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### POSITIONS OPEN

### FACULTY POSITIONS STANFORD UNIVERSITY Department of Electrical Engineering

The Stanford University Department of Electrical Engineering (website: http://ee.stanford.edu) is undertaking a strategic move toward attacking problems in the general areas of biology and medicine and hence is seeking candidates for faculty positions in areas of electrical engineering relevant to these fields. Potential areas of specialization include, but are not limited to, micro-electromechanical systems (MEMS) particularly at the molecular level; microanalytical technology including novel forms of microscopy; information theory as applied to genomics and other bioinformatic applications; micromanipulation including the use of nanoprobes and associated instrumentation for inducing and extracting electrical and other signals on a deep submicron scale; signal processing for extraction of information from fluorescence scanners and other relevant noisy environments; and developing a better understanding, from an electrical or information-systems point of view, of specific biological organs.

The successful candidates will be expected to set up innovative collaborative research programs with one or more relevant departments in the School of Medicine or the Departments of Biological Sciences, Chemistry, or Chemical Engineering. Thus not only will the candidates need to show evidence of the ability to pursue independent research, and a strong commitment to both graduate and undergraduate teaching, but also evidence of the ability to initiate and conduct interdisciplinary, collaborative research. Formal training in the biological sciences is not specifically required.

The search is open at all levels, from **TENURE-TRACK ASSISTANT PROFESSOR** to **TEN-URED FULL PROFESSOR**. The application should comprise a brief research and teaching plan, a résumé including a publication list, an academic transcript, and the names and addresses of at least five references to:

Professor R. Fabian Pease Search Committee Chair Department of Electrical Engineering Paul Allen Center for Integrated Systems Room 314 Stanford, CA 94305-4075

### FACULTY POSITION IN PALEONTOLOGY AT YALE UNIVERSITY

The Department of Geology and Geophysics at Yale University is starting a new multidisciplinary hiring initiative in earth science, which includes the strengthening of its program in paleontology. To this end, we intend to fill a ladder faculty position in paleontology, at either the JUNIOR or the SENIOR level, starting September 2000. We invite applicants who will develop an internationally recognized research program in collaboration with present and future Yale Geoscientists and Bioscientists. The position will include teaching at both the graduate and undergraduate levels. All subfields of paleontology will be considered, including, but not limited to, biogeochemistry, biostratigraphy, event stratigraphy, evolutionary processes, functional morphology, macroevolution, origin of major groups/body plans, marine paleoecology, mass extinctions, paleobiogeography, paleoenvironmental analysis, systematics, or taphonomy. Closing date for applications is January 15, 2000

Applicants should send a curriculum vitae, a statement of professional goals, and the names and addresses of three or more referees to:

Paleontology Search Committee c/o Professor Danny Rye, Chair Department of Geology and Geophysics Yale University P.O. Box 208109 New Haven, CT 06520-8109

We encourage applicants from historically disadvantaged ethnic, racial, and gender categories. Yale University is an Equal Opportunity Employer.

### POSITIONS OPEN

### CHAIRPERSON DEPARTMENT OF HUMAN GENETICS

Virginia Commonwealth University is seeking an outstanding scientist/leader to become the Chairperson of its Department of Human Genetics in the School of Medicine on the Medical College of Virginia Campus. The Department has a distinguished history of excellence in research, education, and the provision of clinical genetic services. Current research interests of the faculty include molecular cytogenetics, gene localization and regulation, statistical genetics/ genetic epidemiology, genetics of complex traits, biochemical genetics, and clinical genetic research projects dealing with a wide variety of clinical, behavioral, and molecular phenotypes and disorders. The Department has a Ph.D. granting program, Postdoetoral Training in human genetics, a Master's degree training program in genetic counseling, and teaching responsibilities in the Schools of Medicine and Dentistry and throughout the university. The Department is an integral part of the academic health center, and is the principal provider of clinical genetic and cytogenetic services to the 1.7 million citizens in the central Virginia area. VCU is home to the Mid-Atlantic Twin Registry and the Virginia Institute of Psychiatric and Behavioral Genetics.

The successful candidate must hold an M.D., a Ph.D., or both and have the breadth of interest, leadership ability, administrative skills, and vision to chart the course of the department into the next millennium. It is expected that the successful applicant will currently hold the academic rank of Full Professor or its equivalent and will have established an ongoing competitive research program. The position will be supported by a newly endowed Chair in human genetics.

Interested applicants should contact: David S. Wilkinson, M.D., Ph.D., Chairman, Human Genetics Search Committee, c/o Larry Vetter, Administrator, Department of Pathology at P.O. Box 980662, Richmond, VA 23298-0662. Applications should include a complete curriculum vitae, a brief summary of the candidate's professional background and vision of the future role of academic departments of human genetics, and three letters of reference.

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

### VISITING FACULTY POSITIONS IN EARTH SCIENCES AT YALE UNIVERSITY

The Department of Geology and Geophysics at Yale University announces the opening of several visiting faculty positions, starting as early as September 1, 1999. Applicants from all areas of earth science and all career levels are welcome to apply. The visiting positions are part of a major hiring initiative in earth sciences at Yale focused on rebuilding the size and strength of the department. We are looking for individuals who would enjoy contributing and interacting in a broad multidisciplinary department that includes active programs in atmospheres, oceans, and climate; geochemistry; petrology; solid-earth geophysics; paeontology and evolutionary theory; and tectonics. The successful applicant would be expected to conduct an active research program, to interact with students and faculty, and to teach one course or seminar per semester with the topic to be negotiated. The duration and scope of the visit are negotiable as well. Applications will be considered as they arrive.

Applicants should send a curriculum vitae, a statement of objectives for the visit, and the names and addresses of three referees to:

Visiting Faculty Search Committee c/o Professor Danny Rye, Chair Department of Geology and Geophysics Yale University P.O. Box 208109 New Haven, CT 06520-8109

We encourage those from historically disadvantaged ethnic, racial, and gender categories. Yale University is an Equal Opportunity Employer.



# **PROFESSOR AND HEAD • DEPARTMENT OF FOOD SCIENCE**

A dynamic and energetic individual is sought to lead a young and growing department that is part of a world-class institution. The new head will play a key role in determining future growth directions for this department. Several new faculty members have been recently hired and several additional faculty member searches are in progress or planned for the immediate future. A new \$22 million Food Science Building and Creamery is approved for construction. There are approximately 100 undergraduate and 50 graduate students interacting with 16 faculty and numerous professional staff in a stimulating intellectual environment. The department enjoys excellent collaborative relationships within the University, with a large and diverse food industry in Pennsylvania and beyond, and with many loyal alumni.

**RESPONSIBILITIES:** The person filling this position will be the departmental administrative officer. Duties will include: (1) leadership and coordination of teaching, research, and cooperative extension and outreach activities of the department; (2) administration of academic affairs, departmental personnel, financial matters, and physical facilities; (3) leadership in representing departmental programs in relation to other departments, government agencies, food and related industries, and consumers; and (4) leadership in development activities that are necessary to attract outside resources to support construction of the new building and departmental programs.

**<u>OUALIFICATIONS</u>**: All candidates must possess an earned Ph.D. or equivalent academic degree in Food Science or a closely related area and a significant period of academic experience, including a record of professional accomplishments to qualify as a tenured professor in the Department. Evidence of effective academic administrative and leadership abilities, or strong evidence of potential administrative and leadership abilities, are also required. The following attributes are highly desirable: (1) experience with or in-depth knowledge of university teaching, research, and outreach functions; (2) evidence of effective management and organizational skills and ability to interact with the food and related industries, as well as with government agencies; (3) understanding of continuing and distance education technologies; and (4) evidence of effective interaction with academic administration, faculty members, students, and staff.

**APPLICATION:** Nominations and inquiries are invited. Interested persons meeting the qualifications for this position are invited to submit: (1) a resume with documentation of teaching, research, outreach, administrative, and leadership experience; (2) a statement that reflects the candidate's personal philosophy of administration and leadership; and (3) the names, addresses, telephone numbers, and e-mail addresses of five individuals who may be contacted as professional references.

Send applications and nominations to: Dr. Robert Beelman, Chair, Advisory Search Committee, Department of Food Science, The Pennsylvania State University, 111A Borland Lab, Box SCI, University Park, PA 16802; Phone: (814) 863-2964.

**<u>CLOSING DATE</u>**: Applications will be accepted until July 31, 1999, or until the position is filled.

To learn more about the Department of Food Science at Penn State, please visit our website at: http://www.cas.psu.edu/docs/CASDEPT/FOOD/index.html

AA/EOE

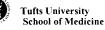
### Jane F. Desforges Chair in Molecular Oncology and Medicine

Tufts University School of Medicine and New England Medical Center seek to fill the newly endowed chair for Oncology and Hematology Research, the Jane F. Desforges Chair in Medicine. We seek a scientist with an MD/PhD or MD degree who has achieved international recognition for independent and innovative research relevant to the molecular biology of neoplastic disorders. The candidate's program will form the core of basic research in oncology for the Division of Hematology/Oncology and will lead oncology research at the New England Cancer Center located at New England Medical Center in Boston. In addition to establishing an internationally recognized research program, the appointee must have an established record mentoring scientists-in-training and provide strong support for existing NIH funded programs at New England Medical Center. Extensive resources are available to foster the growth of the candidate's research program.

The Division of Hematology/Oncology has an illustrious history of basic and clinical research and is home to diverse programs in oncology and hematology research. Major programs in viral oncogenesis, signal transduction, NMR spectroscopy, and nutrition research already exist on campus. The Division holds a U10 main institution grant from ECOG and training grants from NIH in Hematology/Oncology. An NIH funded clinical study unit supports advanced translational research. Five clinical and research fellows per year are recruited to the Division from throughout the United States. The successful candidate has an outstanding opportunity to develop collaborative basic research programs with researchers at Tufts Medical School, The Sackler School of Graduate Medical Sciences, the Tupper Research Institute, Tufts Veterinary School and The Jean Mayer Human Nutrition Research Center on Aging.

Applicants should send a curriculum vitae and summary statement of research interests to Michael Mendelsohn, MD, Vice Chairman for Scientific Affairs, Department of Medicine at New England Medical Center, 750 Washington St. Box 80, Boston MA 02111. Applications should be received no later than July 15, 1999.





ANNOUNCEMENT



Grants are now available to support efforts aimed at determining the therapeutic potential of neural stem cells for the neurodegeneration seen in patients with ataxiatelangiectasia (A-T), as well as efforts focussed on developing other mammalian models of A-T in addition to ATM knockout mice that have been made.

Competitive awards will be given to researchers for one- and two-year projects to be funded up to a total of \$100,000 per year. No administrative overhead or fixed costs are supported.

Scientific excellence, originality and direct relevance to A-T neurodegeneration are the paramount criteria in award decisions. There is no formal deadline date for the submission of proposals. Decisions will be made within 30 days after proposals are

received. For grant proposal guidelines, contact the A-T Children's Project.



1 West Camino Real, Suite 212 Boca Raton, FL 33432-5966 U.S.A. Web site: www.atcp.org Phone: 561-395-2621 Fax: 561-395-2640 E-mail: rosa@atcp.org



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY POST-DOCTORAL PROGRAM National Health and Environmental Effects Research Laboratory

The National Health and Environmental Effects Research Laboratory (NHEERL) of the U.S. Environmental Protection Agency (EPA) is seeking candidates to fill **approximately 18 federal postdoctoral research positions** during the coming year. As one of the national laboratories within the Office of Research and Development (ORD), NHEERL is EPA's focal point for scientific research on the effects of contaminants and environmental stressors on human health and ecosystems. NHEERL utilizes a multi-disciplinary approach to solving research problems. Assimilation and integration of information across environmental disciplines and across multiple levels of biological organizations (from molecular to the whole organism, and from the organism to the ecosystem levels) strengthen analyses of environmental issues. Several of these positions will present developmental opportunities which may be cross-organizational or cross-disciplinary; i.e., within or across NHEERL ecology or health divisions; across lab and human or ecological field studies; and across other national laboratories/centers within ORD or regulatory program offices within EPA.

Because of NHEERL's broad research mission and multi-disciplinary approach, we are seeking candidates from a wide range of disciplinary backgrounds. The preferred candidate will have earned a Ph.D. in one of the following areas (or a closely related field): biology (e.g., cellular, molecular), physiology, biochemistry, toxicology, environmental sciences, biomedical or chemical engineering, ecology (e.g., aquatic, coastal systems, coral, eco-system, estuarine, landscape, marine, microbial), ecotoxicology, endocrinology, epidemiology, biostatistics/model-ing, geographic information science, geomorphology, geostatistics, genetics, development and reproduction, immunology, pulmonology, microbiology, neurosciences, pharmacology, pharmaceutical sciences, plant physiology, population/community modeling, physical chemistry, physiology, or toxicology.

NHEERL is organized into nine divisions which are located at various geographical locations and specialize in a different field of environmental health or ecology research. Post-doctoral positions to conduct research on environmental health are anticipated for divisions located in Research Triangle Park and Chapel Hill, NC. Post-doctoral positions to conduct ecology research are anticipated for divisions located in Duluth, MN; Gulf Breeze, FL; Corvallis and Newport, OR; and Narragansett, RI. To obtain specific information on the scientific research projects proposed for the NHEERL post-doctoral positions, please visit the NHEERL Internet site at <u>http://www.epa.gov/nheerl</u> beginning May 14, 1999.

These positions are excepted service appointments for two to three years, and offer a salary range of \$33,026 – \$62,260, commensurate with qualifications. Our goal is to have successful candidates on board before October 1, 1999. The selected candidates will be eligible for a full benefits package, including relocation expenses, health insurance, life insurance, retirement, and vacation and sick leave. United States citizens are preferred and will be given first consideration for all positions. In the absence of qualified U.S. citizens, applications from citizens of countries specified as exceptions to the appropriations act ban on paying non-U.S. citizens may be considered. Further information on Federal employment of non-citizens is available at <a href="http://www.opm.gov/employ/html/citizen.htm">http://www.opm.gov/employ/html/citizen.htm</a>

The filing deadline for these post-doctoral positions is **July 9**, **1999**. If you are interested, please send a curriculum vitae, a letter of recommendation from your senior research advisor, or other comparable official, and a letter indicating your research interests, preferred geographical location(s), and **country of citizenship** to Ms. Dorothy Carr, U.S. Environmental Protection Agency, Human Resources Management Division (MD-29), Research Triangle, NC 27711, Attn: NHEERL Post-Doctoral Program. If you are claiming veterans' preference, please include your **DD-214** with your application package.

If you send your application via Federal Express, address it to Ms. Dorothy Carr, U.S. Environmental Protection Agency, Human Resources Management Division (MD-29), 4201 Building, Suite 105, 79 Alexander Drive, Research Triangle Park, NC 27709, Attn: NHEERL Post-Doctoral Program. You may also submit your application via facsimile (fax) machine to (919) 541-2186; however, applications faxed from a U.S. government fax machine will not be accepted. Applications sent electronically via the Internet or mailed in U.S. government postage-paid envelopes will also **not** receive consideration. Your application materials must be received in the Human Resources Office by **July 9, 1999**.

Questions may be directed to Ms. Carr at (800) 433-9633. After all responses are reviewed, candidates will receive written notice of the status of their applications no later than **September 17, 1999.** 

The U.S. EPA is an Equal Opportunity Employer.

GRANT



### \*AAAS/ASWISH TRAVEL GRANTS TO RUSSIA\* FOR US WOMEN SCIENTISTS

The American Association for the Advancement of Science's (AAAS) Program on Europe and Central Asia and the Association for the Support of Women in Sciences and Humanities (ASWISH) in Russia with support from the US National Science Foundation announce two, one-time travel grants to promote the participation of US women scientists in scientific meetings. The goal of this grants program is to raise the profile of women scientists in Russia and to encourage US-Russian cooperation and information exchange among women scientists.

**ELIGIBILITY:** The competition is open to AAAS members and members of AAAS affiliated societies who wish to attend a meeting and give a paper at a professional conference in Russia. Applicants should be at least post-doctoral students within five years of a doctoral degree. Eligible Scientific Disciplines are Physics, Chemistry, Biology, or Environmental Sciences. The applicant must already have their paper, presentation, or poster presentation accepted at the conference.

**GRANT**: US participants will be reimbursed up to three thousand dollars for travel, food, and lodging expenses.

**APPLICATION PROCEDURE**: Each applicant must submit the following:

1. Letter of intent including name, affiliation, address, telephone, fax, e-mail, a brief summary of the research area, and a brief description of the conference the applicant wishes to attend;

2. Two recommendations from professors or colleagues familiar with the applicant (must be signed);

3. Curriculum Vitae, no longer than two pages;

4. Proof that their paper, presentation, or poster sessions contribution has been accepted on the program at a conference between August 1999 and April 2000 for which they are applying for a travel grant.

**DEADLINE**: All applications must be received by July 1, 1999 (extended). Late applications or applications that do not conform to the guidelines given above will not be considered. The applications will be reviewed by a panel of experts and the winners will be announced by August 2, 1999.

**APPLICATION ADDRESS**: The letter of intent and the curriculum vitae may be sent via e-mail to: kgrill@aaas.org. The two letters of recommendation and the proof of acceptance must be submitted by fax or by mail. Fax: (202) 289-4958.

Travel Grant Program for US Women Scientists International Directorate Program on Europe and Central Asia 1200 New York Avenue, 7th floor Washington, DC 20005.

