramural Research Program in Bethesda, Maryland is seeking a Staff Physician to conduct clinical research in mental illness, particularly schizophrenia, using functional magnetic resonance imaging. The candi-date must have a Doctor of medicine, be licensed to practice within the United States, and be Board-certified in either psychiatry and neurology with a Fellowship training in neuroimaging, and a minimum of three years of experience in clinical functional magnetic resonance imaging and proton magnetic resonance spectroscopy research. The candidate must have demonstrated expertise, including a record of publications, in fMRI and ¹H-MRS. The successful candidate will be given a two- to five-year appointment as a Staff Physician within the Intramural Research Program at an annual salary of \$90,000 to \$115,000. Interested candidates should submit curriculum vitae/bibliography, résumé, or optional OF-612 (Application for Federal Employment) to: Mollie P. Strotkamp, NIMH Personnel Office, Building 45, Room 3AN32, 9000 Rockville Pike, Bethesda, MD 20892 on or before April 30, 1999.

The National Institute of Mental Health is an Equal Opportunity Employer.

POSTDOCTORAL POSITION IN X-RAY CRYSTALLOGRAPHY

Postdoctoral position available immediately to study the structural basis of key regulatory events in signal transduction (*Nature* **385**:595–602, 1997). We are particularly interested in the structural determination of major drug targets for cancer, immune dysfunction, and neuronal diseases. A strong background in protein crystallography is highly desirable. Send curriculum vitae, three references, and a letter describing research skills and interests to: Dr. Wenqing Xu, Department of Biological Structure, University of Washington, Box 357742, Seattle, WA 98195.

POSITIONS OPEN

UNIVERSITY OF PENNSYLVANIA

Three POSTDOCTORAL or RESEARCH AS-SOCIATE positions available immediately. (i) Neurophysiology of single noradrenergic and dopaminergic neurons in locus coeruleus and midbrain in behaving monkeys during performance of cognitive tasks. Strong background in neurophysiology or cognitive psychology required. (ii) Neuroanatomy of afferent regulation of brain monoaminergic systems in rat. (iii) Behavioral pharmacology of opiate abuse in rats. Successful applicants will join the newly created Laboratory of Neuromodulation and Behavior, an interdisciplinary group using a variety of techniques to study monoaminergic neurons. Send curriculum vitae and names of three references to: Dr. Gary Aston-Jones, Professor, Department of Psychiatry, University of Pennsylvania, VA Medical Center (151), University and Woodland Avenues, Philadelphia, PA 19104.

POSTDOCTORAL POSITION DR. THOMAS C. VANAMAN

A Postdoctoral position is available immediately for studies of the regulation of plasma membrane calcium pump isoform activity and expression in animal cells and tissues and the role of system in calcium signaling pathways. Studies will involve a combination of biochemical and molecular/cellular biological approaches. Expertise in animal and bacterial cell culture, cloning and protein expression systems, protein purification and assay, and standard biochemical techniques is essential. While experience in signal transduction research would be extremely useful, the successful candidate will obtain well-rounded training in the general topic area of protein phosphorylation and calcium regulation in excitable and nonexcitable cells. Interested candidates should apply to: Dr. Thomas C. Vanaman, Department of Biochemistry, University of Kentucky Medical Center, 800 Řose Street, Lexington, KY 40536-0298.

Mayo Clinic. Clinical chemistry **POSTDOC-TORAL FELLOWSHIPS**. Seeking applicants for two-year ComACC-approved Fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1999, will be considered for appointment beginning in July 2000. Contact: Thomas P. Moyer, Ph.D., Division of Clinical Biochemistry and Immunology, Mayo Clinic, Rochester, MN 55905 for more information. Mayo Foundation is an Affirmative Action/Equal Opportunity Employer and Educator.

POSTDOCTORAL POSITION available for three years to study the role of the neurotrophin receptors, p75^{NTR} and Trk, in the regulation of prostate growth and cancer. A background in growth factors and receptors is desirable. Experience in molecular biology and cell biology preferable. Send curriculum vitae and names of references to: **Dr. Daniel Djakiew, Department of Cell Biology, School of Med**icine, Georgetown University, 3900 Reservoir Road N.W., Washington, DC 20007. Telephone: 202-687-1203; FAX: 202-687-1823; e-mail: djakiewd@gunet.georgetown.edu.

POSTDOCTORAL POSITIONS

Postdoctoral positions available to chart and analyze mammalian protein regulatory networks in the context of functional genomics (see: *PNAS* 94:12473-8, 1999). Candidates should be highly motivated with a strong background in mammalian molecular biology. Send research interests, curriculum vitae, and three references to: C. Wilson Xu, Ph.D., Box 362, Sloan-Kettering Institute and Cornell University Graduate School of Medical Sciences, 1275 York Avenue, New York, NY 10021. FAX: 212-639-2767; e-mail: w-xu@ski.mskcc.org.

JU AFRI

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE

Two Postdoctoral positions are open to conduct research in the areas of (1) mechanisms of bioreductive drugs activation. This project focuses on purification, cloning, and functional analysis of a novel cytosolic mitomycin C reductase protein that activates antitumor drugs in tumor tissues. (2) detoxification mechanisms and chemoprevention. The focus is to purify, clone and determine the role of a newly identified NAD(P)H:quinone oxidoreductase in prevention of oxidative stress and cellular transformation. A working knowledge of biochemistry, protein purification, molecular and cell biology is desired. Please send curriculum vitae and names of three references to: Anil K. Jaiswal, Ph.D., Associate Professor, De-partment of Pharmacology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030. Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION CARDIAC GENE EXPRESSION/ HYPERTROPHY

The laboratory utilizes molecular techniques and transgenic mouse models, as well as knockouts, toward understanding cardiac tissue-specific gene expression and hypertrophic signaling pathways. The applicant should have a Ph.D. or M.D. and experience with molecular techniques. Please send your curriculum vitae to: Dr. Jeffery D. Molkentin, Children's Hospital Medical Center, Division of Molecular Cardiovascular Biology, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-5958. Children's Hospital is an Affirmative Action/Equal Opportunity Institution.

