

NASA
RESEARCH OPPORTUNITIES IN SPACE LIFE SCIENCES:
GRAVITATIONAL BIOLOGY AND ECOLOGY,
AND
BIOMEDICAL RESEARCH AND COUNTERMEASURES
PROGRAMS

The National Aeronautics and Space Administration (NASA) announces a solicitation titled, "Research Opportunities in Space Life Sciences: Gravitational Biology and Ecology, and Biomedical Research and Countermeasures Programs" (NRA 98-HEDS-02).

Research Emphases include:

- Developmental Biology
- Evolutionary Biology
- Organismal and Comparative Biology
- Cellular and Molecular Biology
- Gravitational Ecology
- Physiology and Behavioral Research
- Biomedical Countermeasures
- Operational and Clinical Research
- Environmental Health
- Space Radiation Health

This solicitation will be open for the period of June 1 through October 1, 1998.

Proposals may be for ground-based research investigations or for space-flight experiments designed for the Shuttle middeck or for the earliest phase of utilization of the International Space Station.

The solicitation will be available via the Internet at:

<http://peer1.idi.usra.edu>

(Click on **NRA** or "Research Announcements.") Paper copies of this Announcement are also available by calling the voicemail service at (202) 358-4180. Please leave your full name and address, including zip code, and telephone number with area code, along with the name and number of the NRA you are requesting.

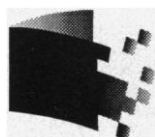
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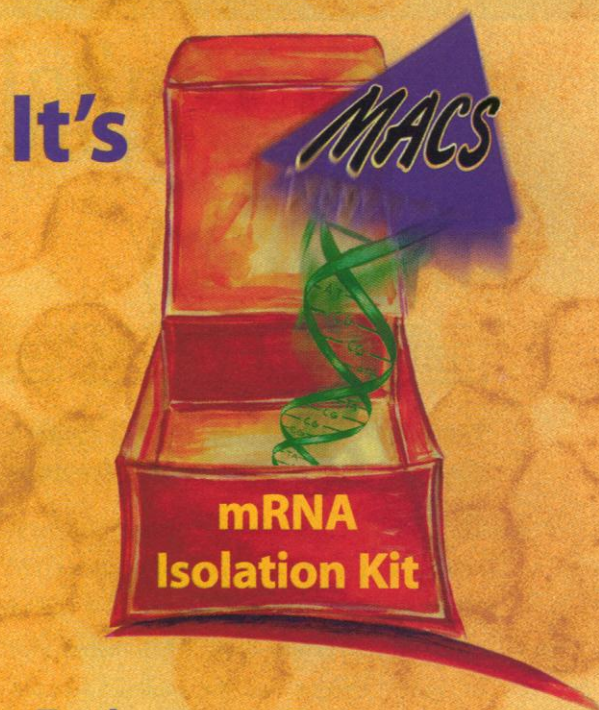
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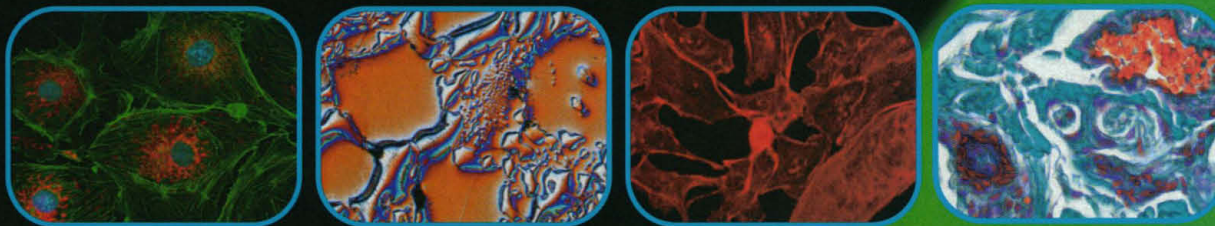
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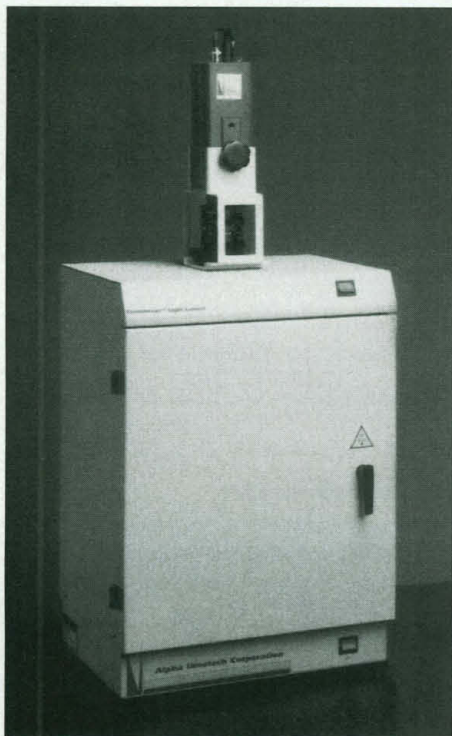
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BookWhere 2000 is a software program for searching databases and library catalogs via the Internet. The program runs under Windows 95 and Windows NT. It can search hundreds of library collections and bibliographic databases including PubMed, Ovid, SilverPlatter, the Library of Congress, and library card catalogs worldwide. **Research Information Systems.** For information call 760-438-5526 or circle 145 on the Reader Service Card.