**CONTACT INFORMATION**: For questions about his program, please contact the coordinator at E-mail: kgrill@aaas.org Fax: (202) 289-4958

## The Institute of Human Virology (IHV), University of Maryland Biotechnology Institute

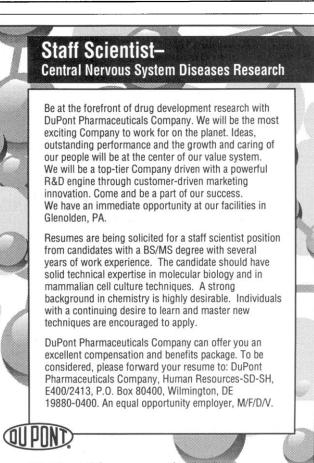
**(UMBI)**, is seeking an experienced combinatorial peptide/organic chemist, protein chemist, or synthetic protein/glycoprotein engineer at the Associate Professor/Professor level for a tenured/tenure-track position. The successful applicant will conduct research activities in the fields of synthetic organic and medicinal chemistry, structural biochemistry and peptide/glycoprotein engineering to answer significant biological questions, particularly related to biological control of disease states; be responsible for establishing a nationally competitive research program using a combination of combinatorial peptide and small molecule libraries, peptide engineering, synthetic glycoprotein synthesis, and/or structural analysis methods; be expected to partake in multidisciplinary collaborative research, and be available to advise and assist other faculty with characterization and modification of previously purified molecules to enhance their biological activities.

Requirements: Ph.D. or equivalent in synthetic organic chemistry, biochemistry or related field, demonstrated expertise in academic or industrial setting, ability to establish a nationally competitive extramural funded research program. Chemical purification and spectroscopic characterization are essential features of the role. In addition, knowledge of solid phase techniques and automation that emphasize the construction of small molecules for lead generation and lead optimization will be valuable.

Preference will be given to those who have experience in synthetic peptide and small molecule synthesis and at least two of the following techniques: medicinal chemistry, protein sequencing/analysis and/or carbohydrate production and characterization; structural biochemistry/ biophysics; development of enzyme/receptor agonists/antagonists.

Please send curriculum vitae, research interest statement and names of three references to: Search Committee, F3-0088, Institute of Human Virology, University of Maryland Institute of Biotechnology, 725 West Lombard Street, Baltimore, Maryland 21201.

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



**DuPont Pharmaceuticals Company** 



Robert Chapin, Ph.D. (chapin@niehs.nih.gov)

Environmental Epidemiology of Cancer and Other Chronic Diseases Dale Sandler, Ph.D. (sandler@niehs.nih.gov)

Genetic and Environmental Epidemiology of Respiratory Illness Stephanie London, M.D., Dr.P.H. (london2@niehs.nin.gov)

Genomic Instability in Vitro and in Vivo Kenneth Tindall, Ph.D. (tindall@niehs.nih.gov)

Ion Channel Physiology Jerrel Yakel, Ph.D. (yakel@niehs.nih.gov)

Mitochondrial DNA Replication William Copeland, Ph.D. (copelan1@niehs.nih.gov)

Mechanism of Action and Function of Nuclear Receptors

Anton Jetten, Ph.D. (jetten@niehs.nih.gov)

Mechanisms by Which Organisms Produce Mutations Roel Schaaper, Ph.D. (schaaper@niehs.nih.gov)

Mechanisms of Cell Adhesion and Migration Steven Akiyama, Ph.D. (akiyama@niehs.nih.gov)

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Must possess Ph.D., M.D. or equivalent with no more than five years of postdoctoral experience. For further information on these positions, access our Human Resources website http://www.niehs.nih.gov/omhrmb/vacancy/postdoc.htm http://dir/niehs.nih.gov provides laboratory information. To apply, submit a cover letter, curriculum vitae and the names of three references to the hiring scientist at the address below.

NIEHS, P.O. Box 12233, Research Triangle Park, NC 27709-2233 NIH/NIEHS Is An Equal Opportunity Employe

## GRANTS



Awards provide \$750,000 to support research linking the laboratory bench and patient bedside.

Open to U.S. and Canadian clinical scientists.

The application deadline for the 2000 award series is September 1, 1999.

The Burroughs Wellcome Fund is an independent private foundation whose mission is to advance the medical sciences by supporting research and other scientific and educational activities.

4709 Creekstone Drive, Suite 100 Durham, NC 27703-8472 Tel (919) 991-5100 Fax (919) 941-5884 E-mail: info@bwfund.org Website: http://www.bwfund.org

FOR PHTSEARCH FURNISTS CLINICAL SCIENTIST AWARDS IN TRANSLATIONAL RESEARCH These awards are intended to foster the development and productivity of established independent physician-scientists who will strengthen translational research-the two-way transfer between work at the laboratory bench and clinical medicine. The awards provide \$750,000 over five years (\$150,000 per year). It is anticipated that up to 10 awards will be made.

Applications must be submitted by degree-granting U.S. or Canadian medical schools on behalf of individual candidates. Candidates from institutions other than medical schools-including schools of veterinary medicine, public health, and pharmacy-will be considered only if they can demonstrate a plan for coordinating with institutions that provide the patient connection essential for translational research.

Candidates must be U.S. or Canadian citizens or permanent residents, have an M.D. or M.D.-Ph.D. degree, and hold an appointment or joint appointment in a subspecialty of clinical medicine. In exceptional circumstances, non-M.D. candidates will be considered if their work is likely to contribute significantly to the clinical enterprise. Candidates must be established independent tenure-track investigators at the late assistant professor level or the associate professor level (or hold an equivalent tenure-track position).

ADDITIONAL BWF AWARD PROGRAMS FOR BIOMEDICAL SCIENTISTS Career Awards in the Biomedical Sciences provide approximately \$500,000 over four to six years to bridge postdoctoral training and initial faculty appointment (application deadline: October 1). Hitchings-Elion Fellowships provide \$332,500 over five years for postdoctoral scientists to engage in training in the United Kingdom or the Republic of Ireland and to begin a faculty appointment in the United States or Canada (application deadline: August 2).

Program information is available on BWF's website at http://www.bwfund.org

# East Coast Careers in Biotechnology and Pharmaceuticals A Science Advertising Supplement

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### Editorial focus on Frontiers in Biotechnology: Plants

<sup>1</sup> Science December 1998 BPA Int'L Publisher's Statement <sup>2</sup> 6 March 1998, 23 May and 18 July 1997 Harvey Research Science Readership Survey, as applied to Science December 1998 BPA Int'l. Publisher's Statement, publisher's own data.

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### ANNOUNCEMENT

# SIXTH ANNUAL REPORT OF MIZUTANI FOUNDATION FOR GLYCOSCIENCE

# (Research Grants Awarded in 1999)\*

In 1998, Mizutani Foundation for Glycoscience received 97 research grant applications from 21 countries. After careful evaluation for scientific merit, potentiality and feasibility, the foundation approved 13 projects and awarded a total of \$70,000,000 to them. The grantees for the 1999 fiscal year are (in alphabetical order):

- 1. Drickamer, Kurt; University of Oxford, UK; "Role of the mannose receptor in adaptive immunity"
- 2. Gallo, Richard L.; Veterans Medical Research Foundation, USA; "Dermatan sulfate, inflammation and wound repair"
- 3. Gastinel, Louis N.; CNRS (National Center for Scientific Research) UPR 9039, France; "ß4GalT structure/ function relationships based on its crystallographic structure"
- 4. Golard, Andre G.; Northwest Hospital, USA; "Ganglioside control of calcium channel activity"
- Habuchi, Osami; Aichi University of Education, Japan;
   "Purification and molecular cloning of GalNAc-4SO<sub>4</sub> 6-O-sulfotransferase"
- 6. Kawakita, Masao; The Tokyo Metropolitan Instute of Medical Science, Japan; "Regulatory role of nucleotide sugar transporters in glycoconjugate biosynthesis"
- 7. Le Bivic, André; Insitut de Biologie du Developpement de Marseille, France; "Role of O-glycans in the polarized sorting of a human neurotrophin receptor"
- 8. Porcelli, Steven A.; Harvard Medical School, USA; "T cell recognition of isoprenoid glycolipids presented by CDlc"
- 9. Real, Francisco X.; Institut Municipal d'Investigacio Médica, Universitat Pompeu Fabra, Spain; "Role of sialylation in glycoprotein targeting"
- 10. Seeberger, Peter H.; Massachusetts Institute of Technology, USA; "Identification of oligosaccharide ligands for natural killer cell receptors"
- 11. Suzuki, Kunihiko; University of North Carolina School of Medicine, USA; "Glycolipid metabolism in the pathophysiology of genetic neurological disorders"
- 12. Thorson, Jon S.; Memorial Sloan-Kettering Cancer Center and the Sloan-Kettering Division, Joan and Sanford I. Weill Graduate School of Medical Sciences, Cornell University, USA; "Biosynthetic alterations of the calicheamicin aryltetrasaccharide"
- 13. Toole, Bryan P.; Tufts University School of Medicine, USA; "Effects of perturbation of hyaluronan function on tumor progression"

\*Methods of application for new research grants and related subjects can be found in the Internet <http://mizutanifdn.or.jp>

Mitzutani Foundation for Glycoscience: Sen-i Kaikan, 3-1-11 Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan (Fax: 81-3-3246-1265; Phone: 81-3-3246-0224; E-mail: info@mizutanifdn.or.jp).

### **GLOBAL OPPORTUNITY**

香港城市大學 City University of Hong Kong



City University of Hong Kong is a well-established degree-granting institution in Hong Kong directly funded by the Government of the Hong Kong Special Administrative Region through the University Grants Committee (Hong Kong). The University has embarked on an ambitious strategic plan to become one of the leading universities in the Asia-Pacific region by achieving excellence in teaching and research. The student population for 1998-99 is approximately 18,500 (11,100 full-time and 7,400 parttime). The medium of instruction is English.

Applications are invited for the following Professorship appointment:

# Professor [Ref.: A/324/29]

# in the Department of Biology and Chemistry

The Department of Biology and Chemistry, with 24 faculty members, offers three undergraduate programmes and one graduate programme. In addition to over 270 first degree students and 85 taught Master's degree students, it has 30 PhD students and 50 MPhil students. The Department places equal emphasis on teaching and research. Focusing on marine science and coastal pollution, research is built upon the interdisciplinary strength of biology and chemistry within the Department. Staff expertise lies in marine and coastal biology; pollution biology and chemistry; ecotoxicology; analytical and environmental chemistry.

# **Qualifications for Appointment**

A world class scientist with an outstanding record related to marine science or coastal pollution is sought to fill this position. The appointee must possess substantial experience as a senior academic of international standing with demonstrated record in both teaching and research. He/She will provide leadership in further developing the Department as an international centre of marine science and pollution.

# Salary and Conditions of Service

Salary is within a professorial range and will not be less than  $HK\$102,\!440$  per month.

(Exchange rate: £1 = HK\$12.6 approximately)

Appointment may be on superannuable terms with provision for retirement benefits or on fixed term contract with contract-end gratuity. Excellent fringe benefits include generous annual leave, housing, passage allowance and medical and dental care provision.

# **Application and Information**

Further information on the post and the University is available on the University's World Wide Web home page http://www.cityu.edu.hk or the University's listserver accessed by E-mail at "hrmail@ctylnk.cityu.edu.hk", or from the Human Resources Office, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong (Fax: (852) 2788 1154 or (852) 2788 9334/ E-mail:hrrecrut@cityu.edu.hk). Please send your application in the form of an application letter enclosing a current curriculum vitae and the names and addresses of three academic referees at full professorial or other appropriate level to the Human Resources Office by **1 September 1999**. Please quote the reference of the post in the application and on the envelope.

### HEALTH PROGRAM SPECIALIST/ MEDICAL OFFICER

The National Center for Complementary and Alternative Medicine (NCCAM), National Institutes of Health (NIH), is seeking one or more scientific staff members in the Division of Extramural Research, Training and Review to stimulate, plan, advise, direct and evaluate program activities for a portfolio of research grants in research and training areas related to complementary and alternative medicine modalities. The salary range is \$48,796 - \$93,233 commensurate with training and experience. A relocation bonus of up to 25% of base pay may be available. Physicians are also eligible for a comparability allowance.

Applicants must have a Ph.D., M.D., D.O., or a full 4year course of study leading to a bachelor's degree or higher in a health related science (e.g. RN, ND, DC, OMD) and graduate study (MS, MPH, etc.) and/or progressively responsible experience which demonstrates that the applicant has acquired advanced scientific knowledge, skills and abilities in health or healthrelated research program administration. Clinical trial experience is desirable.

For additional information, contact Ms. Shirley Villone at (301) 435-5657 or e-mail Villones@od. nih.gov. The complete vacancy announcement

(NCCAM 99-0010) can be found on the NCCAM website at http://nccam.nih.gov All applications must be postmarked by July 19, 1999.

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# HEAD/MEDICINAL CHEMISTRY PROGRAM

The Division of Basic Sciences (DBS), National Cancer Institute (NCI), National Institutes of Health (NIH) is recruiting a tenured senior scientist to direct a medicinal chemistry research program which will be newly established on the Frederick, Maryland, campus of NCI. This program will be the major intramural effort in a rational approach to design drugs which interact with distinct molecular targets. The program will provide an environment that will foster active interaction between chemists and biologists with the goal to develop solutions to biological problems related to cancer.

The selected scientist will be responsible for ensuring the effective functioning of the program by creating and maintaining an interactive scientific environment that supports and enhances the independent research projects of Principal Investigators within the program. The selected scientist is someone who possess excellent scientific judgment, is able to recruit and mentor the best scientists and possesses strong managerial skills.

The successful candidate must hold a doctoral level degree (M.D. and/or Ph.D.) and must be recognized as a world-class leader in the area of medicinal chemistry. Candidates must also possess relevant experience in the administration and management of a research program including planning and directing a multidisciplinary program and evaluating its effectiveness. Experience in establishing priorities and allocating resources is also essential.

The position is full-time. Each candidate must be a U.S. citizen, a citizen of a treaty allied country, or a nonresident alien with a valid work visa. Total annual compensation will be commensurate with education and experience.

Applicants should send: a cover letter of interest in the position, description of research interests, curriculum vitae, bibliography and the names and addresses of five individuals who can be contacted as references. Letters of reference should not be submitted by the applicant. Completed applications should be sent by July 15, 1999 to:

Ms. Kim Kiehl, Building 37, Room 5A15 37 Convent Drive, Bethesda, MD 20892

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# DEAN COLLEGE OF PHARMACY THE UNIVERSITY OF TOLEDO, OHIO

The University of Toledo (UT) a national university, invites applications and nominations for Dean of the College of Pharmacy. The Dean is the chief administrative officer and academic leader of the College and reports directly to the Provost and Vice President for Undergraduate and Graduate Education. Department Chairs and Asst./Assoc. Deans report directly to the Dean.

Responsibilities include leadership and management of all academic, research, and public service programs; budget and resource allocation; fund raising and external development; and representation of the College to various constituencies while fostering the goals of social justice and diversity. The new Dean, working with the new President, will have a unique opportunity to shape the College and the University and enhance already strong academic programs.

Candidates for the position of Dean must possess a Ph.D. in Pharmacy, Medicinal Chemistry, Pharmacology or a related discipline; the credentials to qualify for tenure at the rank of full professor; and a strong background in Pharmacy with a demonstrated understanding of and a commitment to the profession.

Candidates should have a demonstrated commitment to academic excellence and cultural diversity; and be able to provide leadership in advancing the College's research, education, clinical practice, and service missions. The ability to work collegially and effectively with faculty and multiple constituencies within the University, and to continue to develop and enhance relationships with the Pharmacy profession is essential. The position requires administrative experience demonstrating the capability of leading a diverse academic unit, and an appreciation of the role of faculty governance within the College.

Founded in 1872. The University of Toledo has been a member of the university system of the State of Ohio since 1967 and is one of the premier public universities in the State of Ohio. The University is currently a Doctoral I institution with a stated goal of achieving Research II status.

The compensation package for this position is highly competitive. The review process will begin immediately. The position will remain open and applications will be reviewed until an appointment is made. The effective date of appointment is expected to be September 1, 1999, or earlier. Interested persons should submit a letter of interest and a complete resume to: Rochelle C. Bavol, College of Pharmacy Dean Search Committee, The University of Toledo, 5025 Nitschke Hall, Toledo, OH 43606-3390, FAX: (419) 530-6040, Email: rbavol@eng.utoledo.edu

Although every effort will be made to treat all candidates confidentially, Ohio is an open-meetings, open-records state, so full confidentiality cannot be guaranteed. Informal preliminary inquires are invited by contacting Professor William Messer, Chair of the search committee, at (419) 530-1958 or Email: wmesser@uoft02. utoledo.edu.

The College of Pharmacy website address is www.utoledo.edu/colleges/pharmacy.

The University of Toledo is an Equal Access, Equal Opportunity Affirmative Action Employer and Educator.

# **IRRI** International Rice Research Institute

# Position Announcements for Systems Specialist for Rice Plant Protection & Affiliate Scientist (Plant Pathologist for Disease Management)

IRRI, supported by the Consultative Group on International Agricultural Research (CGIAR), is a nonprofit, autonomous organization engaged in research and training on rice-related technology. IRRI employs about 100 Internationally Recruited Staff (IRS) and more than 800 Nationally Recruited Staff (NRS). The Institute's annual budget is approximately US\$35 million.

For these two IRS positions, salary and perquisites are internationally competitive including support for education of children, car and housing, and medical and retirement benefits. IRRI provides a gender-sensitive environment and welcomes women applicants. The positions are located at IRRI's headquarters, 70 kilometers south of Manila, Philippines, and often involve international travel. Fluency in written and spoken English is required. Application materials should include a full curriculum vitae, names (including fax or e-mail address) of three referees, and an indication of availability date. Interested candidates can learn more about IRRI and its activities by visiting the Institute's Web site at http://www.cgiar.org/irri.