POSTDOCTORAL FELLOWSHIP. Posttranscriptional gene regulation: Two NIH-funded positions available immediately to join group investigating posttranscriptional gene regulation of cytokines and amyloid precursor protein mRNAs. Experience in cell and molecular biology essential with interest in human disease helpful. Please send curriculum vitae, research interests, and the names of three references to: Dr. James Malter, University of Wisconsin Hospital, B4/263, 600 Highland Avenue, Madison, WI 53792. E-mail: js.malter@uwmsg.hosp. wisc.edu; FAX: 608-263-1568.

POSTDOCTORAL POSITION available to study regulation of Akt/PKB and p70 S6K. Applicants should have background in biochemistry and/ or molecular biology. Experience with protein purification would be a plus. Send résumés and names of references to: Dr. Richard Z. Lin and Dr. Lisa M. Ballou, Department of Pharmacology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7764. E-mail: linr@uthscsa.edu. UTHSCSA is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION at University of California Davis to study endothelial cell bology and pulmonary hypertension (ref.: Am. J. Resp. Cell. Mol. Biol. 19:129–142, 1998). Expertise in cell cycle and apoptosis, experience in confocal microscopy, and English proficiency are preferred. E-mail or mail curriculum vitae to: VM: Pathology, University of California Davis, Davis, CA 95616. E-mail: dwwilson@ucdavis.edu.

POSTDOCTORAL POSITION available for genetic studies on the role of retinoids in development. Ongoing studies involve knockouts of mouse Adh and Aldh genes involved in the regulation of retinoic acid ligand biosynthesis. Experience in mouse development biology required. Contact: Dr. Gregg Duester, Gene Regulation Program, Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037. E-mail: duester@burnham-inst.org.

EUROPEAN OPPORTUNITIES

UNIVERSITY COLLEGE LONDON The Department of Biochemical Engineering

FACULTY POSITION – FERMENTATION / CELL CULTURE PROCESSES

The Department wishes to appoint a new member of academic staff to further develop its research and training activities in fermentation/cell culture. The Department has built an international reputation for the integration of fermentation and other elements of bioprocessing and for its linkage to cutting edge biological targets. Against this background the successful candidate would be encouraged to take forward exciting fermentation research and to work with UCL staff on whole bioprocess issues and on metabolic engineering and cell culture.

The Department, the first in the UK and a founding laboratory of the field, is an international centre and part of one of the UK's top four research universities. A recent £20M investment in new facilities, equipment and instruments and a long tradition of interdisciplinarity provides a powerful research and advance training base. The Department teaches at the undergraduate, postgraduate and post-experience levels and takes great pride in producing both the world's future bioprocess leaders and advanced bioprocess engineering research.

Applications with a full CV should be sent to **Professor M. Hoarc, Head of Department, Department of Biochemical Engineering, University College London, Torrington Place, London WCIE 7JE.** E-mail: **m.hoare@ucl.ac.uk.**

Deadline for applications is **1st July 1999**. Further information about the Department can be found on our web site (**www.biochemeng.ucl.ac.uk**)

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North Shore LIJ Health System

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From community based programs to large tertiary teaching hospitals, North Shore-Long Island Jewish is a health system of incomparable quality, resources and innovation. Be #1 with us in the following opportunity:

Research Scientist in Gene Therapy

The Gene Therapy Division of the North Shore LIJ Health System is seeking an outstanding researcher to participate in the development of a program in Clinical Gene Therapy. The successful candidate will be a leader in the field with demonstrated abilities in establishing a program based on the use of cell and gene transfer technology to treat inherited or acquired human diseases. Candidates should have a broad background, encompassing clinical and basic studies of and the development of cell and gene transfer methodologies. Focus in the areas of angiogenesis, tissue regeneration, and/or cancer is particularly desirable. The successful candidate will have the opportunity to initiate and facilitate collaborations involving human gene therapy trials with other investigators, and interact with the recently completed FDA GMP Viral Vector Laboratory at North Shore, a state-of-the-art facility for the development and production of clinical materials for human gene therapy.

All applications should include a current curriculum vitae and bibliography, and one-page summary of research accomplishments and research plans, and five professional references. Salary will be commensurate with experience and coupled with an excellent benefits package. Completed applications, and requests for additional information, should be directed to: Robert G. Pergolizzi, PhD, Director, Molecular Genetics and Gene Therapy, North Shore-LIJ Health System, 350 Community Drive, Room 110, Manhasset, NY 11030. E-mail: bob@nshs.edu. Equal opportunity employer M/F/D/V.



EUROPEAN OPPORTUNITIES



Environmental Research Manager Darmstadt University of Technology (TUD), Germany

The Center for Interdisciplinary Studies at TUD has a research focus on Cooperative Problem Solving. Examples for problems to be studied include water management in river basins and management of transport in metropolitan areas. Research projects include scholars working in different departments of TUD as well as researchers affiliated with other institutions.

To implement this research program we seek a research associate with a Ph.D. either in the social sciences (e.g. in management), or in another field if combined with experience in social science research. The core competencies required is a demonstrated ability to organize and coordinate interdisciplinary research teams so as to share the enthusiasm for scholarly excellence. Familiarity with databases and computer networks is expected. The successful candidate should be fluent in English and capable of learning German on the job. Spanish is an advantage.