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The Hunt-A-Gene System is for searching for unknown genes, especially if there are no probes or antibodies available. It is based on the principle of differential hybridization. A cDNA library from an induced tissue or cell line is prepared, and is screened in duplicate

(continued on page 1771)

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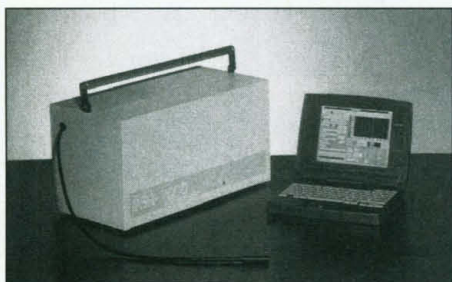


(continued from page 1769)

with control- and induced-mRNA probes. A comparison of the two clones hybridized with both probes identifies new, amplified, or down-regulated genes from the induced library. The system provides rapid identification of the new genes without false-positive results. **Geno Technology.** For information call 314-534-0075 or circle 146 on the Reader Service Card.

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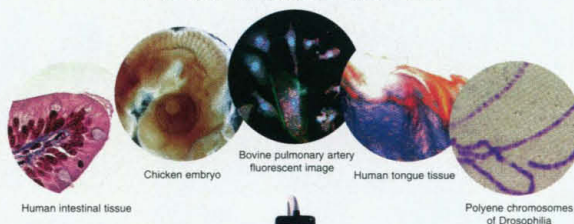


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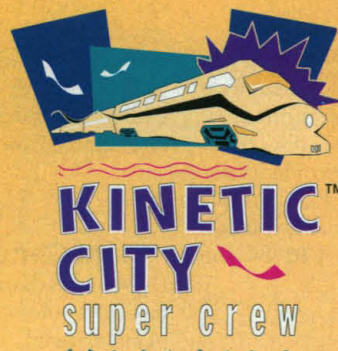
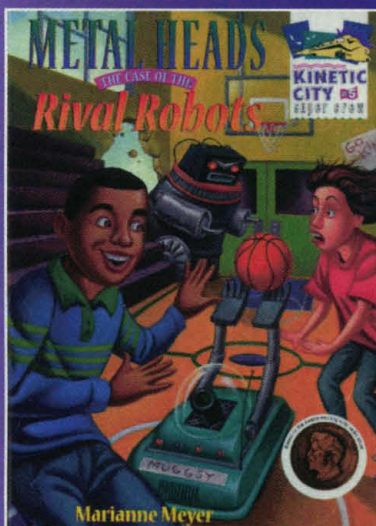
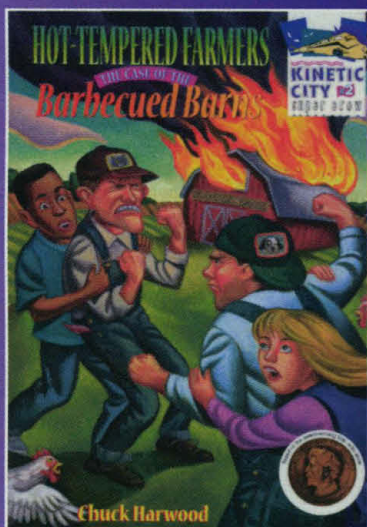
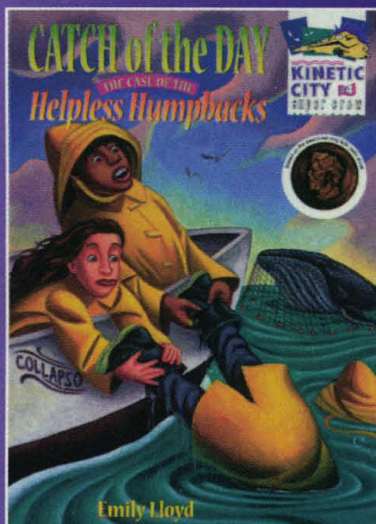