### **Systems Specialist for Rice Plant Protection**

The Systems Specialist will work with an interdisciplinary team of scientists to: 1) conduct field-oriented research aimed at controlling rice pests by identifying priorities, selecting and determining the impact of management options, and delineating IPM recommendations at the regional level; 2) develop tools to project future pest problems in rice and their potential impact, especially in relation to agricultural changes occurring at the regional level, and 3) develop and maintain a rice pest database, including information on outbreaks, production situations, and management options.

Applicants must have a Ph D in plant pathology, entomology, or related disciplines with at least 10 years of experience and a proven record of achievements in plant protection research. The position requires strong communication skills to work with IRRI's partners and donors in a multi-cultural environment.

Send application materials to **Dr. Len Wade (l.wade@cgiar.org)**, chair of the Search Committee, at the address listed below. Deadline is 15 **June 1999**. Please refer to code **IR99-SSRPP-02**.

## Affiliate Scientist (Plant Pathologist)

The Affiliate Scientist (Plant Pathologist) will work in an interdisciplinary team of entomologists, pathologists, geneticists, and breeders to implement disease management strategies in rice. Primary responsibilities are to develop conceptual tools and practical management strategies to reduce yield loss to multiple diseases in intensive production systems. The target problems may include blast, brown spot, sheath blight, and bacterial blight. Emphasis is on diversification of disease resistant sources to achieve sustainable use of productive varieties in farmers' field.

Applicants must have a Ph D in plant pathology with quantitative/statistical skills. Research experience in population biology and genetics are highly desirable. Good communication and inter-personal skills are important to work with colleagues in the national agricultural research systems. The initial appointment is for 3 years with possible renewal depending on performance.

Send application materials to Dr. Hei Leung (h.leung@cgiar.org), chair of the Search Committee, at the address listed below. Deadline is 30 June 1999. Please refer to code IR99-ASPP-02.

International Rice Research Institute MCPO Box 3127 1271 Makati City, Philippines Tel: 63-2-845-0563; Fax: 63-2-891-1292

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The Pew Latin American Fellows Program in the Biomedical Sciences provides support for young scientists from Latin America for post-doctoral training in the United States.

en Fellows will be selected in 2000. An award of \$50,000 will L be provided as a salary stipend for the fellow during the period of training (2 years) and will be administered by the sponsoring U.S. institution. The sponsoring institution is expected to supplement the stipend with at least \$5,000 a year and to provide medical benefits for the fellow. Following the two year fellowship, the Program will issue an additional \$35,000 award to the sponsoring institution to purchase equipment and supplies for the fellow to establish a laboratory in his or her home country.

Applicants must have held a Ph.D. and/or M.D. degree, or equivalent, for no more than five years as of July 1, 2000. Applicants may not have had previous post-doctoral training outside of Latin America nor may they already hold a post-doctoral position in the U.S. Applicants are not required to have a commitment of a position and laboratory space after the fellowship. However, applicants must submit a written statement of intent to return to Latin America. Fellows must accept a position and have confirmed laboratory space in Latin America by the end of the fellowship period in order to obtain the \$35,000 portion of the award.

Fellows will be selected on the basis of their promise as outstanding investigators, as well as the scientific merit of their research proposal, their record of training and how well their interests coincide with the laboratory of their sponsor in the United States. If potential applicants need assistance with the identification of an appropriate sponsoring laboratory in the United States, they may contact the Program Office before August 1, 1999. The program will accept applications from Mexico, Central and South America. Applications may be obtained from the Regional Committee contact listed here for each country or from our website at http://futurehealth.ucsf.edu/pewlatin.html

The application deadline is October 1, 1999. Winners will be notified in April 2000 and the fellowship should begin no later than August 2000.

**APPLICATION DEADLINE IS OCTOBER 1, 1999** 

### ARGENTINA

Ana Belen Elgoyhen, Chair Instituto de Investigaciones en Ingenieria Genetica y Biologia Molecular Phone: (5411)(4) 783-2871 Fax: (5411)(4) 786-8578 E-mail elgoyhen@dna.uba.ar

### BRASIL

Sergio T. Ferreira, Chair Universidade Federal do Rio de janeiro Departamento de Bioquimica Medica, ICB/CCS Phone: (021)270-5988 ext 161; Fax: (021)270-8647 E-mail: ferreira@bioqmed.ufrj.br

### CHILE

Manuel Kukuljan, Chair Programa de Fisiologia y Biofisica Instituto de Ciencias Biomedicas Facultad de Medicina Universidad de Chile Tel: (56)(2) 678-6310 Fax: (56)(2) 777-6916 email kukuljan@bitmed.med.uchile.cl

### MEXICO

Mario Zurita, Chair Instituto de Biotecnología. UNAM Mexico. Phone: (52)(5) 6227659 Fax: (52)(73) 172388 E-mail: marioz@ibt.unam.mx

### All Other Countries

Silvia Montano de Jiménez The Pew Latin American Fellows Program 3333 California Street, Suite 410 San Francisco, CA 94118 Tel: (415) 476-5116 Fax: (415) 476-4113 E--mail: montano@itsa.ucsf.edu

# POSTDOCTORAL POSITION at The Wistar Institute in **Transcriptional Regulation**

The Wistar Institute, an independent research organization located on the University of Pennsylvania campus, currently seeks postdoctoral appli-cants. Research focuses on the function of histone acetylation by the adaptor GCN5 in transcriptional activation. Studies include genetic and biochemi-cal approaches both in S. cerevisiae and in humans, focusing on the mecha-nism and biological role of protein complexes containing GCNS.

Recent publications include:

Wang et al. (1998) Genes & Devel. 12, 640-653. Gregory et al. (1998) Molecular Cell. 1, 495-505 Liu et al. (1999) Mol. Cell. Bio. 19, 1202-1209 Sterner et al. (1999) Mol. Cell. Bio. 19,

Successful candidates will have a Ph.D. and/or M.D./Ph.D. in the biological sciences. Please send a C.V. and three letters of reference to the Human Resources Dept., ATTN: Dr. Shelley L. Berger, THE WISTAR

INSTITUTE, 3601 Spruce Street, Philadelphia, PA 19104. berger@ wistar.upenn.edu. EOE/AA/M/F/D/V

86-98



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### **Postdoctoral Training Position**

We are looking for a recent or soon to be Ph.D. scientist trained in biochemistry, pharmacology, and/or lipid metabolism to dissect the role of lipid pathways in immune cell physiology and in vivo models of inflammation. Training in cellular immunology or cellular biology and tissue culture is required and training in arachidonic metabolism acid advantageous. Please direct CV's with a list of 3 references and a cover letter detailing your experience and scientific interests to Dr. Philip Needleman, Senior Vice President and Chief Scientist and Dr. Catherine Tripp, Senior Research Scientist.

We offer an outstanding competitive compensation and benefits package. For consideration, please send your resume to: The Monsanto Company, Job Code: PD-CT, 700 Chesterfield Pkwy, Mail Code: BB5B, Chesterfield, MO 63198; Fax: 314/737-6419.

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### **Taste Signal Transduction** Title 42 Staff Scientist Position

Applications are invited for a Staff Scientist to conduct investigations into the molecular mechanisms involved in taste at the National Institute of Dental and Craniofacial Research, National Institutes of Health, Bethesda, MD. The applicant will have demonstrated the ability to utilize both molecular biology and biochemical approaches to investigate mechanisms of signal transduction involved in taste perception. The candidate will be expected to collaborate in developing a program to investigate the molecular details of G-protein coupled signal transduction relevant to taste perception. Candidates must have either an M.D. or Ph.D. degree, as well as postdoctoral research experience working on the biochemistry and molecular biology of taste. Preference will be given to candidates demonstrating a strong peer-reviewed publication record in these areas of research. The candidate will work under the supervision of a tenured/tenure-track investigator. Salary ranges from \$58,027 - \$75,433.

If you wish to apply for this position, please submit a curriculum vitae and bibliography, a 1-2 page summary of research interests and goals, and 3 current letters of recommendation from former perceptors or supervisors to the following address: NIDCR Personnel Office, 31 Center Drive, MSC 2290, Building 31. Room 2C39, Bethesda, MD 20892-2290, (301) 496-6971. Applications will be accepted until June 28, 1999. NIH is an equal opportunity employer.



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# **Postdoctoral Scientist**

The Wound Healing Technology Resource Center, located in Skillman, NJ, wishes to appoint a Postdoctoral Scientist. You must have a PhD or MD and experience and/or training in molecular biology, cell biology and biochemistry. Ideally, you will also have up to 3 years' postdoctoral experience. The selected candidate will be involved in the *in vitro* evaluation of materials for potential use in the repair and/or replacement of skin defects. Experience in 3-D culturing techniques or in methods for the differentiation of relevant tissues would be especially useful. Excellent computer and communication skills are essential and you will be expected to give written and oral reports on your work, both within the Company and at scientific meetings.

As a valued team member, you'll receive a competitive salary and great benefits including medical/dental, a 401(k), a pension plan and a comprehensive wellness program. We strongly encourage individuals to apply on-line at www.jnj.com or forward a scannable resume to: Johnson & Johnson Recruiting Services, Dept. Code: 3276, PO. Box 16597, New Brunswick, NJ 08906-6597. We are an equal opportunity employer totally committed to diversity.

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### ANNOUNCEMENT

# NATIONAL SPACE BIOMEDICAL RESEARCH INSTITUTE Special Announcement to Institutions

The National Space Biomedical Research Institute (NSBRI) announces a special opportunity for institutions to compete to become a member of the NSBRI Consortium.

NSBRI Announcement 99-01 (May 10, 1999) An Opportunity to Become a Member of the National Space Biomedical Research Institute Consortium

Letter proposals will compete in a two-phase process. The second phase involves a more detailed application and a reverse site visit.

> This announcement is available electronically via the Internet at http://www.nsbri.org

Initial Letter of Application Due: July 2, 1999

Paper copies of this Announcement are available to those who do not have access to the Internet by calling 713-798-7412 or by writing to R. J. White, NSBRI, One Baylor Plaza, NA-425, Houston, TX 77030.

# Faculty Positions in Biomedical Engineering

The Department of Chemical Engineering at the joint college of engineering between Florida State University and Florida A&M University (FAMU-FSU College of Engineering) invites applications for several tenure-track faculty positions in its newly formed graduate degree programs in Biomedical Engineering. PhD or MD/PhD in Biomedical Engineering or Medical Sciences and related disciplines is required. Rank is open, however, senior appointments should carry a previous record of national distinction in biomedical engineering or related disciplines. Candidates must demonstrate a strong commitment to building both the educational and research components of a new program. Of particular interest are those candidates with strong backgrounds in tissue engineering, metabolic engineering, and intercellular transport processes. The Department recently received a Special Opportunity Award from the Whitaker Foundation to help initiate this program. In addition, the Department also supports a new NSF funded NMR/MRI system for molecular transport and microimaging studies, as well as new laboratory space as part of the College's recent space expansion. Strong opportunities exist for interactions with the FSU's Program in Medical Sciences, FAMU Pharmaceutical Sciences, and FSU's Molecular Biology programs. Qualified applicants should send a letter of application, current vita, and names and contact information of three references by August 1, 1999 to Dr. Michael H. Peters, Director Biomedical Engineering, Department of Chemical Engineering, FAMU-FSU College of Engineering, 2525 Pottsdamer St., Tallahassee, FL 32310. FAMU-FSU is an Affirmative Action/ Equal Employment Opportunity employer. Women, minorities, veterans, and persons with disabilities are encouraged to apply.

# Westvaco Corporation Forest Science and Technology

Project Assistant in Pine Transformation M.S./B.S.

Westvaco is a major manufacturer of paper, packaging and specialty chemicals with an active **Forest Science and Technology** Department located near Charleston, South Carolina. Ongoing research efforts into the application of biotechnology to tree improvement in forest tree species include somatic embryogenesis, organogenesis, and genetic transformation of pines.

Applications are being accepted for a Project Assistant position in the genetic engineering of pines. This position requires an M.S. degree with experience in plant tissue culture, preferably woody plant tissue culture of embryogenesis, and/or plant molecular biology. Candidates with a B.S. in Biology or a closely related field and at least three years of relevant tissue culture experience will also be considered. Applicants must have experience which demonstrates sterile technique, working use of a microscope, computer literacy, and the ability to use scientific methods to learn new information and integrate ideas into experiments. Responsibilities include the initiation and maintenance of transformation experiments; care of embryogenic and organogenic tissue cultures and transgenic plants; and assistance with the molecular analysis of transgenic plants. Associated with these tasks will be documentation of detailed observations, evaluation of data, and assistance with the preparation of technical manuscripts. Additional duties may include general lab maintenance, and assistance with the planting and monitoring of field tests. Candidates should be able to function well within a team environment, collaborating with others as well as conducting experiments with a moderate degree of independence.

Authorization to work in the U.S. is required. To apply please send a resume and university transcripts, and arrange to have three letters of recommendation sent to Cindy McCord, Westvaco Forest Science Laboratory, PO Box 1950, Summerville, SC 29484. Only complete applications will be given full consideration. Applications by E-mail will not be accepted. Inquiries only: E-mail clmccor@westvaco.com or telephone (843) 851-4733. Applications will be accepted until July 30, 1999, or until a suitable candidate is found.

Westvaco is an equal opportunity employer, m/f.

### Nominations are solicited for the fifth annual

# MARCH OF DIMES PRIZE IN DEVELOPMENTAL BIOLOGY

This prize, consisting of a medal and \$100,000, is awarded to an investigator who has made a seminal discovery in biology: one that has revealed a new principle of relevance to birth defects, and who has not previously received a major prize for this work.

We seek nominations of candidates for the year 2000 award. Please make your recommendations on or before September 15, 1999.

Nomination forms available upon request from:

Michael Katz, M.D., Vice President for Research March of Dimes Birth Defects Foundation 1275 Mamaroneck Avenue White Plains, NY 10605 Telephone: (914) 997-4555 Facsimile: (914) 997-4560 e-mail: mkatz@modimes.org

### THE PREVIOUS RECIPIENTS WERE:

1999 - DRS. RICHARD L. GARDNER and MARTIN J. EVANS 1998 - DR. DAVOR SOLTER 1997 - DRS. DAVID HOGNESS and WALTER GEHRING 1996 - DRS. BEATRICE MINTZ and RALPH L. BRINSTER

# Molecular Biologist/Biochemist Research and Teaching Postdoctoral Position

Grinnell College is seeking a postdoctoral-level molecular biologist/biochemist who has a strong interest in undergraduate liberal arts education. The two-year position is funded through an AIRE grant from NSF. The successful candidate will be expected, in collaboration with one or more Grinnell faculty members, to participate in an ongoing research program involving undergraduates. Research areas include starvation-induced and DNA repair genes in prokaryotes. The successful candidate will also work with faculty in the biology and chemistry departments to develop new sophomore-level courses in cellular/molecular biology and an introduction to biochemistry. Questions may be addressed to biology faculty members Bruce Voyles (voyles@ac.grin.edu), Leslie Gregg-Jolly (greggjol@ac.grin.edu). Information about Grinnell College and faculty research programs is available at http://www.grinnell.edu.

Applicants should submit a Curriculum Vitae, a brief description of past, current, and planned research interests, and a statement describing their philosophy of undergraduate education and long-range career plans, along with a list of references and copies of transcripts to Molecular Biologist/Biochemist Search, Grinnell College, Grinnell IA 50112. To be assured of consideration, materials should be submitted by June 15. Grinnell College is an equal opportunity/affirmative action employer committed to employing a highly qualified staff that reflects the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender, sexual orientation, marital status, religion, creed, or disability.

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## RESEARCH SCIENTIST Molecular Structure/CADD

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### **RESEARCH SCIENTIST** Protein X-ray Crystallographer

Use your expertise in determining protein structures with X-ray crystallographic methods to obtain and provide atomic resolution structure information to the chemists in our drug discovery programs. You must have a PhD with postdoctoral or related experience, and expertise in determining protein structures with X-ray crystallographic methods. Additional requirements include knowledge in the expression and purification of proteins for crystallization experiments, and proven expertise in all aspects of X-ray crystallography (data collection, synchrotron radiation, low temperature techniques, structure determination by MIR and molecular replacement, structure refinement).

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### POSITIONS OPEN

### ASSISTANT/ASSOCIATE PROFESSORS DEPARTMENT OF ENVIRONMENTAL MEDICINE University of Rochester Medical School

The Department of Environmental Medicine of the University of Rochester Medical School is expanding. Tenure-track faculty positions are available at the Assistant/Associate Professor level. The Department is one component of a larger environmental health research community. Administratively housed within the Department of Environmental Medicine is an NIEHS Environmental Health Sciences Center Grant focused on "Environmental Agents as Modulators of Human Disease and Dysfunction" with associated research endeavors ranging from genetic engineering approaches to human cohort studies. The Department also includes an NIEHS Toxicology Training Grant. Qualified applicants are expected to develop a vigorous independently funded research program complementing the theme of the NIEHS Center Grant. Areas of broad research interest include, but are not limited to, neurotoxicology, developmental toxicology, immunotoxicology, and aging and toxicology. Faculty positions will include competitive salary, start-up packages, and access to Facility Cores of the NIEHS Center. Applicants should send a curriculum vitae, a statement of research interests including future plans, a description of teaching experience and philosophy, and names of three individuals who can provide letters of reference to: Dr. Deborah A. Cory-Slechta, Chair, Department of Environmental Medicine, Box EHSC, University of Roch-ester Medical School, 575 Elmwood Avenue, Rochester, NY 14642. The University of Rochester is an Equal Opportunity Employer.