The University of Technology, Darmstadt is an Equal Opportunity Employer.

The position is defined for at least one year, renewal is possible. TUD is one of the leading German engineering universities, based near Frankfurt am Main. Additional information can be obtained from staerk@zit.tu-darmstadt.de and www.zit.tu-darmstadt.de. Please send your application, including full personal and career details, reprints of published work and names of references to: Gerhard Staerk, ZIT, Technische Universtät Darmstadt, Hochschulstr. 1, D-64289 Darmstadt, FRG.



A POSTDOCTORAL POSITION is available in the Laboratory of Molecular Microbiology of the National Institute of Allergy and Infectious Diseases (NIAID) at NIH to study the replication, diseaseinducing properties, and immune responses of lentiviruses following infection of subhuman primates. A qualified candidate will have the unique opportunity to combine previous training in molecular biology, virology, and immunology to address fundamental questions pertaining to viral pathogenesis and vaccine development. Applicants should have a Ph.D. and/or M.D. as well as zero to five years of postdoctoral experience.

The position is available immediately for a duration of two to five years. Starting salary is dependent on previous experience and qualifications.

Applicants are requested to submit a curriculum vitae and the names and addresses of three references to: Dr. Malcolm Martin, Laboratory of Molecular Microbiology, NIAID, NIH, Building 4, Room 315, 4 Center Drive, MSC 0460, Bethesda, MD 20892-0460. FAX: 301-402-0226.

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

To study the cellular basis of sensory-evoked potentials and fast oscillatory phenomena in rodent somatosensory and auditory cortex. The laboratory uses both high-density epicortical recording coupled with *in vivo* intracellular recording to study sensory responses at the macro- and microscopic level.

Ph.D. in neuroscience, physiological psychology, or neurobiology is required. A published record using *in vivo*, whole-cell recording techniques is required and the applicant will be expected to train other members of the laboratory in these techniques. Send curriculum vitae to: Daniel Barth, Department of Psychology, C.B. 345, University of Colorado, Boulder, CO 80309-0345. E-mail: dbarth@psych. colorado.edu. CU is an Equal Opportunity Employer. CU, Boulder is committed to diversity and equality in education and employment.

POSTDOCTORAL POSITIONS available for studies of nuclear receptors/coactivators/corepressors in cancer biology and embryonic development. Experimental systems include primary tumors, embryonic stem cell cultures, and transgenic mice. Ph.D. graduate training in molecular biology, biochemistry, or mouse embryology is desirable. Send curriculum vitae and names of three references to: Dr. Li-Na Wei, Department of Pharmacology, 3-249 Millard Hall, University of Minnesota, 435 Delaware Street S.E., Minneapolis, MN 55455. E-mail: weixx009@ maroon.tc.um.edu; FAX: 612-625-8408. The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION available to study NF-kB proteins and immune regulation, and mechanisms of immunosuppression by ethanol. Applicants should have a recent Ph.D., experience in molecular biology, signal transduction, and immunology. Send letter of interest, curriculum vitae including names of references, and a description of research accomplishments to: Gregory Wulczyn, Ph.D., Thomas Jefferson University, JAH 233, Department of Pathology, Anatomy, and Cell Biology, 1020 Locust Street, Philadelphia, PA 19107-6731. E-mail: gregory.wulczyn@mail.tju. edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION in X-ray crystallography and biochemistry is available jointly between the groups of Partho Ghosh and Gordon Gill to investigate interactions between LIM domains and target proteins. Highly motivated individuals with backgrounds in molecular biology, biochemistry, or structural biology are encouraged to apply. Send curriculum vitae and names of three references to: Dr. Partho Ghosh and Dr. Gordon Gill, 0314, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0314. FAX: 619-534-7042; e-mail: pghosh@ucsd.edu, ggill@ucsd.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN SIGNAL TRANSDUCTION

Postdoctoral positions are available through a NIH-funded training program in signal transduction in the College of Medicine of the University of Illinois at Chicago. Fellows may work in the laboratories of any of the 24 training faculty, who are in six basic science departments of the College. Research interests of the faculty range from molecular to cellular aspects of signal transduction. For information on the training faculty and their research interests please see website: http://www.uic.edu/depts/mcbtp/sttp/.

Candidates must be U.S. citizens or hold permanent resident alien status and must have or expect to soon have either Ph.D. or M.D.

Interested applicants are invited to apply by sending their curriculum vitae and three letters of recommendation to: Dr. Peter G. W. Gettins, Training Director, Department of Biochemistry and Molecular Biology, M/C 536, University of Illinois at Chicago, 1819 West Polk, Chicago, IL 60612. Minority applicants are particulary encouraged to apply. The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

ANIMAL LOCOMOTION/MUSCLE PHYSIOLOGY AT PENN

POSTDOCTORAL POSITION for highly motivated individual to study design of muscle for different motor functions (see: *PNAS* 15:8095–8100, 1996; *Science* 263:370–372, 1994). We seek individual(s) with expertise in one of the following: musculoskeletal modeling and biomechanics and muscle physiology (mechanics, skinned fibers, Ca²⁺ transients). Skills in computers and electronics helpful. Penn houses the Penn Muscle Institute with expertise in cellular aspects of muscle. Curriculum vitae to: Dr. Larry Rome, Department of Biology, University of Pennsylvania, Philadelphia, PA 19104 USA. FAX: 215-898-8780; e-mail: Irome@mail. sas.upenn.edu.