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PLANT DEVELOPMENTAL BIOLOGIST

Applications are encouraged from individuals whose work falls under the broad rubric of plant developmental biology. The individuals selected for both positions must develop strong, extramurally funded research programs. Qualified applicants must have a comprehensive understanding of, and demonstrated research creativity and productivity in, plant biology using contemporary approaches.

The individuals would have the opportunity to interface with a world-class effort in plant DNA sequencing, gene expression technology, and gene disruption mutants by being part of the University of Delaware Center for Agricultural Biotechnology, a joint venture with DuPont and other biotechnology firms. A strong commitment to advising and teaching undergraduate and graduate students is important. Specific teaching obligations will be arranged according to the individuals' backgrounds and University needs.

Qualifications: Ph.D. in plant biology or a related field with postdoctoral or equivalent experience. The individuals must be able to communicate effectively with academic, government, and industry colleagues and with students.

Rank and salary: ASSISTANT PROFESSOR; nine-month appointment; tenure-track position; salary commensurate with training and experience. The University provides an excellent, comprehensive benefits package. Appointments will be in the Center for Agricultural Biotechnology and Department of Plant and Soil Sciences of the College of Agricultural and Natural Resources. Plant and Soil Sciences website: <http://bluehen.ags.udel.edu/homepage/plsc/plschome.html>.

Send a letter of application, curriculum vitae, the names of three scientists willing to write informative letters of recommendation, and a description of current and future research interests to: Dr. Bertrand Lemieux, Search Committee Chair, Department of Plant and Soil Sciences, University of Delaware, Newark, DE 19717-1303. Closing date is September 30, 1998, or until a suitable candidate is identified.

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

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Applicants should submit, by September 1, 1998, a curriculum vitae, a statement of research and teaching interests, representative publications, and names and addresses of three references to: Professor Stephen Palumbi, Department of Organismic and Evolutionary Biology, Harvard University, 16 Divinity Avenue, Cambridge, MA 02138.

Further information about the Department is available at the website: <http://www.oeb.harvard.edu>.

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Please send curriculum vitae no later than July 15, 1998, to:

Thomas J. Coates, Ph.D.

Chair, Search Committee

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To apply, submit: 1) letter of intent outlining special interest in position, overall related qualifications, experience, and career goals; 2) curriculum vitae; 3) a summary of research and teaching goals; and 4) names, titles, and addresses of three references to: **Dr. Charles G. Plopper, Chairperson, Department of Anatomy, Physiology and Cell Biology, School of Veterinary Medicine, University of California, Davis, One Shields Avenue, Davis, CA 95616**. Applications accepted through July 15, 1998, or until a candidate is identified.

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The Trustees of Associated Universities, Inc. (AUI), a not-for-profit corporation that has managed major federally supported national research facilities at the forefront of science for more than 50 years, seek candidates for President. The President is the organization's Chief Executive Officer.

The National Science Foundation (NSF) has recently approved a three-year extension of the cooperative agreement under which AUI manages the National Radio Astronomy Observatory (NRAO), whose facilities include the Very Large Array in New Mexico, the Very Long Baseline Array with stations at ten U.S. locations, and the Green Bank Telescope under construction in West Virginia. The NSF has also just awarded AUI/NRAO funds for the design and development phase of a major new initiative, the large Millimeter Array, which is expected to be sited in Chile and to involve international partners.