### THE HAFTER FAMILY CHAIR IN PHARMACOLOGY

The Pennsylvania College of Optometry invites nominations and applications for the recently established Hafter Family Endowed Chair in Pharmacology. The candidate must be an established scientist with a record of extramurally funded research from governmental sources, foundations, and/or industry. While the candidate's research is expected to be ophthalmic, other areas of pharmacological research will be entertained. The candidate is expected to contribute and substantially strengthen the academic programs in pharmacology. Both the academic programs and the new research laboratories are located in the recently opened PCO campus in Elkins Park, Pennsylvania, a suburb of Philadelphia. The salary range is between \$80,000 and \$110,000, depending on qualifications. Applicants should send their curriculum vitae, descriptions of research programs, and contact information for a minimum of three references to: Dr. Pierrette Davhaw-Barker, Search Committee Chairperson, Pennsylvania College of Optometry, 8360 Old York Road, Elkins Park, PA 19027-1598. E-mail: pierrette@pco.edu.

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

The Department of Animal Sciences at Ohio State University, Columbus, Ohio is seeking a Molecular Anaerobic Microbiologist at the rank of ASSIST-ANT PROFESSOR/ASSOCIATE PROFES-SOR. This tenure-track position with a 12-month appointment is 70 percent research and 30 percent teaching. Research emphasis will be on molecular biology, including functional genomics, focused on microorganisms inhabiting the rumen or gastrointestinal tract of food animals and those involved in waste management. Teaching emphasis will be an undergraduate course related to molecular biology in animal agriculture and a graduate course in his/her area of expertise. For inquiries regarding qualifications and application directions, please contact: Dr. Jeff Firkins, Telephone: 614-688-3089; e-mail: firkins.1@osu.edu. The Ohio State University is an Equal Opportunity/.Affirmative Action Employer. Qualified women, Vietnam-era veterans, and individuals with disability are encouraged to apply

### POSITIONS OPEN

### FACULTY POSITION IN ACTIVE TECTONICS AND GEOMORPHOLOGY AT YALE UNIVERSITY

The Department of Geology and Geophysics at Yale University announces a ladder faculty position, at either the junior or senior level, in the general area of active tectonics and geomorphology, starting as early as January 2000. This position is part of a broad multidisciplinary hiring initiative in earth sciences at Yale, including the areas of the dynamics of the oceans, atmospheres, and climate; geochemistry; solid-earth geophysics; and paleontology. For the active tectonics and geomorphology search, we are particularly interested in finding candidates who relate the evolution of landforms to the forcing caused by tectonic and climate processes. We also welcome applications from related fields, including, but not limited to, geodynamics of landscape evolution, paleoseismology, structural geology, and tectonics. The successful candidate is expected to develop an internationally visible research program, and to teach at both the graduate and undergraduate levels.

The closing date is Sepember 30, 1999. Applicants should send a curriculum vitae, a statement of professional goals, and the names and addresses of three or more referees to:

Geomorphology Search Committee c/o Professor Danny Rye, Chair Department of Geology and Geophysics Yale University P.O. Box 208109 New Haven, CT 06520-8109

We encourage applicants from historically disadvantaged ethnic, racial, and gender categories. Yale University is an Equal Opportunity Employer.

### FACULTY POSITIONS IN SOLID-EARTH GEOPHYSICS AT YALE UNIVERSITY

The Department of Geology and Geophysics at Yale University is starting a new multidisciplinary hiring initiative in earth science, which includes a major expansion in solid-earth geophysics. To this end, we intend to fill several ladder faculty positions in solidearth geophysics, either at the **JUNIOR** or **SENIOR** level, starting as early as January 2000. We invite applicants who will develop internationally recognized research programs in collaboration with present and future Yale Geoscientists. The positions will include teaching at both undergraduate and graduate levels. All subfields of solid-earth geophysics will be considered, including, but not limited to, geodesy, geodynamics, geomagnetism, mineral physics, rock and earthquake mechanics, and seismology. Closing date of applications is September 30, 1999.

Applicants should send a curriculum vitae, a statement of professional goals, and the names and addresses of three or more referees to:

Solid-Earth Geophysics Search Committee c/o Professor Danny Rye, Chair Department of Geology and Geophysics Yale University P.O. Box 208109 New Haven, CT 06520-8109

We encourage applicants from historically disadvantaged ethnic, racial, and gender categories. Yale University is an Equal Opportunity Employer.

**RESEARCH ASSISTANT PROFESSOR** and POSTDOCTORAL FELLOW positions in neurobiology, with appointments at the Detroit Veterans Administration Medical Center, Wayne State University, and Henry Ford Health System, to start within one year. Individuals in either category will have experience in molecular neurobiology and will work on nitric oxide, catecholamine, and oncogene involvement in apoptotic neuronal death and neurological diseases. Research Assistant Professor position, requiring United States permanent residency, will facilitate transi-tion to independent tenure-track Assistant Professor. Opportunities to secure federal VA Merit grant funding are available. Send curriculum vitae, statement of research interests, names of three references to: Robert A. Levine, Ph.D., Director, Gossett Neurology Laboratories, Henry Ford Hospital, 1 Ford Place, 4D, Detroit, MI 48202.

### POSITIONS OPEN

ASSISTANT PROFESSOR in population ecology. The Department of Wildlife Ecology and Conservation invites applications for a 12-month, tenuretrack, teaching (70 percent) and research (30 percent) position. This assignment may change in accordance with the needs of the unit. The successful candidate will develop a nationally recognized teaching and research program focusing on quantitative approaches in population ecology. Teaching responsibilities will include developing a course in population ecology for advanced undergraduates that integrates mathematical, statistical, and ecological concepts; participation in other courses in the undergraduate curriculum; and a graduate course that emphasizes modeling and other quantitative approaches in population ecology. The individual will also be expected to supervise M.S. and Ph.D. students. Research responsibilities include developing a competitive program in population ecology. Applicants must have earned Doctorate degree in wildlife ecology, biology, zoology, natural resource management, or related field, and have a strong background in mathematics. Applicants must demonstrate excellence in written and oral communication skills, a strong commitment to teaching, and the ability to procure extramural funding. Salary commensurate with qualifications and experience. Applications will be accepted until September 15, 1999. Please send a letter of application, a curriculum vitae, statements of professional goals and teaching philosophy, and the names, addresses, and telephone numbers of three (3) professional references. Reference position #929710. Please forward nominations, applications, and inquiries to: Dr. Michael P. Moulton, Search and Screen Committee, Department of Wildlife Ecology and Conservation, P.O. Box 110430, University of Florida, Gainesville, FL 32611-0430. Telephone: 352-846-0643; FAX: 352-392-6984; e-mail: mpm@gnv.ifas.ufl.edu. The University of Florida is an Equal Opportunity/Equal Access/Affirmative Action Employer. Women and minorities are encouraged to apply.

#### ASSISTANT/ASSOCIATE PROFESSOR OF CELL BIOLOGY CHEMISTRY/BIOLOGY INTERFACE

The Department of Cell Biology at Harvard Medical School invites applications from scientists working at the interface between chemistry and cell biology for a tenure-track position at the Assistant or Associate Professor level. The successful candidate will have a demonstrated interest in applying chemical thinking to problems in basic cell biology. He or she will have the opportunity to develop a close working relationship with the Institute of Chemistry and Cell Biology (website: http://www.hms.harvard.edu/iccb) and will have access to the facilities of the Institute. Submit applications, with curriculum vitae, research proposal, and names of three references to: Chemical Biology Search Committee, Department of Cell Biology, Harvard Medical School, 200 Longwood Avenue, C-517, Boston, MA 02115. Please arrange for all letters of reference to be sent to the same address.

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

Biostatistics / informatics Tenure-track ASSIST-ANT PROFESSOR available immediately. Candidate will collaborate with multidisciplinary group of Investigators to develop instruments for statistical analysis and data management of "gene chips" and other complex data sets emerging from research on aging, cardiovascular function, and cell signaling. Requirements: Ph.D. in biostatistics or related field with superb language and communication skills. Background in biological sciences and computer science is highly desirable. Send curriculum vitae and names of three references to: James F. Nelson, Ph.D., Associate Professor, Department of Physiology, 7703 Floyd Curl Drive, University of Texas Health Science Center, San Antonio, TX 78284-7756. E-mail: nelsonj@uthscsa.edu. The University of Texas Health Science Center at San Antonio is an Eanal Employment Opportunity/Affirmative Action Employer.

# CLINICAL MICROBIOLOGY FACULTY DEPARTMENT OF PATHOLOGY

The Department of Pathology at State University of New York at Brooklyn invites applications for a faculty position in clinical microbiology. Preference will be given to candidates with specialization in clinical microbiology and those with independent research programs.

Duties include clinical and administrative responsibility for clinical microbiology laboratories, teaching of medical students, and training of pathology residents. The candidate will be expected to carry out an independent research program. Academic rank and salary commensurate with experience. Submit curriculum vitae to: Joan H. Howanitz, M.D., Vice Chair, Department of Pathology, SUNY Health Science Center, Box 25, 450 Clarkson Avenue, Brooklyn, NY 11203. Fax: (718) 270-3313.

The State University of New York is an Affirmative Action and Equal Opportunity Employer.

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University Hospital of Brooklyn State University of New York Health Science Center at Brooklyn

# POSTDOCTORAL POSITION IN OPHTHALMOLOGY

University of Washington School of Medicine

The University of Washington, Department of Ophthalmology invites applications for a **POSTDOC-TORAL POSITION** to study visual signal transduction and retinoid metabolism in the eye. Experience in biochemistry, molecular biology, chemistry, and/or mass spectrometry is desirable. Send curriculum vitae and names of references to:

Dr. K. Palczewski, University of Washington Department of Ophthalmology Box 356485, 1959 NE Pacific St. Seattle, WA 98195-6485. E-mail:

palczews@u.washington.edu.

The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/ Affirmative Action Employer.

# Associate Laboratory Director Applied Science & Technology

Brookhaven National Laboratory is seeking an Associate Laboratory Director (ALD) to manage and develop a diverse program in enviromental sciences, energy sciences, national security, as well as applied chemistry and materials science. The Applied Science & Technology Directorate is currently structured in two research departments (Applied Science and Advanced Technology) with a combined budget volume of approximately \$98M and 288 employees. The Directorate is also responsible for the management and development of technology transfer, and for outreach to the business community.

As head of one of four science directorates, the ALD reports to the Laboratory Director and is part of the Laboratory's level-1 managment team. He/She will define the goals and develop the strategic plan for the Directorate in accordance with the mission of the U.S. Department of Energy and other agencies, and will recruit, maintain and develop an outstanding scientific staff.

A Ph.D. in Science or Engineering and a strong research background in one of the main areas of the Directorate are required, as is demonstrated experience and success in managing and developing a medium-size research program in a federally funded environment or in industry. Excellent communication and leadership skills are essential.

This position requires U.S. citizenship and the ability to obtain a DOE Q clearance. Details on BNL's management structure and the DAS/DAT program may be obtained from the BNL web site at **www.bnl.gov.** The position is available immediately and should be filled by October 1, 1999. We invite interested candidates to send their curriculum vitae to: R. D'Angio, Human Resources Division, Bldg 185, P.O. 5000, Upton, NY 11973-5000; or email to: dangio@bnl.gov. BNL welcomes diversity and encourages applications from all qualified individuals.



www.bnl.gov

### **ANNOUNCEMENT**

# DOES THIS SOUND LIKE YOU OR SOMEONE YOU KNOW!

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

"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."

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

# NIH Loan Repayment Benefits of \$35,000 per Year

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

For more information on the Loan Repayment Program and postdoctoral training, visit our websites at: http://www.training.nih.gov and http://Irp.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.

### POSITIONS OPEN

### FACULTY POSITIONS IN ATMOSPHERE, OCEAN, CLIMATE DYNAMICS AT YALE UNIVERSITY

The Department of Geology and Geophysics at Yale University announces a search for several ladder faculty positions in the general area of atmosphere, ocean, and climate dynamics. We seek both JUN-IOR and SENIOR applicants with records of creative research in subject areas that improve understanding of modern atmospheric and oceanic processes and/or the evolution of the earth's climate on geologic time scales. Areas of special interest include atmosphere/ ocean modeling; climate-system modeling; coupled air-sea interaction; dynamical meteorology and oceanography; glaciology; hydrology; remote sensing; and the physics, dynamics, and chemistry of clouds. New appointments at Yale in these areas will contribute to a broad emphasis in the Department on paleoclimatology, paleo-environments, and global change. Additional appointments in the Department will be made in areas of active tectonics and geomorphology, geochemistry, paleontology, and solid-earth geophysics. Closing date for applications is September 30, 1999.

Applicants should send a curriculum vitae, a statement of professional goals, and the names and addresses of three or more referees to:

Atmosphere, Ocean, Climate Dynamics Search Committee c/o Professor Danny Rye, Chair Department of Geology and Geophysics Yale University P.O. Box 208109 New Haven, CT 06520-8109

We encourage applicants from historically disadvantaged ethnic, racial, and gender categories. Yale University is an Equal Opportunity Employer.

### PHYSICIAN-SCIENTIST

ASSISTANT PROFESSOR (tenure-track). Joint appointment in Department of Medicine and Sol Sherry Thrombosis Research Center at Temple University School of Medicine. Available immediately. Should have Board certification in internal medicine. have completed a Fellowship and research training in hematology-oncology, and be Board-eligible or Board-certified in this specialty. Will be expected to establish an independent research program, preferably in vascular biology or in related areas of hemostasisthrombosis. Will have at least 75 percent protected time for research. Will be expected to attend in both hematology and internal medicine. Generous space and start-up support will be provided. The Thrombosis Research Center has a training grant for graduate students and Postdoctoral Fellows, and the individual will be able to participate as a faculty member. Con-tact: Robert W. Colman, M.D., Director, Sol Sherry Thrombosis Research Center and Chief, Hematology Division, Temple University School of Medicine, FAX: 215-707-2783; e-mail: colmanr@ astro.temple.edu. Please include current curriculum vitae, complete list of publications, and names of three references. Temple University is an Affirmative Action/ Equal Opportunity Employer and strongly encourages applications from women and minorities.

ENTOMOLOGIST. Tenure-track ASSISTANT PROFESSOR. Nine-month appointment. Basic qualifications include Ph.D. by date of application; training and ability to teach introductory biology, entoniology, zoology, and an advanced course in area of expertise; ability and commitment to conduct research in entomology involving undergraduate and M.S. graduate students; and expertise in identification of North American terrestrial insects. Full details available at website: http://bioweb.wku.edu. Review of applications begins August 16, 1999, with a target start date of January 10, 2000. Applicants should submit a cover letter, curriculum vitae, teaching and research statements, and have three letters of reference sent to: Chair, Entomology Search, Biology Department, 1 Big Red Way, Western Kentucky University, Bowling Green, KY 42101. Affirmative Action/Equal Employment Opportunity

### POSITIONS OPEN



### MAINE SCIENCE AND TECHNOLOGY FOUNDATION

The Maine Science and Technology Foundation is seeking an experienced Policy Analyst to manage the development and implementation of the state's science and technology policy and the measurement of the impact of science and technology on the state's economy.

Candidates will have an understanding of the interrelationship between science and technology, technology-based industry, research and development, education, and economic development. The following skill sets will be required: experience in formulating, communicating, and implementing science and technology policy to influence economic growth; grant research and writing; computer proficiency; and experience with technology-based businesses, the education sector, and/or not-for-profit research laboratories. In addition, the candidate will have strong interpersonal and communication skills and a demonstrated attention to detail. A working knowledge of federal agencies that support science and technology research, development, and education and how the private and public sectors can benefit from partnerships is essential.

The Director of Policy Analysis will be an integral member of the Foundation team and report directly to the President.

Letters of interest, résumés, and salary requirement can be sent to: Claire Collins, CFO, Maine Science and Technology Foundation, 77 Sewall Street, August, ME 04330 by June 15, 1999.

The Maine Science and Technology Foundation is a state-chartered, not-for-profit organization whose mission is to stimulate economic growth in Maine through the practical application of science and technology in education, research, and commerce. *MSTF is an Equal Opportunity Employer.* 

### ASSISTANT/ASSOCIATE PROFESSOR COLLEGE OF PHYSICIANS AND SURGEONS Columbia University

A tenure-track position with a competitive recruitment package is now available with joint appointments in the Department of Ophthalmology and a basic science department. The candidate should have a strong background in molecular biology, cell biology, and transgenic technology. While the candidate may not have worked in the field of eye biology, they must have an interest in degenerative diseases of the retina and have publications in journals of the first rank. Please submit curriculum vitae, reprints of your two most important papers, and three reference let-ters to: Abraham Spector, Ph.D., Chair, Search Committee, Department of Ophthalmology, College of Physicians and Surgeons of Columbia University, 630 West 168th Street, New York, NY 10032. Responses should be received no later than August 1, 1999. Columbia University takes Affirmative Action toward Equal Employment Opportunity.

**CURATOR, ECOLOGY PROGRAMS.** The California Science Center seeks an individual to develop and manage ecological and environmental science exhibits, which will include both aquatic and terrestrial living habitats, multimedia experiences, hands-on exhibits, and live educational programming. Possession of an earned Doctorate in terrestrial or aquatic ecology, environmental science, marine biology, oceanography, or a related scientific field; three years of experience teaching at the college or university level or in exhibit and education program development at science museums, aquaria, or zoo; and one year of administrative or supervisory experience required. \$5,331 to \$5,877. Please visit website: www.casciencetr.org for a full description of the position. *Equal Opportunity Employer*.