BRAIN SLICE ELECTROPHYSIOLOGIST

POSTDOCTORAL POSITION available to study the neurobiology of brainstem sensory integration at the nucleus tractus solitarius (NTS). Patch clamp or electrophysiological experience is desired. Neurobiology or anatomy background is helpful. Send curriculum vitae, references, and letter of interest to: Dr. Michael C. Andresen, Department of Physiology and Pharmacology, L334, 3181 S.W. Sam Jackson Park Road, Oregon Health Sciences University, Portland, OR 97201-3098. E-mail: andresen@ohsu.edu. OHSU is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer.

A POSTDOCTORAL POSITION (two years) is available in the Laboratory of Biophysics, FDA, to pursue NMR studies of the structure and dynamics of biomolecules; the laboratory has 500 MHz (with gradient capabilities) and 300 MHz NMR spectrometers as well as molecular dynamics simulation capabilities. Applicants should have familiarity with modern highresolution NMR techniques; experience with peptides and proteins is desirable. Applicants should send a curriculum vitae and three letters of recommendation to: Dr. T. E. Bull, Center for Biologics Evaluation and Research, HFM 410, 1401 Rockville Pike, Rockville, MD 20852-1448. FDA is an Equal Opportunity Employer and has a smoke-free environment.

POSTDOCTORAL POSITION (Postgraduate Researcher) available immediately to study muscarinic receptor signaling mechanisms in smooth muscle and in cell lines expressing recombinant receptors. Advanced degree in biochemistry, pharmacology, or physiology is required and experience with cell culture and *in vitro* techniques for studying isolated tissues is highly desirable. Send curriculum vitae and names of three references to: Dr. F. J. Ehlert, Department of Pharmacology, College of Medicine, University of California, Irvine, CA 92697-4625. UCI is an Equal Opportunity Employer committed to excellence through diversity.

POSITIONS OPEN POSTDOCTORAL FELLOW

Department of Botany, College of Natural Sciences, University of Hawai'i at Manoa. Full time, beginning approximately August 1, 1999, for one year, pending availability of funds. Duties: Overseeing both laboratory and field studies in Hawai'i to study embolism repair of woody plants, hydraulic architecture of native and invasive plants, and energy balance of tropical alpine plants. Other research projects according to candidate interests and experience will be considered. Minimum qualifications: Ph.D. in plant physiology or ecophysiology, or related discipline. Some experience in water relation studies, photosynthetic gas exchange, and data-logging equipment is a plus. Annual stipend: \$30,000. Send application including résumé, reprints, and the names of three references (e-mail and telephone numbers) to: Guillermo H. Goldstein, Department of Botany, University of Hawai i, 3190 Maile Way, Honolulu, HI 96822. Inquiries: e-mail: gold@hawaii.edu; FAX: 808-956-3923. Closing Date: May 31, 1999.

POSTDOCTORAL POSITION

A Postdoctoral position is available for ongoing NIH-funded research on molecular mechanisms of gene regulation of EBV and KSHV proteins. Projects include the role of the EBV SM protein in nuclear export and RNA processing. A Ph.D. and expertise in molecular biology are required. Applicants should send a curriculum vitae, summary of research interests/career goals and names of three references to: Sankar Swaminathan, M.D., Sealy Center for Oncology and Hematology, University Boulevard, Galveston, TX 77555-1048. FAX: 409-747-1938; e-mail: sswamina@utmb.edu. Equal Opportunity/Affirmative Action Employer/Minorities/Females/Disabled/Veterans. UTMB is a smoke-free/drug-free workplace and hires only employees authorized to work in the United States.

POSTDOCTORAL POSITION available to join a dynamic research group involved in ongoing NIHfunded studies of hypoxia-inducible factor 1 (HIF-1), a transcriptional regulator of cellular and systemic oxygen homeostasis (*Cur. Opin. Genet. Dev.* 8:588, 1998), including analysis of signal transduction pathways that affect HIF-1 activity and the role of NIF-1 in cancer, ischemia, pulmonary hypertension, and normal development. *Must be U.S. ditzen/permanent resident.* Send curriculum vitae and three recommendation letters to: Gregg L. Semenza, M.D., Ph.D., Johns Hopkins University School of Medicine, CMSC-1004, Baltimore, MD 21287-3914. FAX: 410-955-0484; e-mail: gsemenza@jhmi.edu. JHU is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Available immediately to study mammalian autophagy signaling pathways and the role of mammalian autophagy genes in the control of tumorigenesis, viral replication, and viral pathogenesis. Seek highly motivated persons; experience in molecular biology, cell biology, and biochemistry desirable. Publications in international journals a prerequisite. Send curriculum vitae, statement of research interests, and three letters of recommendation to: Beth Levine, M.D., Department of Medicine, P&S 8-444, Columbia University College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. E-mail: levine@cuccfa.ccc.columbia.columbia University is an Equal Opportunity/Affimative Action Employer.

Two POSTDOCTORAL POSITIONS. UCLA Department of Physiology. To study (1) integrin signaling in cardiac disease, and (2) gene regulation of intestinal antibody receptors. Expertise required in molecular biology and (1) cell signaling, (2) transcriptional regulation. Send curriculum vitae and names of three references to: (1) Dr. Robert S. Ross or (2) Dr. Martín G. Martín, Department of Physiology, UCLA School of Medicine, Los Angeles, CA 90095-1751. FAX: 310-206-5661. E-mail: rross@mednet.ucla.edu or mmartin@mednet.ucla. edu. UCLA is an Affirmative Action/Equal Opportunity Employer.