Candidates for President should have a record of accomplishments and recognized stature in physical sciences, demonstrated ability and experience in senior-level management of scientific research enterprises and projects, and familiarity with federal R&D agencies. He or she will have the opportunity to guide and oversee ongoing and new initiatives at NRAO and elsewhere with a team based at Corporate Headquarters in Washington, D.C. Starting date and salary are negotiable. *Nominations of and applications from women and minority candidates are especially welcome.* The search committee will begin considering applications July 10, 1998, and will accept applications until the position is filled.

Inquiries, nominations, and applications should be sent to:

Dr. Claude R. Canizares
Search Committee Chair
Associated Universities, Inc.
1400 Sixteenth Street NW, Suite 730
Washington, DC 20036-2217

BURROUGHS WELLCOME FUND

Career Awards provide U.S. and Canadian scientists with \$500,000 to support advanced postdoctoral training and initial faculty appointment.

The application deadline for 1999 Career Awards is October 1, 1998.

BWF is an independent private foundation established 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

BIOMEDICAL
RESEARCH FUNDING

CAREER AWARDS IN THE BIOMEDICAL SCIENCES

These competitive awards, open to U.S. and Canadian scientists, provide approximately \$500,000 in bridging support for the advanced postdoctoral years and the first three years of faculty service. Recipients may spend part of the award period at an institution in the United Kingdom or the Republic of Ireland. At least 23 awards will be made, with some awards targeted specifically at researchers in reproductive science.

Congratulations to BWF's Newest Career Award Recipients! BWF in 1998 made 25 Career Awards in the Biomedical Sciences, including two awards in reproductive science—a total investment of approximately \$12.5 million to help biomedical scientists early in their careers make the critical transition to becoming independent investigators. The new awardees are:

Edward S. Brodtkin, M.D., Princeton University.
Discipline: Genetics.

David C. Chan, M.D., Ph.D., Massachusetts Institute of Technology, Whitehead Institute for Biomedical Research. Discipline: Virology.

Jeffrey S. Diamond, Ph.D., Oregon Health Sciences University. Discipline: Neuroscience.

Aaron DiAntonio, M.D., Ph.D., University of California-Berkeley. Discipline: Neuroscience.

Guowei Fang, Ph.D., Harvard Medical School.
Discipline: Cell biology and regulation.

Reiko Maki Fitzsimonds, Ph.D., University of California-San Diego. Discipline: Neuroscience.

Jeffrey S. Glenn, M.D., Ph.D., Stanford University School of Medicine. Discipline: Virology.

Carrie Haskell-Luevano, Ph.D., Oregon Health Sciences University. Discipline: Neuroscience.

Xianxin Hua, M.D., Ph.D., Massachusetts Institute of Technology, Whitehead Institute for Biomedical Research. Discipline: Cell biology and regulation.

David K. R. Karaolis, Ph.D., University of Maryland. Discipline: Microbiology.

William L. Kraus, Ph.D., University of California-San Diego. Discipline: Reproductive science.

Peter D. Kwong, Ph.D., Columbia University.
Discipline: Structural biology.

Hiten D. Madhani, M.D., Ph.D., Massachusetts Institute of Technology, Whitehead Institute for Biomedical Research. Discipline: Cell biology and regulation.

Chandra Mohan, M.D., Ph.D., University of Florida College of Medicine. Discipline: Immunology.

Kelle H. Moley, M.D., Washington University School of Medicine. Discipline: Reproductive science.

Karen Ottemann, Ph.D., University of California-Berkeley. Discipline: Infectious diseases.

Salman T. Qureshi, M.D., McGill University Faculty of Medicine. Discipline: Infectious diseases.

David J. Robbins, Ph.D., University of California-San Francisco. Discipline: Cell biology and regulation.

Aimee K. Ryan, Ph.D., University of California-San Diego. Discipline: Developmental biology.

Elaine K. Sia, Ph.D., University of North Carolina-Chapel Hill. Discipline: Genetics.

Upinder Singh, M.D., University of Virginia Health Sciences Center. Discipline: Parasitology.

Leonidas Stefanis, M.D., Columbia University College of Physicians and Surgeons. Discipline: Neuroscience.