### POSITIONS OPEN FOUR NEUROSCIENCE

### FACULTY POSITIONS NEUROLOGICAL SCIENCES INSTITUTE Oregon Health Sciences University

The Neurological Sciences Institute (NSI) is recruiting additional faculty to staff its new, expanded research facility being built on Oregon Health Sciences University's west campus, at the western edge of Portland. We invite applications from Neuroscientists at the level of ASSISTANT, ASSOCIATE, or SE-NIOR SCIENTIST whose research complements that of the current faculty (website: www.ohsu.edu/ nsi/). Preference will be given to those with extramurally funded programs. All levels of investigation will be considered, including molecular, cellular, systems, and behavioral.

Our institute is a multidisciplinary center dedicated to advancement of our understanding of the brain and neurological disorders and to application of that understanding to address problems in human health. We are part of a rapidly growing university that is strong in basic and clinical neurosciences. Our new building will be located adjacent to the Oregon Regional Primate Research Center, which makes primate research possible.

Applicants should submit a curriculum vitae, a statement of research interests, and three letters of recommendation to: Search Committee, Neurological Sciences Institute, Oregon Health Sciences University, 1120 N.W. 20th Avenue, Portland, OR 97209. Applications must be received before August 1, 1999; interviews will be conducted in the fall of 1999 for appointments to begin in the fall of 2000.

OHSU is an Equal Opportunity Employer.

### STABLE ISOTOPE LAB MANAGER

The Ecosystems Center of the Marine Biological Laboratory is seeking a full-time year-round RE-SEARCH ASSISTANT II/III to manage the Stable Isotope Laboratory. Prepare samples and carryout carbon, nitrogen, and sulfur stable isotope analyses of ecological samples for researchers and outside customers. Keep records of data and samples analyzed. Maintain and troubleshoot mass spectrometers. Consult with researchers on stable isotope applications to ecological studies. Work with Principal Investigators to develop new methods and applications. M.S. and experience in the operation and maintenance of mass spectrometers required. Experience with Finnigan delta-S isotope and Europa ratio mass spectrometers plus a background in ecology or biogeochemistry are highly desirable. Send a cover letter, résumé, names, addresses, and telephone numbers of three references and transcripts to: The Marine Biological Laboratory, Attn: Human Resources [RA II/III Isotope], 7 MBL Street, Woods Hole, MA 02543-1015. Telephone: 508-289-7422; e-mail: resume@ mbl.edu.

An Equal Opportunity/Affirmative Action Employer/Nonsmoking workplace.

### MOLECULAR BIOLOGIST ASSISTANT/ASSOCIATE PROFESSOR

Section of Surgical Specialties, VA Puget Sound Health Care System, Seattle Division and Department of Orthopaedics, University of Washington.

Position available for Molecular Biologist interested in molecular and genetic basis of tumors of the musculoskeletal system. Interest in matrix biology also desirable. Candidate is expected to establish an independent research program and collaborate with clinical faculty. Qualified candidates may possess an M.D. and/or Ph.D. Rank and salary commensurate with experience.

Submit a letter of interest, curriculum vitae, reprints of selected publications, and addresses of three or more references to: Howard A. Chansky, M.D., Assistant Professor, Orthopaedics, 1660 South Columbian Way, Mailstop S-112-ORT, Seattle, WA 98108.

The VAPSHCS and the University of Washington are Equal Opportunity Employers.



# Be an NCI Cancer Prevention Fellow

THE NATIONAL CANCER INSTITUTE (NCI) sponsors the Cancer Prevention Fellowship Program (CPFP). Its purpose is to train individuals from a multiplicity of health and biomedical science disciplines in the field of cancer prevention and control.

### What will I get out of the program?

- Master of Public Health degree
- Cancer Prevention and Control Summer Academic Course
- Mentored research at the NCI
- Brief field assignments at other institutions

Research opportunities include chemoprevention, clinical epidemiology, diet, nutrition and other lifestyle factor studies, evidencebased decisionmaking, intervention studies, outcomes research, special populations, screening and early detection (including genetic and other biomarkers), smoking cessation, social and behavioral research, statistical and epidemiological methodology, and translational research.

### Am I eligible?

You must have a doctorate degree (MD, DDS, DO, PhD or equivalent) from a U.S., territorial or Canadian institution. Foreign medical graduates must have current USMLE or ECFMG certification. You must also be either a citizen or resident alien of the U.S. eligible for citizenship within 4 years.

### How long is the program?

Fellows are accepted for up to 5 years of training beginning in July.

### When are applications due?

Applications are due September 1, 1999 for entry into the program the following July 1, 2000.

### How do I apply?

To receive a catalog\*, contact: Douglas L. Weed, M.D., M.P.H., Ph.D. Director Cancer Prevention Fellowship Program National Cancer Institute

Executive Plaza South, Suite T-41 6130 Executive Blvd MSC 7105

Bethesda MD 20892-7105

\*Please provide home address and where you heard about the program.

*Further inquiries:* Mrs. Barbara Redding (301) 496-8640 Fax (301) 402-4863 E-mail br24v@nih.gov

Visit our Web site at: http://dcp.nci.nih.gov/cpfp/

THE NATIONAL CANCER INSTITUTE IS AN EQUAL OPPORTUNITY EMPLOYER.

# CHIEF OFFICER

# **OFFICE OF RESEARCH COMPLIANCE AND ASSURANCE**

The Department of Veterans Affairs (VA) is soliciting applications for the Chief, Office of Research Compliance and Assurance. The position will report to the Under Secretary for Health and will serve as his primary advisor on all matters affecting the integrity of VHA research as it relates to compliance and assurance. Incumbents must possess exceptional skill and experience in the development of procedures for investigating allegations of noncompliance with policies, regulations, and statutes governing research activities. Incumbents must have demonstrated expertise in the development, implementation and evaluation of policies and regulations for the protection of human subjects and the use of laboratory animals involved in research.

The veterans healthcare system is the largest integrated healthcare system in the nation, providing 800,000 acute hospital admissions and over 33 million outpatient visits per year, and includes a staff of 14,000 physicians, 800 dentists, and 40,300 nurses, plus tens of thousands of other health care professional and support personnel. The individual chosen for this position will oversee field-based units that conduct periodic, ongoing reviews of VHA research programs and will identify deficiencies requiring correction or modification.

Applicants must be U.S. citizens, be a medical doctor or Ph.D. with extensive experience in the management and evaluation of research activities. Physicians must possess an active and current license to practice in their respective disciplines. Salaries can range to \$165,000 for physicians and to \$117,000 for Ph.D.'s.

Applicants should forward a curriculum vitae and a statement of interest by June 23, 1999 to:

Department of Veterans Affairs Management Support Office (10A2A) Attn: Robert McQueeney 810 Vermont Avenue, NW

### Washington, DC 20420

The Department of Veterans Affairs is an Equal Opportunity Employer

### RESEARCH POSITIONS AVAILABLE PRINCETON UNIVERSITY

Several positions are available to study genomics and biology of learning and memory in mice using a variety of modern techniques including genomics tools and our newly developed brain region-specific gene knockout technology (See: Cell 87:p1317, p1327, p1339, 1996). Postdoctoral applicants should have a Ph.D. or M.D. degree with solid training in one of the following areas: Protein chemistry, molecular biology, transgenics, or slice electrophysiology. Research Assistant applicants should have a Bachelor's and/or Master's degree with experience in above area. Please send or FAX curriculum vitae, research summary, and three references to:

Dr. Joe Z. Tsien Department of Molecular Biology Princeton University Princeton, NJ 08544 USA FAX: 609-258-1028

Princeton University is an Equal Opportunity/Affirmative Action Employer.

### FACULTY POSITIONS IN GEOCHEMISTRY AT YALE UNIVERSITY

The Department of Geology and Geophysics at Yale University is starting a new multidisciplinary hiring initiative in earth science, which will include several ladder faculty appointments in the general area of geochemistry, starting as early as January 2000. We invite applications from both JUNIOR- and SE-NIOR-level candidates who will develop internationally recognized research programs in collaboration with present and future Yale Geoscientists. The positions will include teaching at both undergraduate and graduate levels. All subfields will be considered, including, but not limited to, biogeochemistry, earth surface chemical processes, experimental geochemistry, mantle geochemistry, organic geochemistry, ra-diogenic and stable isotopes, and theoretical geochemistry. Closing date for applications is September 30, 1999

Applicants should send a curriculum vitae, a statement of professional goals, and the names and addresses of three or more referees to:

#### Geochemistry Search Committee c/o Professor Danny Rye, Chair Department of Geology and Geophysics Yale University P.O. Box 208109 New Haven, CT 06520-8109

We encourage applicants from historically disadvantaged ethnic, racial, and gender categories. Yale University is an Equal

# Opportunity Employer.

### DEPUTY EDITOR THE AMERICAN JOURNAL OF HUMAN GENETICS

A full-time position in the new editorial office in Atlanta, Georgia beginning in the summer of 1999. We are seeking a Doctoral-level individual who has a broad range of interests in human and nonhuman genetics, a lively and engaging writing style, and a strong interest in scientific communication and the editorial process. The Deputy Editor will assist the Editor on all scientific matters relating to the journal, including manuscript review and evaluation, and should possess a critical scientific judgment. In addition, the Deputy Editor will be responsible for commissioning review articles and commentaries as well as book reviews. This individual will have opportunity, along with the entire editorial staff, to continue to improve the quality and timeliness of the journal. Candidates are asked to send a letter of interest, curriculum vitae, and writing sample to: Stephen T. Warren, Ph.D., Editor, The American Journal of Human Genetics, Emory University School of Medicine, 1462 Clifton Road, Room B-28, Atlan-ta, GA 30322-3050.

### POSITIONS OPEN

### MOLECULAR BIOLOGIST AD REOPENED

Colby Collge is seeking a Molecular Biologist to fill a temporary, one-year position as a FACULTY FEL-LOW in biology to begin September 1999. Candidates should have a Ph.D. in the biological sciences with an emphasis on molecular biology and a strong commitment to undergraduate education. Teaching assignments will include molecular biology with laboratory and another course with laboratory. Preference will be given to people who can teach a course in the plant sciences. Familiarity with liberal arts colleges and teaching experience are desirable.

Please submit a letter of application, statement of teaching interests, curriculum vitae, reprints of no more than three publications, undergraduate and graduate transcripts, and three letters of recommendation to: Paul G. Greenwood, Chair, Department of Biology, 5732 Mayflower Hill, Colby College, Waterville, ME 04901. Telephone: 207-872-3322; e-mail: pggreenw@colby.edu. Application review will begin immediately and continue until the position is filled. For more information about the College, please see the Colby website: http://www.colby.edu. Colby College is an Affinative Action/Equal Opportunity Employer and encourages applications from minorities and women.

### CELLULAR IMMUNOLOGIST

Nexell Therapeutics Inc. is developing and marketing innovative cell therapies for cancer and other lifethreatening diseases. We are seeking a highly motivated T cell Immunologist to join a team involved in developing T cell–based therapeutics for treating cancer and autoimmune diseases. The successful candidate will be involved in developing innovative procedures to isolate, sensitize, and expand antigen-specific cytotoxic T lymphocytes of define properties for treating human diseases. Requires a Ph.D. in biological sciences and two to five years of hands-on experience in the isolation, culture, and functional evaluation of human T lymphocyte populations.

This is an opportunity to join a growing biotechnology company at an exciting time during our lifecycle. If you are qualified and interested in the T cell Immunologist position, please send your curriculum vitae to:

> Nexell Therapeutics Inc. 9 Parker Irvine, CA 92618 FAX: 949-470-6405

The University of the South invites applications for the position of **BIOLOGY LABORATORY CO-ORDINATOR**. This is a full-time, 10-month, academic year position. The Coordinator's duties will include preparation, set-up, and operation of biology laboratories; responsibility for documentation and enforcement of safety policies and procedures; maintenance of equipment; and grading of laboratory reports and exams, as needed.

A Master's degree in biology, at least three years of laboratory experience, and the ability to effectively instruct students and communicate with faculty.

Applications will be accepted until the position is filled. Review will begin on June 18, 1999. A letter of application, résumé, and the names of three references should be sent to: Biology Laboratory Coordinator Search, University of the South, 735 University Avenue, Sewanee, TN 37383-1000.

The University of the South is an Equal Opportunity Employer. Minorities and women are encouraged to apply.

Neuroanatomy/neuropathology (PH.D.) POSI-TION with leadership potential in an exciting multidisciplinary setting focusing on human neurodegenerative diseases and neural systems relevant to cognitive function. Send curriculum vitae to: Marsel Mesulam, M.D., Cognitive Neurology and Alzheimer's Disease Center, Northwestern University Medical School, 320 East Superior Street, Searle 11-450, Chicago, IL 60611. Nonlwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States. Women and minorities are encouraged to apply.

### POSITIONS OPEN

MAGNETIC PARTICLE INSPEC-TORS' SUPERVISOR needed by Magnetic Inspection Laboratory in Elk Grove Village. Must have two years of experience in magnetic particle inspection. Apply to: Jay Gandhi, VP, Magnetic Inspection Laboratory, Inc., 1401 Greenleaf Avenue, Elk Grove Village, IL 60007-5536.

### BIOLOGIST/TRANSGENIC TECHNICIAN

The National Heart, Lung, and Blood Institute (NHLBI), NIH is in the process of establishing a new state-of-the-art transgenic core facility. We have immediate openings for two **TECHNICAL ASSIST**-**ANTS** to help in the production of transgenic and knockout mice. The qualified candidate must have a B.S. degree or equivalent in a biology-related field. Experience with mammalian cell cultures, mouse genomic DNA purification, Southern blotting, PCR analysis, and handling of laboratory animals is required. Experience with pronuclear and blastocyst microinjection, embryonic stem (ES) cell culture, and small animal surgery is highly desirable.

The successful candidate will be offered a competitive salary and benefits package. Depending on qualifications and experience, the position can be filled at either the GS-9 or GS-11 level (salary range \$33,650 to \$52,927). Interested individuals should submit a cover letter and/or curriculum vitae addressing the above mentioned qualifications and experience, bibliography, and the names, addresses, and telephone numbers of three professional references by June 28, 1999, to: Kim Westervelt, Personnel Management Branch, National Heart, Lung, and Blood Insti-tute, National Institutes of Health, 31 Center Drive, MSC 2484, Building 31, Room 5A28, Be-thesda, MD 20982-2484. Please reference vacancy number HL-99-0066. Additional information can be obtained either through: Kim Westervelt, Tele-phone: 301-496-6477 or via the FAX-back system by Telephone: 301-594-2953 and using FAX ID #4026. U.S. citizenship is required.

NIH is an Equal Opportunity Employer.

### STAFF ASSOCIATE COLUMBIA UNIVERSITY

The Gertrude H. Sergievsky Center has a full-time position for a Staff Associate on a study of Down syndrome and Alzheimer's disease. Responsibilities include cognitive assessment of adults with mental retardation, interviewing, medical record review, and phlebotomy. Previous experience with adults with mental retardation and interviewing required. Must be a licensed Phlebotomist. A car is required to travel to interview sites, with reimbursement for travel expenses and travel time; may require occasional evening work. B.A. required; M.A. in epidemiology, psychology, or biomedical studies preferred. Salary is \$31,000, with good benefits.

Qualified applicants should send résumés to: Dr. Nicole Schupf, Gertrude H. Sergievsky Center, P&S Box 16, 630 West 168th Street, New York, NY 10032.

Columbia University takes Affirmative Action toward Equal Employment Opportunity.

#### HEALTH EFFECTS OFFICER \$5,899 to \$7,173 Per Month South Coast Air Quality Management District Diamond Bar, California

Senior Staff Expert on toxicology and health effects of air pollution. Most competitive will possess advanced degree and extensive training and research experience in toxicology, medicine, health effects of toxics and criteria pollutants, risk assessment analysis, air pollution research, environmental regulatory processes, etc.; and demonstrated strong interpersonal and oral and written communication skills. Deadline June 25, 1999. Applications available for download at website: www.aqmd.gov, or e-mail: hr@aqmd.gov; FAX: 909-336-3325; Telephone: 909-396-2800. Equal Employment Opportunity.

### **EUROPEAN OPPORTUNITY**

### University of Zurich Department of Psychiatry Research 2 Clinical Research Fellows 1 Postdoctoral Research Fellow in Molecular Biology

for research projects on molecular, genetic and biochemical markers of Alzheimer's disease. Clinical Research Fellows examine and diagnose patients with Alzheimer's disease and related dementias, and participate in specific clinical and basic research projects with a focus on diagnostic biochemical markers, genetic risk factors, neuroimaging, genetic counseling and clinical trials.

The Postdoctoral Research Fellow in Molecular Biology will work on clinically oriented research projects related to dementia, including diagnostic tests, genetic screening and transgenic disease model systems. Previous experience in molecular biology and immunoassay techniques is required.

The positions are funded up to 3 years with a possibility to extend.

Please address your application to: PD Dr. C. Hock or Prof. R. M. Nitsch University of Zurich, Department of Psychiatric University Hospital, P.O. Box 68, 8029 Zurich, Switzerland Fax +41-1-384-2275 e-mail: nitsch@bli.unizh.ch

# LABORATORY HEADS RIKEN FRONTIER

**RESEARCH SYSTEM (FRS)** 

**GLOBAL OPPORTUNITY** 



The Frontier Research System aims to establish an innovative research program, which deals with most exciting and promising research subjects in the fields of physics, chemistry, materials science, and bioscience, and is composed of time limited research groups. As the second generation Program, RIKEN has decided to launch two research groups from October 1, 1999 for "Spatio-Temporal Functions Materials" and "Suprabiomolecular System" with a particular emphasis on establishing an innovative industrial basis. Three positions of Laboratory Heads in each research group are available for talented and highly motivated scientists specialized in either of the following subjects:

### Group 1. Spatio Temporal Function Materials (directed by Dr. Toyoki KUNITAKE)

This research aims at exploration of innovative spatio-temporal function materials in which non-equilibrium aspects are explicitly incorporated into preparation and functions. The positions of three Laboratory Heads who are responsible for operating one of the following research laboratories are open at this time, 1) Localized Space Laboratory, 2) Dissipative Structure Laboratory, and 3) Exciton Engineering Laboratory. The candidates should have a strong background in applied physics or in material science.