UNIVERSITY OF OULU, FINLAND Faculty of Science

Applications are invited to the position of Professor in Plant Ecology

The position is open in the Department of Biology for the candidates who should possess experience in research and teaching in plant ecology, particularly in plant population and community ecology. The appointment will be made for eight years period. The successful candidate is expected to conduct research of high international quality in close collaboration with scientists in botany and related fields in biology. The teaching duties cover both basic and advanced courses on graduate level, and also postgraduate level in plant population and community ecology. The lectures will be delivered mainly in Finnish, but teaching in English is allowed as well. The annual salary will be within the range of 185 000 - 235 000 FIM depending on qualifications and experience in the field.

For informal information by email: juha. tuomi@oulu.fi or tel: +358-8-553-1528. For further information and application instructions to be requested by email: kaisa. ala@oulu.fi or tel: +358-8-553-1051.

Applications including the documents required according to the application instructions should be received no later than May 27, 1999 at the University of Oulu, Registrar Office, P.O. Box 8000, FIN -90401 Oulu, Finland.



MAX-PLANCK-INSTITUTE FOR CHEMICAL ECOLOGY

Jena, Germany

Postdoctoral Fellowship

available immediately to study the biochemistry and molecular regulation of plant metabolism in Arabidopsis and other crusifers. Previous experience in enzymology or molecular biology is required. The institute is international in character. Applications are invited from both German and non-German nationals. Please send curriculum vitae and names of three references to:

Jonathan Gershenzon, Max-Planck-Institut für chemische Ökologie, Tatzendpromenade 1a, D-07745 Jena, Germany, Fax: +49 3641 643650.



INVITATION FOR GRANT APPLICATIONS

The European Chemical Industry Council (CEFIC) is funding basic research into health and environmental effects of chemicals. One of the governing principles of the Longrange Research Initiative (LRI) is that research will be carried out by internationally recognised, independent research experts. A science panel consisting of experts from academia and research institutes will oversee the programme. ECETOC, the European Centre for Ecotoxicology and Toxicology of Chemicals, will manage the programme for CEFIC. Research results will be published in peer reviewed journals and communicated widely via workshops, open literature and internet.

GRANTS

CEFIC therefore invites grant applications from research institutes in the areas of:

- chemical carcinogenesis;
- * marine risk assessment and ecosystem dynamics;
- environmental exposure modelling;
- uncertainty analysis in risk assessment;
- respiratory toxicology and immunotoxicology;
- human exposure.

Project specifications including budget details and an application form can be found on the CEFIC-LRI website: http://www.cefic.org/lri. Deadline for receipt of environmental proposals is 10 June 1999 and for the others 30 June 1999. Only proposals on an official CEFIC-LRI application form and that fit the published project specifications will be taken into consideration.

These should be sent electronically to rta@cefic.be; Dr. Rob Taalman, CEFIC-LRI, Avenue E. van Nieuwenhuyse 4, bte 2, B-1160 Brussels, tel. +32 2 676 73 28.



UNIVERSITY OF ZURICH

The Faculty of Sciences (Mathematisch-naturwissenschaftliche Fakultät) of the University of Zurich invites applications for the position of an

Assistant Professor of Computational (Theoretical) Chemistry

within the special program of the Swiss federal government supporting young scientists (Sondermassnahmen des Bundes zur Foerderung des akademischen Nachwuchses), and hosted by the Institute of Organic Chemistry. This is a non-tenure-track position.

Applicants should be of Swiss nationality or presently hold a position at a Swiss Institution, or possess an academic degree (M.Sc., Ph.D., Habilitation) from a Swiss University, and must have an established track record of independent research in the field of computational/ theoretical chemistry (Habilitation or equivalent). The successful candidate will be expected to develop a strong internationally recognized program of research, and should also participate in the teaching program for chemistry students at the University.

A curriculum vitae, a list of publications, copies of three key publications, a short summary of current and future research interests, and names. addresses, FAX and phone numbers of three referees, should be submitted by May 28th 1999, to:

Prof. Dr. V. Ziswiler, Dekan der Mathematisch-naturwissenschaftlichen Fakultät der Universität Zürich Winterthurerstrasse 190 CH-8057 Zürich, Switzerland

For further information please see http://www.unizh.ch/oci and/or contact the chairman of the Organic Chemistry Institute, Prof. J. A. Robinson, phone ++41-1635-4242, Fax ++41-1635-6812, E-mail robinson@oci.unizh.ch

POSTDOCTORAL POSITION MOLECULAR BIOLOGY BIOLOGICAL AGENT DETECTION

A Postdoctoral position is immediately available for participation in an interdisciplinary DÁRPA-funded project to develop biological agent detection technologies using micro-electrical-mechanical systems (MEMS)-based engineering approaches. The ideal Postdoctoral candidate will have extensive experience with microbiological and molecular biological techniques, including nucleic acid preparation, amplification, and analysis. An understanding of bacterial identification methodologies is also desired. This is an interdisciplinary project, which combines molecular biology, MEMS, and microfluidics. The successful candidate will work closely with researchers in both molecular biology department and engineering department. The candidate therefore has the opportunity to develop an understanding of state-of-the-art engineering technologies and their applications in molecular biology.

Please send curriculum vitae and three letters of reference to: Kelli Yang, UCLA, MAE Department, Box 951597, 38-137C Engineering IV, Los Angeles, CA 90095. E-mail: kelli@ea.ucla.edu.

POSTDOCTORAL RESEARCH POSITIONS available to study signal transduction in endothelial cell biology. Projects include (1) biomechanical stimuli of NO and growth factor production; (2) regulation of signaling pathways by reactive oxygen species; and (3) interaction between estrogen receptor- and growth factor-mediated signaling mechanisms. Training in cell/molecular biology essential (less than four years from Ph.D.); experience with mechanisms of cell activation or regulation of gene expression desirable. Send curriculum vitae and names of three references to: Stephen Black, Ph.D., or William Schnaper, M.D., Mail Stop W-140, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008. E-mail: steveblack@nwu. edu or schnaper@nwu.edu. Northwestern University is an Equal Opportunity/Affirmative Action Educator and Employer.