Surachai Supattapone, M.D., D.Phil., University of California-San Francisco School of Medicine. Discipline: Neuroscience.

Sarah A. Tishkoff, Ph.D., Pennsylvania State University. Discipline: Genetics.

Johannes Walter, Ph.D., University of California-San Diego. Discipline: Biochemistry.

HITCHINGS-ELION FELLOWSHIPS

These competitive fellowships, newly revised for the 1999 award cycle, are intended to help U.S. and Canadian researchers early in their careers in the biomedical sciences and medically oriented behavioral sciences develop into independent investigators. Fellowships provide \$325,000 to support two years of postdoctoral training in the United Kingdom or the Republic of Ireland, a transitional year either to complete training abroad or to return to North America for additional postdoctoral training, and two faculty years at a U.S. or Canadian university. Up to five awards will be made. *Application deadline: August 3, 1998.*

ADDITIONAL BWF FUNDING OPPORTUNITIES FOR BIOMEDICAL SCIENTISTS

BWF offers major awards to new investigators in the pharmacological and toxicological sciences; to established physician-scientists in translational research that links the laboratory bench and clinical medicine; and to both new and established investigators in molecular parasitology, malaria, and pathogenic molecular mycology.

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



St. Jude Children's
Research Hospital

ALSAC • Danny Thomas, Founder

POSTDOCTORAL POSITION IN EXPERIMENTAL ONCOLOGY

St. Jude Children's Research Hospital
Memphis, Tennessee

Applications are invited for a funded position to dissect and analyze the transcriptional regulation of myelopoiesis and the induction of myeloid leukemia. Current investigations focus on the functional interactions of transcription factor proteins regulating myeloid cell differentiation. Specific projects include: characterizing functional interactions of the c-Myb and c-Maf transcription factors and the role of these interactions in regulating early myeloid gene transcription (MCB 18:2729-2737, 1998); determining the mechanisms of c-Maf induced monocytic differentiation; and isolating novel genes encoding accessory proteins responsible for the developmentally regulated interaction of c-Myb and c-Maf in human myeloid cells. Individuals are needed to work on all aspects of these projects involving transgenic and knockout mouse models, retroviral expression and in vitro differentiation assays, and cellular and molecular genetic analyses. Support facilities at this institution are exceptional, the research environment is highly interactive, both within the Research Hospital and at the nearby UT Medical School. Qualified candidates should possess either a Ph.D. and/or M.D. in a relevant field. Please forward your CV and the names, addresses, and phone numbers of three references to:

Linda H. Shapiro, Ph.D.
Department of Experimental Oncology
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105
E-MAIL: linda.shapiro@stjude.org
www.stjude.org/departments

Women and minorities are especially encouraged to apply.
SJCRH is an affirmative action/equal opportunity employer.

The Neurosciences Institute (NSI) is an independent, not-for-profit organization at the forefront of research on the brain. Located in La Jolla, it is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

ASSOCIATE FELLOW IN EXPERIMENTAL NEUROBIOLOGY

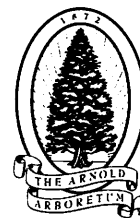
Applications are invited for the position of Associate Fellow in Experimental Neurobiology, with an emphasis on neuropharmacology. The NSI's goal is to increase understanding of brain processes at several organizational levels, from the molecular to the cognitive. A current focus is on the action and pharmacological manipulation of neuromodulatory systems with diffuse projections, such as the noradrenergic, serotonergic, cholinergic, dopaminergic, and histaminergic systems. Successful candidates will be expected to collaborate with other Fellows in Experimental Neurobiology and to take advantage of opportunities for scientific exchanges with Fellows in Theoretical Neurobiology.

Applicants should be at the assistant professor level with strong backgrounds in neuropharmacology and behavioral neuroscience. Positions are now available. Fellows receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: **Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**

JUNIOR FELLOW IN THEORETICAL NEUROBIOLOGY

Applications are invited for positions as Junior Fellow in Theoretical Neurobiology. Since 1987, the NSI has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and the analysis of functional interactions among brain areas using modern neuroimaging techniques. Advanced supercomputer facilities are available. Junior Fellows in Theoretical Neurobiology will be expected to collaborate with Senior Fellows in Theoretical Neurobiology and will have daily opportunities to interact with Fellows in Experimental Neurobiology.