### Group 2. Supra-biomolecular System Research (directed by Dr. Akemi SUZUKI)

The research goal is the elucidation of a new signal triggering and deciphering system that we have named the "Supra-biomolecular System". A microdomain in the membrane plays critical roles in the system and we will carry out the research from the viewpoints of integrative glycobiology and sphingolipid biophysics and cell biology. Three positions of Laboratory Heads are available and candidates are required to have a strong background on glycoconjugate or sphingolipid research and propose unique research projects. Three laboratories are 1) Glyco-chain Expression and 2) Function of Glyco-chains in Integrative Glycobiology, and 3) Sphingolipids, Biophysics and Cell Biology.

One laboratory consists of 5 to 10 members. It is requested that not less than one fourth of research members are associated with industry. Contract: one year contract, renewable, maximum 8 years from October 1, 1999. Mid term review is scheduled in 2003 on laboratory activities. Application: Persons wishing to apply for these positions should send a letter of interest, a curriculum vitae, your previous research summary (less than 2000 words), research proposal within the framework described above (less than 2000 words), and the name, address, phone number, and e-mail address of three references, one of them should be a Japanese scientist, to: **Frontier Research General Affair Section, RIKEN, 2-1 Hirosawa, Wako, Saitaina, 351-0198 Japan, Fax: +81-48-465-8048, e-mail: FRS-SUB@postman.riken.go.jp.** For more information, visit our website at **www.riken.go.jp.** Deadline for application: June 30, 1999.

### EUROPEAN OPPORTUNITY



In der Fakultät für Elektrotechnik und Informationstechnik der TU München ist zum 01.04.2000 am Institut für Elektronik der

### Lehrstuhl für Medizinische Elektronik Universitätsprofessorin/-professor

der Bes.Gr. C4

zu besetzen. Das Forschungsgebiet des Lehrstuhls soll die Modellierung und Anwendung bioelektronischer Systeme in der Medizin sein. Gesucht wird daher eine Persönlichkeit mit ausgewiesenen wissenschaftlichen Erfolgen auf technischem und medizinischem Gebiet in einem oder mehreren der folgenden Arbeitsgebiete: Modellierung und experimentelle Untersuchung der Schnittstelle von biolgischen zu elektronischen Systemen in der Medizin, Einsatz bioelektronischer Systeme in Therapie, Monitoring und miniaturisierter Prothetik, z.B. Sensorik für invasive und nichtinvasive Verfahren zur biologischen Charakterisierung und Therapie von Tumoren; Zell-Silizium-Systeme; klinische Erprobung und Qualitätssicherung von bioelektronischen Systemen.

Interdisziplinäre Zusammenarbeit innerhalb der Fakultät und mit der Fakultät für Medizin wird angeboten und erwartet, z.B. in einschlägigen Sonderforschungsbereichen. Der Lehrstuhl soll als Nukleus für die medizintechnischen Aktivitäten der Fakultät und mit Nachbarfakultäten wirken.

In der Lehre sollen die Grundlagen der Biomedizinischen Technik und vertiefende Veranstaltungen aus dem Forschungsgebiet angeboten werden. Zudem wird eine Beteiligung am geplanten interfakultativen Masterstudiengang Medizintechnik erwartet.

Einstellungsvoraussetzungen sind ein abgeschlossenes Studium an einer wissenschaftlichen Hochschule, pädagogische Eignung, Promotion und Habilitätion oder der Nachweis gleichwertiger wissenschaftlicher Leistungen, die auch in einer Tätigkeit außerhalb des Hochschulbereichs erbracht sein können.

Die Bewerberin/der Bewerber darf das 52. Lebensjahr im Zeitpunkt der Ernennung noch nicht vollendet haben. Schwerbehinderte werden bei gleicher Eignung bevorzugt berücksichtigt. Die Technische Universität strebt eine Erhöhung des Anteiles von Frauen in Forschung und Lehre an und bittet deshalb Wissenschaftlerinnen nachdrücklich um ihre Bewerbung.

Bewerbungen sind mit den üblichen Unterlagen (Lebenslauf, Zeugnisse, Urkunden, Schriftverzeichnis einschl. ausgewählter Sonderdrucke) bis **30.7.1999** einzureichen beim

Dekan der Fakultät für Elektrotechnik und Informationstechnik Technische Universität München Arcisstraße 21. 80333 München

### **GLOBAL OPPORTUNITY**

QUARK BIOTECH INC. (QBI), an industry leader in the field of genomics, with laboratories in San Francisco, Chicago and Israel, is looking for innovative and enthusiastic individuals for its rapidly growing R&D facilities in ISRAEL. The Israel labs, currently employing over 100 scientists, are located near the Weizmann Institute of Science. Opportunities are now open for:

- Transgenic and/or knockout mice experts: Highly motivated individuals with proven experience in the field. Responsibilities include all aspects of the work, including the design and assembly of vectors, creation of genetically-altered mice and knowledge in basic phenotype analysis. Knowledge in embryonic development and histology is an advantage.
- Molecular and Cellular Biologists: Creative individuals with experience in the analysis of gene function in cultured cells. Proven knowledge of molecular biology techniques and tissue culture work is required. Experience in work with animals is advantageous.
- Bioinformatics Protein analysis: Specialists in the analysis and prediction of protein function based on sequence information, with knowledge in protein sequence analysis, domain prediction, and signal transduction and biochemical pathways. Qualifiers will assist the Company in the process of analyzing results of differential functional profiling and proteomics, in our search for key genes that will serve as targets for drug development.
- Bioinformatics Literature analysis: M.D./Ph.Ds, with creative minds who possess wide knowledge in molecular biology, signal transduction pathways and gene regulatory circuits. Qualifiers will serve a key role in analyzing pathology-related gene expression results, in the search of key genes for drug target development.

To qualify for any of the above positions, you should have a **Ph.D.** in biological science with more than one year's post-doc experience in the field.

Apply to QBI, POB 741 Weizmann Science Park, Nes Ziona 74106, ISRAEL. Email: qbi@qbi.co.il

### POSITIONS OPEN

### BIOINFORMATICS APPLICATIONS SPECIALIST HARVARD MEDICAL SCHOOL

The Departments of Cell Biology and Biochemistry and Molecular Pharmacology seeks a Bioinformatics Applications Specialist to work in collaboration with and assist faculty and students in the use of current and emerging software and databases for genomics, protein sequence analysis, and three-dimensional macromolecular structure. The position is for two years. Responsibilities include accessing and installing relevant software, setting up convenient access to significant databases, instructing faculty and students in use of these resources, and consulting with them on specific research projects. Examples include how to access and use genomics, how to visualize protein structures and examine their functional properties, how to analyze protein sequence similarities and to use the analysis for sensible homology modeling. The successful candidate will keep abreast of developments in relevant areas of bioinformatics, provide local instructional materials, and hold frequent one-on-one teaching and consulting sessions. Candidates should have a Ph.D. (or the equivalent) in molecular biology, structural biology, or a related field; experience with software operating in a variety of environments, especially Unix; programming experience; and excellent communication and teaching skills. Depending on the background and abilities of the candidate there may be an opportunity to participate in formal teaching of graduate students, to participate or collaborate in specific research programs, or to initiate and carryout software development projects.

Submit a curriculum vitae and three letters of reference to: Gerald Greenhouse, Harvard Medical School, 240 Longwood Avenue, C517, Boston, MA 02115-5730. Telephone: 617-432-0415; FAX: 617-432-0501; e-mail: ggreenhouse@hms. harvard.edu.

Harvard upholds a commitment to Affirmative Action and Equal Opportunity.

### COMPUTERCRAFT CORPORATION

SCIENTIFIC DATA ANALYST to help build and maintain GenBank, the National Institutes of Health (NIH) DNA Sequence DataBase, produced by the National Center for Biotechnology Information (NCBI) at NIH. This position is with ComputerCraft Corporation, working as a Contractor on location at NCBI. Responsibilities include review and analysis of DNA sequence submissions to GenBank from individual laboratories as well as sequencing centers, use of bioinformatics software to ensure database quality control, editing database records to conform to international sequence database guidelines, and extensive communication with scientists around the world regarding their sequence submissions. Excellent opportunity to use state-of-the-art computer systems and gain experience using bioinformatics tools developed by a leading computational biology research group. This is not a laboratory position, but extensive molecular biology laboratory experience is needed to understand the information in the database records and communicate with scientists. Ph.D. in molecular biology or related field required. Excellent oral and written communication skills required. Experience with computers and DNA sequence analysis software important. Mail/FAX résumé with cover letter and list of references to: ComputerCraft Corporation, 6701 Democracy Boulevard, Suite 401, Bethesda, MD 20817. FAX: 301-530-0634, Attn: Molecular Biology.

**POSTDOCTORAL POSITIONS** available for (1) recent Ph.D. in molecular biology or genetics to apply oligonucleotide arrays to DNA polymorphism detection and mRNA expression analysis in neuropsy-chiatric disease; (2) recent Ph.D. in neurobiology or related field to study microglial-induced neurotoxicity in cell culture and transgenic animals. Send curriculum vitae and names of three references to: Dr. Greer Murphy, Psychiatry Neuroscience, MSLS P-104, Stanford University School of Medicine, Stanford, CA 94305. E-mail: gmurphy@stanford. edu.

### POSITIONS OPEN

### NATIONAL INSTITUTES OF HEALTH NATIONAL CANCER INSTITUTE

Two POSTDOCTORAL POSITIONS are available in the Laboratory of Molecular Pharmacology, Division of Basic Sciences, NCI, NIH (website: http://www.nci.nih.gov/intra/lmp/lmp/page. htm). The first position is for a Molecular Modeler/ Computational Chemist trained in protein and chemical structure analysis. The research will focus on the structures of DNA topoisomerases and HIV-1 integrase. The second position is for a Molecular and Cellular Biologist with training in cell cycle checkpoints, DNA repair, or transduction pathways as they relate to anticancer drugs and DNA damage. Candidates with training in either mammalian or yeast systems will be considered. The research will focus on the cellular processing of topoisomerase cleavage complexes and on the downstream pathways elicited by replication-mediated DNA damage. The salary range, dependent on experience, is \$29,000 to \$39,500. U.S. citizens, permanent residents, or foreign nationals may apply by sending a curriculum vitae and list of references to: Dr. Yves Pommier, Building 37, Room 5D02, NIH, Bethesda, MD 20892 4255. FAX: 301-402-0752; e-mail: pommier@nih.gov. NIH is an Equal Opportunity Employer.

#### POSTDOCTORAL POSITION POSTTRANSCRIPTIONAL REGULATION OF GENE EXPRESSION IN BACTERIA Mount Sinai School of Medicine

Mount Sinai School of Medicine is a leader in medical research and education. A Postdoctoral position is available to study messenger RNA processing in *Bacillus subtilis* (see: *JBC* **273**:19542; *J. Bacteriol.* **180**: 5968). This ongoing NIH-funded project involves cloning genes that encode ribonucleases and other proteins involved in mRNA turnover; analysis of mRNA processing in ribonuclease knockout strains; identification of mRNA target sites for initiation of decay. A strong background in molecular biology with a demonstrated interest in bacterial systems is preferred.

For consideration, send curriculum vitae and a list of references to: Dr. David Bechhofer, Department of Biochemistry and Molecular Biology, Box 1020, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an Equal Opportunity Employer fostering diversity in the workplace.

### POSTDOCTORAL RESEARCH FELLOW THE ROCKEFELLER UNIVERSITY GENE STUDIES IN OBESITY

A Postdoctoral Fellow position is available for a talented and self-motivated individual to characterize and clone genes involved in obesity, in rat and mouse models. A strong background in molecular biology/genetics and biochemistry is required. Experience with various gene cloning methods, protein expression, purification and biochemistry is essential. Knowledge of neurobiology is preferred but not mandatory. Send or FAX curriculum vitae, research background and interest, and names of three references to: Dr. Sarah F. Leibowitz, The Rockefeller Univesity, 1230 York Avenue, New York, NY 10021. FAX: 212-327-8447.

### POSTDOCTORAL POSITION AVAILABLE

A Postdoctoral position is available at the Fox Chase Cancer Center to investigate the molecular mechanism of DNA repair. This position will study the structural analyses of protein-protein and protein-DNA interactions of repair factors. This study also involves cell biological analyses of *in vivo* DNA repair. Experience in structural, cell, or molecular biology required. Applicants should send a curriculum vitae to: Yoshihiro Matsumoto, Ph.D., Division of Medical Science, 7701 Burholme Avenue, Philadelphia, PA 19111. E-mail: ymatsumoto@fccc. edu. Equal Opportunity Employer.

### POSITIONS OPEN

**RESEARCH ASSOCIATE**. The Genomation Laboratory in the University of Washington's Electrical Engineering Department seeks a POSTDOC-TORATE to pursue interdisciplinary work in automation of DNA studies and processes in support of the Human Genome Project. This is an opportunity to contribute to an exciting project and learn about a rapidly growing interdisciplinary field. Applicants must have earned a Doctorate in physics, engineering, or closely related field by the date of appointment. Successful applicants will be expected to have or acquire knowledge in design and optimization of mechanical, electrical, and optical systems; controls and programming; molecular biology and procedures such as PCR, sequencing, screening. Microfluidics and heat transfer are also useful. The researcher would work closely with undergraduate and graduate students, research staff, and industrial partners in pursuit of automated fluid sample handling and preparation of submicroliter biochemical reactions. See website: http://rcs.ee.washington.edu/GNL for more details. Members of our group have had formal training in electrical engineering, physics/engineering physics, biochemistry, bioengineering, chemistry, and mechanical engineering. Send résumé and three references (names, addresses, telephone, e-mail) to: Dr. Deirdre Meldrum, Department of Electrical Engineering, University of Washington, Box 352500, Seattle, WA 98195-2500. The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITIONS LABORATORIES FOR REPRODUCTIVE BIOLOGY

Postdoctoral positions are available to study the molecular biology of various aspects of spermatogenesis, fertilization, implantation and androgen receptor function. Positions are supported by an NIH training grant, requiring U.S. ditzenship or permanent resident status. Submit a letter outlining your interests, with your curriculum vitae and the names of three references, to: The Laboratories for Reproductive Biology, Attn: Ron Knight, CB# 7500, 377A Medical Sciences Research Building, University of North Carolina School of Medicine, Chapel Hill, NC 27599-7500. The University of North Carolina at Chapel Hill is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority candidates are welcomed.

### POSTDOCTORAL FELLOW ENVIRONMENTAL NEUROTOXICOLOGY

Available immediately to study the neurochemical mechanisms by which environmental neurotoxicants, including lead and pesticides, disrupt cognitive functions using rodent models. Current approaches utilized in these studies include behavioral studies with microinjections, *in vivo* voltammetry and *in vivo* microdialysis. Candidates should have a background in behavior (particularly operant conditioning) and/or in neuropharmacology. Please submit a curriculum vitae, letter outlining research interests, and names of three potential references to: Dr. Deborah A Cory-Slechta, Chair, Department of Environmental Medicine, Box EHSC, University of Rochester Medical School, Rochester, NY 14642. The University of Rochester is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study molecular regulation of gastrointestinal mucosal inflammation and carcinogenesis, with a focus on host responses to *Helicobacter pylori*. Expertise in molecular biology required; immunology or microbiology background highly desirable. Send curriculum vitae and names of three references to: Dr. Keith T. Wilson, Department of Medicine, University of Maryland Medical Center, N3W62, 22 South Greene Street, Baltimore, MD 21201. FAX: 410-706-1573; e-mail: kwilson@umaryland.edu. Department of Biology

### EUROPEAN OPPORTUNITY

MONSANTO

Food · Health · Hope



# GENETICIST IMMUNOLOGIST

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

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

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

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

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

# TEAM LEADER / SEED QUALITY GROUP

Monsanto is searching for a senior scientist to serve as Team Leader for the Europe/Africa region of Monsanto's Seed Quality group.

Qualifications include a Ph.D. in biological sciences with an emphasis on molecular biology or molecular genetics (or MS with 5+ years of experience in molecular biology). Expertise required in Southern bot analysis, PCR, robotics and high-throughput automation. Experience with plant genetics, molecular marker assisted breeding, ELISA, micro-array technology, and GLP systems desired. Responsibilities include interfacing with other Monsanto Seed Quality groups; serve as a conduit with Monsanto Seed Company partners; distribute and support molecular and immunological assays; set-up and implement high-throughput systems for screening plant samples and reporting results.

This position will co-report to the Monsanto QC Biotechnology teams and the European regional seed group in Brussels. The successful candidate will have demonstrated the ability to work effectively in a team based environment and have excellent communication skills. This person will be expected to travel throughout the region (Europe/Africa/CIS/ME) to ensure all Freedom to Operate and Seed Quality requirements are fully understood and implemented.

> Contact: Please send your CV, by June 25, 1999 to Christine Abs, MONSANTO EUROPE SA., Rue Laid Burniat, 5, Parc Scientifique Fleming, B-1348 Louvain-La-Neuve, Belgium. E-mail: christine.abs@monsanto.com

### EUROPEAN OPPORTUNITIES



Universität Heidelberg

The ZENTRUM FÜR MOLEKULARE BIOLOGIE HEIDEL-BERG (ZMBH) at the University of Heidelberg (Germany) invites applications from young scientists for a five year

### **GROUP LEADER POSITION**

The successful candidate will have the ZMBH's support (personnel and financial) to establish an independent research group. It is expected that his/her research program will contribute to the ZMBH's research activities which include — molecular cellbiology (neurobiology) — molecular cell differentiation and development — molecular biology of infections —.