POSTDOCTORAL MICROBIOLOGIST. Need a highly motivated individual to apply molecular and biochemical expertise to applied research problems. The position entails the use of combinatorial strategies to microbial transformations. Research problems include microbial synthesis of surfactants, exopolysaccharides, and bioremediation. Preference for recent Ph.D. with experience in environmental microbiology, fermentation engineering, and/or biochemistry. The salary will be competitive and commensurate with qualifications and experience. Candidates should forward a cover letter, résumé, and a brief statement of interest by e-mail only to: **Professor Richard A. Gross, Herman F. Mark Chair, Polytechnic University, e-mail: rgross@poly.edu**.

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

POSTDOCTORAL FELLOWSHIP available to study factors predisposing cells to proliferation or apoptosis. Approaches will involve an investigation of signal transduction complexes and spatial/temporal aspects of protein interactions in mammalian cells. The Fellowship requires U.S. citizenship or permanent residence status. Send application to: Dr. John R. Williamson, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, PA 19104. FAX: 215-898-9918; e-mail: johnrwil@mail. med.upenn.edu. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS BMP SIGNALING

Positions are available immediately to study the biochemistry of BMP signaling in Drosophila. These factors are involved in numerous processes including axis determination in the early embryonic development of both vertebrates and invertebrates. We are interested in defining the roles of several novel gene products that act extracellularly to modulate the availability of BMP type ligands to receptor complexes, as well as several molecules that function intracellularly to control signal specificity and strength. Experience in the biochemistry of signal transduction, protein purification, enzymology of proteases, and/or ligand-receptor interactions is highly desirable. Salary is negotiable. Applications, to include a curriculum vitae and three letters of reference, should be sent to: Dr. Michael B. O'Connor, Department of Genetics, Cell Biology, and Development, Box 206 FUMC, 420 Delaware Street S.E., University of Minnesota, Minneapolis, MN 55455-0392. Telephone: 612-626-0642; FAX: 612-625-5402; e-mail: moconnor@gene.med.umn.edu; website: http:// www.ihg.med.umn.edu/OConnor/.

The University of Minnesota is committed to the policy that all persons shall have Equal Access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

NATIONAL INSTITUTES OF HEALTH REGULATION OF NITRIC OXIDE SYNTHASE BY INSULIN

POSTDOCTORAL POSITION available to study regulation of nitric oxide synthase by insulin. Molecular mechanisms of insulin-stimulated production of nitric oxide in vascular endothelial cells are being elucidated. Insights from these studies will be used to investigate the relationship between insulin resistance and hypertension at a molecular level. Strong background in molecular biology and/or cell biology preferred. Applicants must have less than five years of posdoctoral experience. Send curriculum vitae and names of three references to: Michael J. Quon, M.D., Ph.D., Hypertension Endocrine Branch, National Heart, Lung, and Blood Institute, Building 10, Room 8C-103, 10 Center Drive MSC 1754, Bethesda, MD 20892-1754.

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to study the mechanism of gonadotropin-releasing hormone signaling in immortalized pituitary gonadotropes. Experience in molecular and cell biology preferred. Position funded by the NIH Center for the Study of Reproductive Biology and Disease. Send curriculum vitae and names of three references to: Dr. Nicholas Webster, Department of Medicine (0673), University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093. E-mail: nwebster@ucsd.edu. U.S. citizens and permanent residents only. UCSD is an Equal Opportunity Employer.

POSTDOCTORAL POSITION TO STUDY NITRIC OXIDE

The Tucson VA offers a Postdoctoral position to study lung nitric oxide. Ph.D. and/or M.D. required with experience in protein biochemistry and molecular biology desirable. VA policy limits awards to U.S. citizens or pennanent residents. Send curriculum vitae to: Richard A. Robbins, M.D., Tucson VA Medical Center, 3601 South 6th Avenue, Tucson, AZ 85723. E-mail: richard.robbins2@med.va.gov.

POSTDOCTORAL POSITION on NIH campus in Bethesda, Maryland to develop new molecular methods to detect and identify viruses. Experience with virology and molecular techniques required. Send or e-mail curriculum vitae and names of three references to: Philip Krause, M.D., FDA/Center for Biologics Evaluation and Research, HFM-457, 1401 Rockville Pike, Rockville, MD 20852. E-mail: krause@cber.fda.gov.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCI-ATE. Our Department of Biochemistry invites applications for a Research Associate position, as soon as possible. Ideal candidates will be proficient in molecular biology, particularly focused in cloning and gene expression. The project addresses control of gene expression at the level of mRNA stability. This individual will be responsible for the characterization of proteins that specifically bind to the 3' untranslated re-gion of the glucose transporter mRNA. This will involve the preparation of cDNA libraries, screening and determination of the expression of the clone. Once cloned, this position will be responsible for preparing antibodies directed against the protein and utilize them to determine the cellular metabolism of the binding protein. Candidates must have a Ph.D. in biochemistry or a related science. Please forward curriculum vitae and three letters of reference to: Dr. Phillip Pekala, East Carolina University School of Medicine, Department of Biochemistry, 600 Moye Boulevard, Greenville, NC 27858-4353. Applications will be accepted until the position is filled. ECU is an Equal Opportunity/Affirmative Action Employer and as such encourages applications from minorities and women and accommodates individuals with disability. Proper documentation of identity and employment and official transcripts required at time of employment.