Applicants should be at the postdoctoral level with strong backgrounds in experimental or theoretical neuroscience, neuroimaging, or related fields. Experience in computer modeling or statistics is especially welcome. Positions are now available. Fellows receive stipends appropriate to their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: **Dr. Olaf Sporns and Dr. Giulio Tononi, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**



THE ARNOLD ARBORETUM OF HARVARD UNIVERSITY

The Arnold Arboretum seeks to fill three positions in horticulture/systematics; individuals with field experience in Asian flora are particularly appropriate. Positions will remain open until filled.

Horticulturist

Reporting to director of Living Collections, the horticulturist works with the team responsible for overall care of the woody plant collections. Duties include field checking plants; monitoring insect/disease problems; coordinating nursery, plant records, and grounds maintenance; consulting on plant replacement; occasional teaching/writing. Requirements: Master's Degree in horticulture science or related field. Experience in public horticulture (five years or equivalent), collections information systems, teaching/writing.

Botanical/Horticultural Taxonomist

Reporting to director of Living Collections, the taxonomist is responsible for curatorial review of woody plant collections. The taxonomist conducts research on temperate woody plants using traditional/molecular methods; coordinates related research by others, including collaborative projects and grants, collecting expeditions, and conservation activities; curates living collections herbarium; conducts curatorial review of problematic taxa. Requirements: Ph.D. in plant taxonomy preferred; evidence of scholarly publications; field experience with plant collecting, preferably in Asia.

Tropical Plant Systematist

Reporting to director, Arnold Arboretum, the systematist conducts field- and collections-based research on the systematics of the tropical flora of Asia, linking it to related floristic/ecological research, biodiversity information systems, and conservation activities. The systematist works closely with the director and staff of the Harvard University Herbaria, to support institutional goals. Requirements: Ph.D. in plant systematics; field experience in Asian tropical flora; evidence of research and scholarly publication.

Send résumé; names/addresses/phone numbers for three references; letter of application to: **Ms. Frances Maguire, Arnold Arboretum, 125 Arborway, Jamaica Plain, MA 02130.**

Arnold Arboretum Web Page:
www.arboretum.harvard.edu



**United States Environmental Protection Agency
National Exposure Research Laboratory
Human Exposure and Atmospheric Sciences Division**

The U.S. Environmental Protection Agency (EPA) is seeking highly qualified senior scientific/engineering candidates for the Director of the Human Exposure and Atmospheric Sciences Division (HEASD), National Exposure Research Laboratory (NERL) located at Research Triangle Park (RTP), North Carolina. The NERL is responsible for conducting research and development related to the exposure of people and ecosystems to a wide range of pollutants in the air, water, and soil, and to other environmental changes resulting from human activities at a wide range of scales. The HEASD conducts intramural and extramural research to characterize exposures, across the whole of the exposure assessment paradigm from pollutant source to the dose delivered to the exposed person or receptor. The principal foci of the Division's research are human exposure to chemical pollutants and atmospheric sciences. The Division's research mission encompasses aspects of all components of the exposure assessment paradigm, including exposure/source research; atmospheric processes modeling research; environmental characterization research, including characterizing microenvironmental concentrations/exposures, and defining the critical routes of exposure; exposure analysis research; and exposure/dose research. The human exposure research has both modeling and measurement aspects. It focuses on exposures to susceptible subpopulations and includes field studies of total exposure measurements, the development of probabilistic human exposure models, and the linkage of these models to environmental process models and dose models to achieve source-to-dose models. The atmospheric sciences portion of HEASD's research includes the development and application of instruments and methods to measure atmospheric pollutants and their precursors; chamber and kinetics studies of the chemistry of air pollutants; the development of source apportionment techniques; and the comprehensive profiling of emissions from on- and off-road mobile sources burning gasoline with and without fuel additives.

The Director of HEASD plans, develops, organizes, directs, and implements a highly technical and complex research and development program that has nationwide impact with an annual budget in excess of \$25M and a staff of approximately 130 employees located in RTP and Las Vegas, Nevada. The Director and scientists under the Director's supervision are the Agency's experts in the area of multipathway, multimedia human exposure to environmental contaminants and atmospheric sciences, measurement methods, chemistry, and source characterization; and, therefore, they interact and represent the Agency to a large community of scientists, both nationally and internationally, as well as to the general public and legislative leaders. Ultimately, the research performed will provide an understanding of the critical factors to be considered in developing and implementing programs for the protection of the public's health.