The holder of the position is expected to participate in the department's teaching program.

The ZMBH presently houses 15 independent research groups and offers excellent central facilities which include DNA and peptide synthesis, protein microsequencing, transgenic facility, biocomputing, and centralised administrative services.

Research and teaching programmes are summarized at the ZMBH's web-site (http://www.zmbh.uni-heidelberg.de).

Further details may be obtained from Prof. Dr. Dr. h.c. Konrad Beyreuther, telephone 49-6221-54 6850, telefax 49-6221-54 5507.

Applications should be sent to the Director of the ZMBH, Im Neuenheimer Feld 282, D-69120 Heidelberg by June 30,1999.

# Director

# The Sanger Centre, Hinxton, UK

The Governors of The Wellcome Trust wish to appoint a successor to John Sulston, as Director of the Sanger Centre on The Wellcome Trust Genome Campus at Hinxton near Cambridge. During its first seven years the Centre has established itself at the forefront of large scale sequencing. Alongside this it has set up strong infrastructure and leading groups in related areas of genome research such as mapping and informatics. The Centre occupies new purpose built premises on a rural campus a few miles from Cambridge.

The Sanger Centre derives its funds from a variety of sources, although the predominant funder is the Wellcome Trust, which has invested heavily in the infrastructure and scientific programmes of this very prestigious centre of excellence.

A major programme of genomic sequencing is likely to continue on site for some time to come. However, the Sanger Centre itself, and the Governors of the Trust, anticipate an increasing emphasis on the use of sequence in understanding biology and medicine. They wish therefore to identify a scientist of the highest international calibre, with interests in areas related to "post genomic science", with the stature and experience to direct a major enterprise and to develop its programme of work over the coming years.

The successful candidate will have both a major scientific profile, and the requisite strategic and managerial skills to enable them to direct, develop, and evolve the scientific base of the Sanger Centre.

Enquiries about this unique appointment should be made in the first instance to: The Director, The Wellcome Trust, 183 Euston Road, London NW1 2BE.



The Wellcome Trust is a Registered Charity, (No: 210183).

### N3dO SNOILISOd

### CEOCEVENTIC INFORMATION SCIENCE POSTDOCTORAL POSITION

.ubs.usm.isted.www participants. For more information see the website: research team that includes private and public sector of Landsat data, and coordinating the efforts of a expertise in information systems programming and organization is desirable. The position will be respon-sible for developing World Wide Web–based GIS ap-plications using COTS tools, managing a large archive plications using COTS tools, managing a large archive ecosystem analysis, or earth science. Demonstrated geography or a related discipline, with experience in application of GIS and remote sensing to forestry, Information Center; a NASA-funded data center. Can-didates must have a Ph.D. or equivalent experience in ment and implementation of the Tropical Rain Forest also provide support and leadership in the developrelated to land use and cover change. The position will sensing to support global change research projects tion in geographic information science and remote versity is seeking applicants for a Postdoctoral posithe Department of Geography at Michigan State Uni-The Basic Science and Remote Sensing Initiative of

Salary will be competitive and commensurate with qualifications and experience. Send curriculum viace and a letter of application to: David Skole, Department of Geography, Michigan State University, 218 Manly Miles Building, East Lansing, MI 48823-5243. Telephone: 517-432-7774; e-mail: skole@msu.edu. Review of applications begins June

7, 1999, and continues until the position is filled. Miduigan State University is an Affimative Action/Equal Opportunity Employer. Minority and women candidates are enconveged to apply. Disabled persons have the night to request and receive reasonable accommodation.

### HEVILH SCIENCES CENLER DNIAEBSILA OF FOUISVILLE POSTDOCTORAL POSITIONS

Applications are invited to compete for available positions to investigate molecular mechanisms of vertebrate development. Specific areas of investigation include: signal transduction, regulation of gene expression, embryotoxicity, and genetic determinants of normal and abnormal development. Strong backgeoind in molecular/molecular genetic methodologits, cell and/or developmental biology required. Applicants alould submit a curretulum vitae and names oratory of Molecular Craniofacial Development, Ditaci, 501 South Preston Street, University of Ditacifie is an Equal Employment Opportunity/Affinnative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL ASSOCIATE position is available at Fox Chase Carcer Corter to study the control of DNA synthesis, transcription and chromation secondy, and all the checkpoints that coordinate these processes throughout the mammalian cell cycle. This position will employ a wide mage of cell and nolecular biology techniques. We offer an excellent benefits package plus shared core facilities to provide a ams, Department of Basic Science, c/o Human atom, Department of Basic Science, c/o Human Burtholme Avenue, Philadelphia, PA 19111, Websifte: www.fccc.edu. Equal Opportunity Employer.

POSTDOCTORAL TRAINING in (1) 7 cell therapy of brain microtumor (Immunof. 70day 19:17, 1998) or (2) site-specific immune control in the brain (J. Comp. Neurol. 405:322, 1999). Experience in engineering rat T cell lines or neuropharmacology desirable. Give reason for your interest, related experience, and Fellowships for which you are eligible. Dates flexibles: Dr. L. Lampson, Harvard Institutes of Medicine, 77 Avenue Louis Pasteut, Boston, MA 02115.

### **bOSILIONS OPEN**

POSTDOCTORAL POSITION available to study RNA-protein interactions required for development in *Drosophila*. Applicants must have strong Doctoral training in invertebrate genetics and/or RNA or protein blochemistry and be highly motivated. Please send curriculum vitae and names of three references to: Biology, Princeton University, Princeton, Biology, Princeton University, Strinceton, Biology, is an Equal Opportunity/Affinnative Action Employer.

#### POSTDOCTORAL RESEARCH POSITIONS EXPERIMENTAL LYMPHOMAGENESIS NATIONAL INSTITUTES OF HEALTH National Institute of Allergy and Institute of Allergy and Infectious Diseases

The Laboratory of Immunopathology seeks two Postdoctoral Fellows (ALD,-D,V.M. and/or Fh.D.) with strong backgrounds in anatomic pathology and molecular pathology or molecular immunology with a particular interest in B-cell differentiation and lymphomagenesis. Our laboratory utilizes spontancous B disorders (c.g., marginal zong lymphonna) and disect disorders (c.g., marginal zong lymphonna) and disect disorders (c.g., marginal zong lymphonna) and disect disorders (c.g., marginal zong lymphonna) and of cypes, disorders (c.g., marginal zong lymphonna) and of cypes, disorders (c.g., marginal zong lymphons) and of cypes, determinants of lymphonna initiation and progression use of Ig V region sequences in specific tunnor types, inonal mutagenesis, (iii) examination of gene exprestional mutagenesis, (iii) examination of gene expression using cDMA microarrays. The positions are open immediately. Applicants must have less than five years of postdoctoral research experience. Statring salary of postdoctoral research experience. Statring salary immediately. Applicants must have less than five years of postdoctoral research experience. Statring salary in ranges from \$32,000,000 to \$47,000.00 commonsultinges from \$32,000.00 to \$47,000.00 commonsultional mutagenesis.

Send curriculum vitae and names of three references

Dr. Herbert C. Morse III Chief, Laboratory of Immunopathology Building 7, Room 304, MSC-0760 Berhesda, MD 20892-0760 E-mail: hml 6c@nih.gov

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION is available immediately for M.D.-Ph.D. or equivalent with an expertise in immunochemistry. Experience in antibody raphy, protein separation, and peptide sequencing is desirable. Candidate will study a variety of processes involving platelet immunology and coagulation inopportunities. Send résumé to: Mervyn A. Sahud, M.D., Director, Blood Research Institute, Sherrick Research Building, Level 2, 3023 Summit rick Research Building, Level 2, 3023 Summit Street, Oaldand, CA 94609.

POSTDOCTORAL POSITIONS available to study the function and regulation of homeobox transcription factors in reproductive tissues, activatda macrophages, and tumor cells. Opportunity to real in reproductive biology, immunology, developmental biology, and molecular biology. See website: www.bmb.mcd.uth.tmc.edu/repro/Wilkinson. html and website: www.mdacc.tmc.edv/immuno/PROGRAM/wilkinson.html. Send curinternet biology, University of Texas M. D. Anderson reality more forter, Box 180, 1515 Holcombe Boulevard, Houston, TX 77030. E-mail: mwilkins@ notes.mdacc.tmc.edu.

POSTDOCTORAL POSITION available to study signaling in neural cell migration and axon outgrowth, and to generate a mouse model of oligodendroglioma using embryonic stem cell rechnology and retroviral vector-mediated gene transfer. Visit our website: www.unc.edu/~srcfab/, Ph.D., appliann minst be U.S. cirizen Maness, Ph.D., Department of Biochemistry, University of North Carolina, Biochemistry, University of North Carolina, Chapfel Hill, NC 27599-7260.

# GLOBAL CHANGE RESEARCH/ECOLOGY POSTDOCTORAL POSITION

The Basic Science and Remote Sensing Initiative of the Department of Geography at Michigan State University is seeking applicants for a Postdoctoral position in systems ecology to support global change resaved projects related to land use and cover change and its influence on the global carbon cycle. Candithe fields of ecology, environmental science, earth systems science, or related field. The position will focus on the development of models and the analysis of the effects of deforestation and forest recovery in application to global change research but also including assessments of carbon emissions related to the IPPCC and Framework Convention on Climate IPPCC and Framework Convention and Includetion and Framework convention and thange. For more information act but also includtion and a first of carbon emissions related to the application to global change research but also including massessments of carbon emissions related to the application to global change research but also includthe the theorem and Framework convention and the and Framework convention and the effect. For many construction and the effect of the application to global change research but also including assessments of carbon emissions related to the application to global change research but also includthe the effect and the analysis research application to global change research but also includtion and the effect and the analysis of the the application to global change research but also includtion with the analysis and the analysis and the analysis application to global change research but also includtion and the analysis and the analysis and the application and the analysis application to global change research and application and the application to global change and application and the application and application and the application and the application application and the application application

Salary will be competitive and commensurate with qualifications and experience. Send curriculum virae and a letter of application to: David Skole, Department of Geography, Michigan State University, MI askole@msu.edu. Keview of applications begins, MI skole@msu.edu. Keview of applications begins June skole@msu.edu. Mines until the position is filled.

7, 1999, and continues until the position is filled. Midingan State University is an Affinantive Action/Equal Opportunity Employer. Minority and women candidates are encouraged to apply. Disabled persons have the right to request and receive reasonable accommodation.

### DKUG ABUSE POSTDOCTORAL RESEARCH IN

•səңџюніш риv нәшөлі шөлf snoithoil Opportunity Employer and encourages applications is 550-1454; e-mail: cschindl@heinx.nih.gov. NIDA be addressed to: Dr. Schindler, Telephone: 410-W. Schindler, Ph.D., Preclinical Pharmacology, NIDA/IRP, 5500 Nathan Shock Drive, Balti-more, MD 21224, Questions about the position may lum vitae and names of three references to: Charles with experience. Applicants should submit a curricuresearch experience is highly desirable. The salary range is \$27,500 to \$42,000 and is commensurate behavioral pharmacology or related area and primate date must have a Ph.D. or equivalent; a background in (2) potential cardiovascular roxicity. Opportunities for research with rodents is also available. The candiity in psychomotor stimulant self-administration and rential treatment medications for (1) behavioral activpreclinical studies in primates focused on testing po-Program in Baltimore. The research program involves The National Institute on Drug Abuse (NIDA) has a Postdoctoral position available in the Preclinical Pharmacology Section of the Intramural Research

POSTDOCTORAL POSITIONS are available for individuals increated in investigating the role of leukocyre adhesion receptors in inflammation using gene-targeted mice. Present studies include investigating (1) mechanisms regulating neurophil apoproais; (2) leukocyte functions. Strong background in nolecular biology/tef Incrions. Strong background in rolecular biology/cell biology or pathology is desited. Experience in investigating signaling mechasiced. Experience in investigating signaling mechainerits or small animal experimentation a plus. Publi-Send curriculum vitae and names of three references nisms or small animal experimentation a plus. Publifaratology, Brigham and Women's Hospital and Pathology, Brigham and Women's Hospital and Pathology, Brigham and Women's Hospital and Boson 404, Boston, MA 02115. FAX: 617-732-3933.

POSTDOCTORAL POSITION for an individual who will perform research in immunology/biochemistry/cancer therapies, especially in regard to aningen processing and presentation. Starting salary will be at least \$24,000. Send curriculum virae and the Dates of three references to: Joyce Solheim, Ph.D., Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska Medical Center, Omaha, WE 088005 Mebraska Medical Center, Omaha, WE 68198-6805.





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### EUROPEAN OPPORTUNITY



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# Postdoc Positions for Physicists / Crystallographers

(one to two years)

The tasks at the new SINQ spallation neutron source include:

Position A (reference code 3303-01): Responsibility for the operation and upgrade of the reflectometer TOPSI. The candidate is expected to carry out his/her own research in the field of magnetic multilayers and to work in the neutron reflectometry programme. Production facilities for multilayers and characterisation methods like X-ray scattering and torque magnetometry are available.

Position B (reference code 3303-02): Responsibility for the neutron optical bench NOB. This position is part of the TMR European Network on 'Perfect Crystal Neutron Optics'. The candidate is expected to collaborate with the major neutron scattering centers in Europe in the field of ultra-small angle neutron scattering and fundamental physics (interferometry).

Position C (reference code 3301): Co-responsibility for the operation and further development of the single crystal diffractometer TriCS. Development and implementation of the data acquisition and detector software for TriCS. The candidate is expected to carry out his/her own research in the field of neutron scattering.

These positions are suitable for postdoctoral scientists who have shown an aptitude for original research and have experience in the respective fields. Information about SINQ is available at http://www.psi.ch/sinq

Further information may be obtained from Dr. P. Böni, phone +41 56 310 2518, e-mail: Boni@psi.ch (positions A and B) and Dr. P. Fischer, phone +41 56 310 2094, e-mail: Peter.Fischer@psi.ch (Position C).

Please send your detailed application to:

PAUL SCHERRER INSTITUTE, Personnel Division, Reference code 3303-01/02 or 3301, CH-5232 Villigen PSI, Switzerland





Department of Biochemistry and Molecular Biology

# **Postdoctoral Positions**

Multidisciplinary department seeks motivated individuals to fill several NIH-funded positions in the following areas.

### Eukaryotic Gene Regulation

Control of DNA Damage- and Cell cycle-regulated genes by TBP-associated factors and chromatin in yeast. Contact: Joseph Reese jcr8@psu.edu

### Prokarvotic Gene Regulation

Post-transcriptional regulatory mechanisms mediated by RNA structure and RNA-binding proteins. **Contact: Paul Babitzke pxb28@psu.edu** 

### **RNA Virus Genome Replication**

Enzymology of poliovirus and hepatitis C virus replication; structure-function studies of viral polymerases and accessory proteins. Contact: Craig Cameron cec9@psu.edu

### Metalloenzyme Biochemistry

Biophysical/mechanistic studies of redox metalloenzymes and metallocofactor assembly. Contact: J. Martin Bollinger jmb21@psu.edu

Applicants should send a CV, description of research interests and the names and addresses of three references to those listed above at: The Dept. of Biochemistry and Molecular Biology, Pennsylvania State University, University Park PA 16802. More information can be obtained at: http:// www.bmb.psu.edu

### POSITIONS OPEN

#### POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY, ALLERGY, AND IMMUNOLOGY

Positions are available in Children's Hospital Research Foundation, a leading state-of-the-art facility associated with the University of Cincinnati College of Medicine. Positions in the laboratories of Dr. Marc E. Rothenberg on molecular and cellular analysis of leukocytes, eosinophils, and chemokines in allergic disease; Dr. Gurjit K. Khurana-Hershey on atopy susceptibility genes, cytokine receptors, and signaling pathways; and Dr. Anon Srikiatkhachorn on T cell activation and differentiation in viral infection. Successful applicants should have a Ph.D. and/or M.D. and a background in immunology, molecular biology, or signal transduction. Send curriculum vitae to: Marc Rothenberg, M.D., Ph.D., Division of Pulmonary Medicine, Allergy and Immunology, Children's Hospital Medical Center, 3333 Burnet Avenue, Cincinnati, OH 45229-3030. E-mail: rothm0@chmcc.org; FAX: 513-636-3310. Affirmative Action/Equal Opportunity Institution. Women and minorities encouraged to apply.

### POSTDOCTORAL POSITION IN NEUROSCIENCE

Participate in a project aimed at understanding mechanisms and integrative synaptic properties of local cortical circuits. We are studying the connectivity among excitatory and inhibitory neurons, mechanisms of transmitter release at specific cortical synapses, and their postsynaptic receptors. In these experiments we use mainly patch-clamp recordings of synaptic currents in visualized brain slices (Galarreta and Hestrin, Nature Neuroscience 1:587–594, 1998). Experience with electrophysiological techniques is required. Send curriculum vitae and names of two references to: Shaul Hestrin, Ph.D., Department of Anatomy and Neurobiology, University of Tennessee, Memphis, 855 Monroe Avenue, Memphis, TN 38163. E-mail: shaul@nb.utmen.edu.