POSTDOCTORAL POSITION available immediately to investigate molecular, biochemical, and physiological aspects of smooth muscle contraction. Approaches to be used include antisense inhibition of thin filament-based proteins, isolated contractile proteins, detergent and alpha-toxin permeabilized fibers, and intact tissues to examine Ca^2 +-dependent regulation of contraction and G-protein-dependent signal transduction pathways with an emphasis on kinasephosphatase regulation. These studies will be performed on vascular, gastrointestinal, and urinary bladder smooth muscle. Experience in muscle research is desirable. Please send curriculum vitae and names, addresses, and telephone numbers of three references to: Dr. Robert S. Moreland, Department of Physiology, MCP Hahnemann University, 2900 Queen Lane, Philadelphia, PA 19129.

POSTDOCTORAL POSITION available immediately to study oxidative damage using transgenic mouse models with altered antioxidant defense systems. Experience in molecular techniques required, experience in mitochondrial biochemistry is desirable. Send curriculum vitae, statement of research interests, and names of three references to: Arlan Richardson, Ph.D., Director, Aging Research and Education Center, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. E-mail: richardsona@ uthscsa.edu. The University of Texas Health Science Center at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer.

Two **POSTDOCTORAL POSITIONS** available immediately at Stanford University School of Medicine to study (1) cytokine-producing T cell subsets in alloreactivity or (2) mechanisms of apoptosis in transplantation. Doctoral training in immunology and/or molecular biology preferred. Send curriculum vitae, statement of prior research, and names of three references to: (1) Olivia Martinez, Ph.D. or (2) Sheri Krams, Ph.D., Stanford University School of Medicine, 1201 Welch Road, MSLS, 3rd Floor, Stanford, CA 94305-5492. FAX: 650-498-6250; e-mail: omm@leland.stanford.edu or smkrams@ stanford.edu.

POSTDOCTORAL POSITION in the molecular basis of quantitative variation in maize and its ancestor, teosinte (see: *Genetics* 141:333–346, 1995; *Nature* 386:485–488, 1997) is available September 1, 1999, in the Genetics Department at the University of Wisconsin–Madison. Expertise in quantitative genetics and/or molecular biology required. Send a statement of research interests, curriculum vitae, and three references to: John Doebley, Plant Biology Department, University of Minnesota, St. Paul, MN 55108. E-mail: doebley@maroon.tc.umn.edu.

POSTDOCTORAL POSITIONS CLEVELAND CLINIC FOUNDATION LERNER RESEARCH INSTITUTE

Postdoctoral positions are available immediately to study (a) molecular mechanisms of a new protein, myotrophin, that stimulates myocyte growth and initiates cardiac hypertrophy (J. Biol. Chem. 265:16635, 1990; J. Biol. Chem. 271:2812, 1996); and (b) effects of growth factors on myocardial collagen formation during hypertensive hypertrophy and its transition to heart failure. A strong background in molecular biology is required. Some research experience in cell biology is desirable. A special remuneration package will be available for exceptionally qualified candidates. Applicants should send a current curriculum vitae and three letters of reference to: Dr. Subha Sen, Staff, Department of Molecular Cardiology, The Lerner Research Institute, Mail Code NB50, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. FAX: 216-444-9263; email: sens@ccf.org. The Cleveland Clinic Foundation is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available for studying the molecular/physiological mechanisms in regulating vascular and uterine smooth muscle function in female reproduction. The candidate should be experienced in molecular/biochemical techniques and interested in the physiological mechanisms underlying smooth muscle contraction/relaxation. The University of Maryland, a National Center of Excellence in Women's Health (website: www.marylandwomenshealth.org), has an exciting environment for studying reproductive biology. The candidate will interact with the diverse membership of the Center for Studies in Reproduction (website: csr.umaryland. edu) and the Women's Health Research Group. Send letter of research interest, curriculum vitae, and names of three references to: Loren P. Thompson, Ph.D., Department of Obstetrics/Gynecology and Reproductive Sciences, University of Maryland School of Medicine, Bressler Research Building, Room 11-040, 655 West Baltimore Street, Baltimore, MD 21201.

EUROPEAN OPPORTUNITIES

MediGenomix GmbH of Martinsried near Munich, a spin-off of MediGene AG, is currently seeking a **PH.D. SCIENTIST** with two years of postdoctoral experience in bioinformatics. The candidate should have a strong background in molecular biology and be familiar with ABI DNA sequencing technology. The position requires the interaction with our partners in the Gene Alliance, a consortium of German genome research companies, and with our leading partners in the field of human and veterinary diagnostics. The successful candidate must have both the skills and experience of working independently and in forming a new group. Please send curriculum vitae, references, and salary details to: **Medi-Genomix GmBH**, Lochhamerstrasse 11, Martinsried D-82152 Germany.

GLOBAL OPPORTUNITIES

CELLULAR IMMUNOLOGIST INSTITUTE OF BIOMEDICAL SCIENCES ACADEMIA SINICA, TAIPEI, TAIWAN

Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan seeks outstanding applicants to partake in a newly established DNA-based vaccine research program project for RNA viruses. A TEN-URE-TRACK POSITION is open for a Cellular Immunologist at all ranks. Applications with curriculum vitae and a list of publications should be sent to: Dr. Sho Tone Lee, Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, ROC, 11529. FAX: 886-2-27858847; e-mail: bmtom@ ccvax.sinica.edu.tw.

GLOBAL OPPORTUNITIES

ASIAN VEGETABLE RESEARCH AND DEVELOPMENT CENTER

Position announcements: The Asian Vegetable Research and Development Center (AVRDC) is a Taiwan-based international agricultural research center. AVRDC has made progress in utilizing biotechnological tools to reinforce and supplement conventional varietal improvement approaches. Building on its progress in the integration of modern biotechnology in the varietal improvement program, AVRDC is developing a value-added biotechnology project. To develop this project team, we are seeking scientists with strong interest in the following areas to join us: transgenic plant biotechnology/Project Coordinator; marketing analysis; plant molecular biology.

Qualifications and experience: A Ph.D. or equivalent is required. The successful candidates will have strong research or industrial background in one of the above disciplines supported by a significant publication or commercialization record. The Project Coordinator, who reports directly to AVRDC Director General/Deputy Director General, also must have leadership experience at the senior level and be able to demonstrate the vision needed to develop this complex and challenging project, capitalizing on new funding opportunities and potential linkages. Preferences will be given to candidates who are familiar with Taiwan's social context.

Conditions of appointment: The initial contract for these positions will be for a three year term with the possibility of extension. Salary, dependent on experience, will be denominated in NT dollars. Housing allowance and other perquisites will be provided.

Applications: Applicants should send a cover letter, curriculum vitae, and the names and addresses (including telephone, FAX, and e-mail) of three referees to: Dr. Samson C. S. Tsou, Director General, Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan 741 Taiwan. Telephone: 886-6-583-7801; FAX: 886-6-583 0009; e-mail: cstsou@netra.avrdc.org.tw. Screening of applications will begin 15 May 1999 and will continue until the post is filled.

COURSES

CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND SCIENTISTS

A one-week intensive course sponsored by the Massachusetts Institute of Technology, June 7-11, 1999, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director. Basic principles of cardiovascular physiology, cardiovascular medicine, diagnostic and therapeutic technologies. Contact: Director of the MIT Summer Session, Telephone: 617-253-2101; website: http://web.mit.edu/professional/ summer.

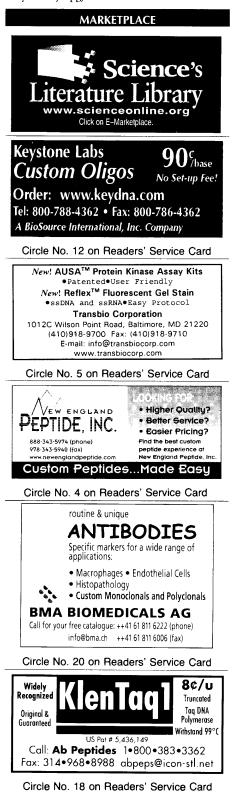
ANNOUNCEMENT

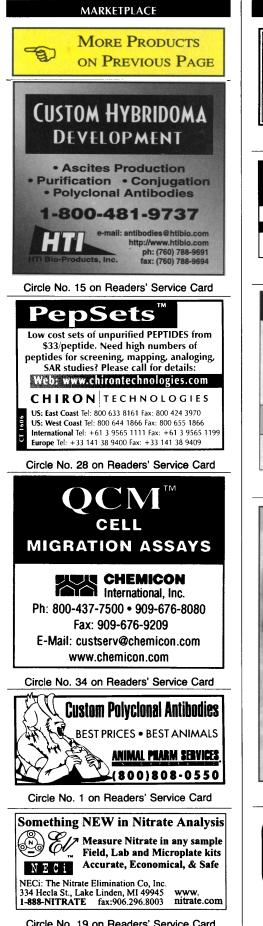
RESEARCH GRANTS ON TICK-BORNE DISEASE PREVENTION

The American Lyme Disease Foundation, Inc. will be providing support for five to seven proposals of \$10,000 or more each (no overhead included) to initiate innovative research in preventing Lyme disease and other tick-borne infections. Applicants must have received their terminal degree within the past five years. Projects emphasizing novel methods for reducing the abundance of ticks in peridomestic and recreational environments in endemic areas are strongly encouraged, but other proposals addressing Lyme disease prevention will also be considered. Proposals will be limited to five pages plus supporting material. Deadline for applications is October 31, 1999. For details, please visit our webiste: www.aldf. com or contact: David L. Weld, Executive Director, American Lyme Disease Foundation, Mill Pond Offices, 293 Route 100, Somers, NY 10589. Telephone: 914-277-6970, ext. 22; FAX: 914-277-6974.

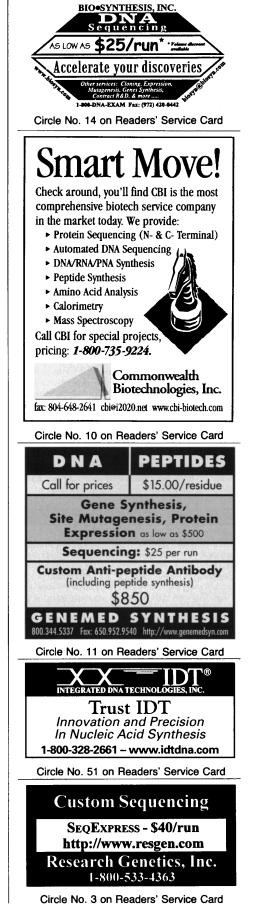
ANNOUNCEMENT

International Society of Psychiatric Genetics. Seventh World Congress on Psychiatric Genetics. October 14–18, 1999. Montercy, California. Abstracts due May 15, 1999. Qualifies for up to 24 hours of CME Category I credit. Sample topics include genetic factors and linkage studies in psychiatric disorders, candidate genes, pharmacogenetics, and ethical issues in genetics. For information, Telephone: 516-444-7246; FAX: 516-444-7536; e-mail: kgreene@ mail.psychiatry.sunysb.edu; website: www.uhmc. sunysb.edu/ispg/.









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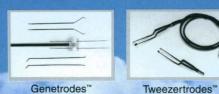


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