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

Two **POSTDOCTORAL POSITIONS** available to study the roles of mammalian BMP-1/Tolloidrelated proteases (and related gene products) in morphogenetic, homeostatic, and pathological processes (*Science* **271**:360; *J. Biol. Chem.* **273**:27511; *Development* **126**:2631). Molecular, biochemical, and knockout mouse technologies are employed in the context of state-of-the-art facilities on a premier biological sciences research campus. Persons experienced and skilled in any of the above fields are encouraged to apply. Please send curriculum vitae and the names of three references to: Dr. Daniel S. Greenspan, Department of Pathology and Laboratory Medicine, University of Wisconsin, **1300** University Avenue, Madison, WI **53706**. FAX: 608-262-6691; e-mail: dsgreens@facstaff.wisc.edu.

**POSTDOCTORAL POSITION** available immediately, to work on spectroscopic and kinetics studies of metalloenzymes; and/or molecular biology and protein engineering of metalloenzymes. Ph.D. in chemistry, biochemistry, or related field with experience in protein biochemistry or molecular biology required. Send curriculum vitae and three letters of recommendation to: **Prof. David Dooley, Department of Chemistry and Biochemistry, Montana State University, Bozeman, MT 59717.** *ADA/ Equal Opportunity/Affirmative Action/Veterans Preference.* 

Several **POSTDOCTORAL POSITIONS** available to study relationship between telomerase and cancer drug sensitivity, and growth factor-induced drug resistance. Background in molecular biology is essential, experience in gene expression, signal transduction, antisense technology, and apoptosis is preferred. Send curriculum vitae and names of three references to: Dr. Jessie Au, Ohio State University, 496 West 12th Avenue, Columbus, OH 43210. FAX: 614-688-3223; e-mail: au.1@osu.edu.

### POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS ALBERT EINSTEIN COLLEGE OF MEDICINE

The "Mechanisms of Cardiovascular Disease" Training Grant offers NIH-funded Postdoctoral positions to candidates with Ph.D's and/or M.D's desiring two or three years of laboratory-based training. Participating laboratories have programs in molecular regulators of angiogenesis (J. A. Ware); cardiomyo-cyte growth and cell death (R. N. Kitsis); gap junctions in cardiovascular tissues (D. Spray); transcription factors in cardiac development (T. R. Evans, H. Nguyen); TGF-B in vascular growth (E. Bottinger); diabetic cardiomyopathy (M. Charron); mechanisms of cell migration (J. Condeelis); anti-myosin antibodies in myocarditis (B. Diamond); cholesterol in membrane transport (M. Kielian); genetics of cardiovascular abnormalities (B. Morrow, R. Kucherlapati, A. Skoutchi); caveolae in cardiovascular tissues (M. Lisanti); ion channel regulation (T. McDonald); monocyte-endothelial interaction (J. Berman); prostaglandin transport (V. Schuster); adhesion molecules (P. Stanley); T. anzi myocarditis (H. Tanowitz); and cell cycle control (R. Pestell, L. Zhu)

Candidates must be U.S. citizens or permanent residents. To apply, please send a curriculum vitae, names of three references, and a statement of research interests 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.

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### POSTDOCTORAL POSITION LARGE-SCALE CHROMATIN STRUCTURE, DYNAMICS, AND FUNCTION

Position available to study higher-order chromatin folding of specific gene loci and chromosome regions using a combination of light and electron microscopy and molecular and cell biological methodologies. This includes a novel technique for in vivo localization of specific DNA sequences. Potential projects include probing general structural motifs and mechanisms underlying interphase and mitotic chromosome condensation and the relationship of large-scale chromatin structure to transcriptional regulation. Experience in biological imaging, Drosophila molecular genetics, somatic cell genetics, or recombinant DNA technology, particularly cloning large DNA fragments, would be helpful but is not crucial. Send curriculum vitae and names of three references to: Andrew Belmont, Department of Cell and Structural Biology, University of Illinois, Urbana, B107 CLSL, 601 South Goodwin Avenue, Urbana, IL 61801. FAX: 217-244-1648; e-mail: asbel@uiuc.edu.

Two POSTDOCTORAL POSITIONS available immediately to examine brainstem-diencephalic circuitry controlling unit/EEG activity of the septum/ hippocampus and its functional significance (see: Vertes and Kocsis, Neuroscience 81:893, 1997). One position for Neurophysiologist with experience with extracellular unit recording in anesthetized and freely moving rats and the other for a Neuroanatomist experienced with various neuroanatomical tracing techniques. Contact: Dr. Robert P. Vertes, Center for Complex Systems and Brain Sciences, Florida Atlantic University, Boca Raton, FL 33431. Telephone: 561-297-2362; FAX: 561-297-2363; email: vertes@walt.ccs.fau.edu.

A **POSTDOCTORAL POSITION** available starting September 1, 1999, for strongly motivated individuals to study various aspects of the molecular and cell biology of selectins and their ligands. Significant experience in molecular biology and in the murine system strongly desired. Send complete curriculum vitae, names, telephone, and e-mail of three references to: Dr. Geoffrey Kansas, Department of Micro-Immunology, Northwestern Medical School, 303 East Chicago Avenue, Chicago, IL 60611. E-mail: gsk@nwu.edu.

# POSITIONS OPEN

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

The M. D. Anderson Cancer Center Science Park-Research Division has outstanding opportunities at our research facility in Smithville, Texas for POST-DOCTORAL TRAINEES. Postdoctoral Training positions, through an NCI-sponsored training program in molecular and cellular mechanisms of carcinogenesis, are available immediately. Research programs include DNA repair and mutagenesis, genetic susceptibility, role of oncogenes and/or tumor suppressor genes in multistage carcinogenesis, normal and tumor cell cycle regulation and differentiation, carcinogen metabolism and adduct formation, retrovirology, chemoprevention, and nutrition in cancer. For detailed descriptions of faculty research programs, visit our website: http://sciencepark.mdanderson.org. Applicants unust be U.S. citizens or permanent residents with a Ph.D., M.D., or D.V.M. degree. Contact: Dr. Ellen Richie, Professor, University of Texas Science Park, P.O. Box 389, Smithville, TX 78957. Email: erichie@odin.mdacc.tmc.edu; Telephone: 512-237-9425. Equal Opportunity/Affirmative Action Employer.

### POSTDOCTORAL POSITIONS (2) Molecular Modeling/Computational Chemistry of Carcinogen-DNA Interactions

We have computational and experimental evidence that the dominant adduct of one particularly potent mutagen/carcinogen (benzo[a]pyrene) adopts multiple conformations when covalently bound to DNA. Furthermore, different conformations induce different mutations, explaining how potent mutagens/carcinogens induce such a complex array of mutations (e.g., G->T, A, C, and frameshifts). Computational chemical approaches will be used to investigate which conformations yield which mutations and why. A background in computational chemistry of DNA or proteins is desired. Send curriculum vitae and reference letters to: Edward L. Loechler, Department of Biology, Boston University, 5 Cummington Street, Boston, MA 02215.

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### POSTDOCTORAL/RESEARCH ASSISTANT POSITIONS

Two Postdoctoral/Research Assistant positions are immediately available to work on NIH-funded projects: (1) to examine the role of chromatin in transcription and DNA replication during mouse embryonic development, and (2) to examine regulation of neural/glial differentiation and cancer. See: EMBO 12:1131-1140; Mol. Cell. Biol. 14:4258-4268; EMBO J. 16:1721-1731; J. Biol. Chem. 274:8002-8011. Experience in working with chromatin structure and/or construction and analysis of transgenic mice are required. Please send curriculum vitae and names and addresses of three referees to: Sadhan Majumder, University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Box 316, Houston, TX 77030. Telephone: 713-792-8920; FAX: 713-792-6054; e-mail: majumder@ mdanderson.org. UTMDACC is an Equal Employment Opportunity Employer. Women and minorities are encouraged to apply. Smoke-free environment.

**POSTDOCTORAL/TECHNICIAN POSI-TIONS** in viral hepatitis available immediately to establish a new laboratory to investigate (1) persistence of hepatitis C virus by developing *in sin* techniques for detection in liver biopsies and other samples and (2) novel assays to detect variants of hepatitis B virus. Experience in molecular techniques (*in sin* hybridization, subcloning, transfection) required. The research also involves analyses of quasispecies, phylogenetic data, and use of an automated sequencer. Send curriculum vitae and three letters of reference to: Dr. E. Fagan, Section of Hepatology, Rush Medical Center, 1725 West Harrison Street, Suite 206, Chicago, IL 60612. E-mail: efagan@rush.edu. Equal Opportunity Employer/Minorities/Fenales/Disabled/Veterans.

### POSITIONS OPEN

POSTDOCTORAL FELLOWS. Catalytic antibodies. Two molecular biology/biochemistry posi-tions are available for recent Ph.D's in NIH-funded projects to study catalytic antibodies within a highly interactive team. Projects include phage library construction, catalyst selection, enzymological and immunological characterization, and synthesis of peptide substrates/inhibitors. Background available at website: http://dpalm.med.uth.tmc.edu/faculty/ bios/paul/centers/index.html. Good communication, organizational skills, improvisation abilities, willingness to carry out tedious procedures, inquisitive outlook, and strong background in one or more relevant areas are essential. Salary is highly competitive, dependent in part on experience and training. Contact: Dr. Sudhir Paul, Professor and Director, Chenical Immunology Center, Department of Pathology, University of Texas-Houston Medical School, 6431 Fannin, Houston, TX 77030. Email: paul@casper.med.uth.tmc.edu. UTHSCH is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

### POSTDOCTORAL POSITIONS AVAILABLE

Two (2) Postdoctoral positions for qualified individuals are available immediately to study molecular mechanisms of brain injury and invasion as applicable to the central nervous system regeneration, trauma, and brain tumors areas. Candidates must possess previous experience in cell and molecular biology, a strong motivation, and interest in biological research. Candidates should possess a Ph.D. in molecular biology. Salary is highly competitive in state-of-the-art facilities and positions are intended to be for at least two years, with possibility of an extension depending on productivity record. If interested, please contact and/or send résumé to: Dario Marchetti, Ph.D., The University of Texas-Houston, Health Science Center, Medical School, Department of Neurosurgery, MSB 7.136, Houston, TX 77030. Tele-phone: 713-500-6137; FAX: 713-500-7787; email: dmarchet@heart.med.uth.tmc.edu.

**POSTDOCTORAL POSITION**. Postdoctoral position is immediately available to study the molecular basis of T cell activation. The projects involve rational drug design in developing molecules for controlling activation of pathogenic T cells. *Applicants for this multidisciplinary program must be U.S. citizens or permanent residents* and should have an M.D. or Ph.D. degree. A strong background in biochemistry, molecular biology, and structural immunology is essential. This position has guaranteed two- to three-year funding at \$40,688 annually. Interested applicants should send a curriculum vitae, a statement of career goals, and names of three references to: Eva Nichaus, Portland VA Medical Center, Neuroimmunology Research R&D-31, 3710 S.W. U.S. Veterans Hospital Road, Portland, OR 97201. *An Equal Opportunity/Affimative Action Employer*.

### POSTDOCTORAL POSITION RETROVIRUS RESEARCH

To sudy HTLV-1 leukemogenesis, HIV assembly, or HIV entry (*Blood* 90:783, 1997; *J. Virol.* 72:4458, 5271, 1998; 73:3497, 1999). Experience in molecular biology required, as well as cell biology or biochemistry. Send cover letter, curriculum vitae, and reference letters to: Lee Ratner, M.D., Ph.D., Washington University, Box 8069, 660 South Euclid, St. Louis, MO 63110. Telephone: 314-362-8836; FAX: 314-747-2797; e-mail: Iratner@ imgate.wustl.edu.

**POSTDOCTORAL POSITION**. Available to study the role of neurofilament proteins in axon development (website: www.albany.edu/~bgs86). Experience in primary cell culture and digital video microscopy preferred. Send a letter of interest, curriculum vitae, and three letters of reference to: Ben G. Szaro, Department of Biological Sciences, University at Albany, State University of New York, 1400 Washington Avenue, Albany, NY 12222.

The Research Foundation of SUNY is an Equal Opportunity/Affirmative Action Employer.

### POSITIONS OPEN

Applications are invited for immediate **POST-DOCTORAL POSITION** to study molecular aspects of prostate cancer. Excellent opportunity for a candidate with a Ph.D. or M.D. Experience in molecular/cellular biology with emphasis on signal transduction, cell cycle, or apoptotic pathways preferred. Send curriculum vitae, names of three references, and date of joining the position to: Dr. M. Vijay Kumar, Director of Research, Section of Urology, BA-8415, 15th Street, Medical College of Georgia, Augusta, GA 30912. E-mail: vkumar@mail.mcg. edu; FAX: 706-721-2548.

**POSTDOCTORAL POSITION** available July 1, 1999, to a Biochemist or Cell Biologist to study the factors that regulate glutathione metabolism in normal and cancerous breast tissue. Experience in cell culture required and knowledge of HPLC, MS, NMR helpful. Send curriculum vitae with the names and addresses of three references to: Michael P. Gamesik, Ph.D., Department of Medicine, Duke University Medical Center, Box 3843, Durham, NC 27710. E-mail: michael.gamcsik@duke.edu. Duke University is an Equal Opportunity/Affirmative Action Employer.

### CONFERENCE

### NEW GORDON RESEARCH CONFERENCE

Non-antibiotic properties of tetracyclines and other antibiotics. Andover, New Hampshire, July 11–16, 1999. Effects of TCs/Abx on MMPs, inflammation, metastases, gene expression, cytokines, proteases. Contact: **R. Greenwald, e-mail: rgreen@lij.edu** or Gordon Research Conference website: grc.uri.edu.

### **GLOBAL OPPORTUNITIES**

#### THE SOUTH AFRICAN NATIONAL BIOINFORMATICS INSTITUTE HAS TWO POSTDOCTORAL POSITIONS Available for Highly Motivated Researchers

Postdoctoral position in functional genomics. A U.S. Department of Energy Postdoctoral Research position is available at South African National Bioinformatics Institute (SANBI) to support the development of a novel method for functional assignment using structural data and statistical analyses. The successful candidate will be knowledgeable of protein structural features, motifs, families, and their comparison, in addition to genetic sequence analysis, and the currently available sequence databases. Programming skills are essential; experience in Perl, C, Fortran, HTML/CGI, and Unix beneficial.

Postdoctoral position in genome variation. A National Innovation Fund post is available to develop a system for analysis of variation of expressed human genes. Particular interest lies in the areas of relevance to South African populations. The study will be performed in phases: (1) Further development of *in silico* screening for coding sequence tag polymorphisms. (2) Development of a dataset of variant positions in disease candidate genes. (3) Integration with an analysis of variation of specific loci within South African populations. Demonstrated computer literacy, an ability to drive the project independently, an understanding of population genetics and/or the analysis of variation, and experience in sequence analysis and software development are required.

Candidates are requested to submit a full curriculum vitae and contact information for two referees to: Winston Hide, South African National Bioinformatics Institute, University of the Western Cape, Private Bag X17, Bellville 7535, South Africa. E-mail: winhide@sanbi.ac.za.

Closing date for assessment: July 1, 1999.

Remuneration: According to skills, but highly competitive with international levels.

Further information available at website: http://www.sanbi.ac.za/vacancies.html.

### POSITIONS OPEN

### POSTDOCTORAL ASSOCIATE

Postdoctoral positions are available in anticancer drug discover to study the influence of acute and chronic drug treatment on stress response gene expression in cellular systems. Background and/or interest in applying molecular techniques to determine drug mechanisms leading to novel drug development will be beneficial. Further information is available at website: http://www.fccc.edu. Send curriculum vitae and names of three references to: Dr. Kenneth D. Tew, c/o Human Resources, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

**POSTDOCTORAL POSITIONS** are open to study how bacterial virulence factors modulate P2Z receptor mediated macrophage cell death and mammalian apoptotic processes. Should have experience in macrophage handling and cell biology of apoptosis. Send curriculum vitae and names of three references to: Dr. A. M. Chakrabarty, University of Illinois at Chicago, Department of Microbiology/Immunology, 835 South Wolcott (M/C 790), Chicago, IL 60612-7344. UIC is an Affinative Action/Equal Opportunity Employer.

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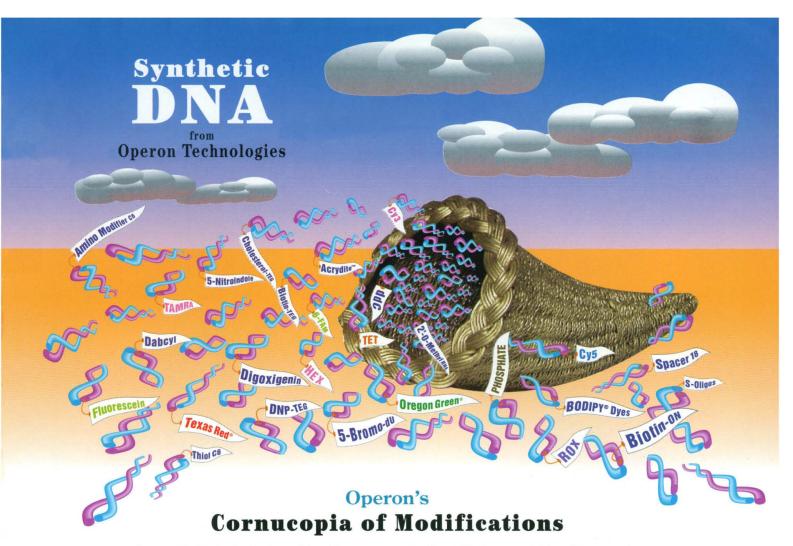


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1.0 µmole	\$2.40	\$20.00	PAGE	from \$45	Cy5 Digoxigenin	\$70 \$125	ROX TAMRA	\$125 \$125
(Large	er scales availabl	e)	(Many scale	s available)	Fluorescein	\$50	Texas Red®	\$125



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