The preferred candidate for this position will have a doctoral degree in one of the biological, physical, or mathematical sciences or in an engineering field. Candidates must also have scientific expertise in either atmospheric sciences or human exposure to chemicals and have demonstrated leadership in scientific management of state-of-the-art programs in atmospheric sciences or human exposure to chemicals. In addition, applicants must meet the executive and technical qualifications described in the vacancy announcement. Salary ranges from \$104,577–\$114,486 per annum, commensurate with the level of appointment in the Senior Executive Service.

To apply for this position, you must obtain a copy of the vacancy announcement and submit an application containing all the requested information by the closing date of the announcement. All applications for this position must be postmarked by 8/28/98. The vacancy announcement may be obtained by calling or writing **Ms. Karen Stinson (202) 260-6374, U.S. EPA, Executive Resources & Special Programs (3641), 401 M Street SW, Washington, DC 20460**. The announcement may also be viewed on the Office of Research and Development's Internet Site at <http://www.epa.gov/ord/>.

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HEALTH SCIENCE CENTER AT HOUSTON
AND THE UNIVERSITY OF TEXAS
M. D. ANDERSON CANCER CENTER
GRADUATE SCHOOL OF BIOMEDICAL SCIENCES**

DEAN

The Graduate School invites applications for the position of Dean.

The Graduate School of Biomedical Sciences (GSBS) was established in 1963, is one of six schools of The University of Texas Health Science Center at Houston, and is located in the world-renowned Texas Medical Center. Its faculty of 400 is drawn from the schools of the Health Science Center (Medical School, Dental Branch, School of Public Health, School of Allied Health Sciences, and School of Nursing) and The University of Texas M. D. Anderson Cancer Center. The current student enrollment is 460. The most recent NRC survey of doctoral programs rated the GSBS in the top quartile of biological science programs in the United States.

The Dean reports to the Presidents of UT-Houston Health Science Center and UT M. D. Anderson Cancer Center and confers with officials of those institutions as well as UT System officers and The Texas Higher Education Coordinating Board on academic and financial matters relating to current or future affairs of the administration of the School. The Dean maintains liaisons with teaching-affiliated administrators, deans, and other administrative officials throughout the country. He/she must be capable of establishing effective community relations and engaging in institutional development. He/she must also be capable of maximizing the opportunities presented by the coexistence of two major research enterprises within a single GSBS and work to facilitate increasing institutional collaboration.

The Dean approves new appointments to the GSBS faculty and appoints and makes salary recommendations for the GSBS staff. There are 17 full-time staff members at the GSBS, five of whom report directly to the Dean. As Chief Administrative Officer of the GSBS, the Dean administers the affairs of the School through subordinates and through direct participation in the functions and activities of the School.

The Dean will be an active academician and innovative scientist involved in obtaining new knowledge through research and committed to passing this new knowledge on to the students at the GSBS. He/she must have prior experience in a senior leadership position in an academic environment and qualify for appointment at the professorial level.

Applicants should send a full curriculum vitae and the names, addresses, and telephone numbers of three references to **Thomas F. Burks, Ph.D., Executive Vice President for Research and Academic Affairs, The University of Texas Health Science Center at Houston, P. O. Box 20036, Houston, TX 77225.**

The University of Texas Health Science Center at Houston and The University of Texas M. D. Anderson Cancer Center are Equal Opportunity Employers. Women and minorities are encouraged to apply. The Search Committee will consider applications in July and until the position is filled.

The Jackson Laboratory is an independent, not-for-profit mammalian genetics research institution, a major repository for the research community and a center for training in mammalian genetics. Designated a Basic Cancer Center by the National Cancer Institute, the Laboratory offers its 37 principal investigators the opportunity to conduct basic research in an interactive and cooperative environment. For more information, see our website: <http://www.jax.org>.

Staff Scientists

The Jackson Laboratory is currently recruiting Faculty Members at all levels in Cancer Genetics, Neurogenetics, and Statistical Genetics. The successful applicant should have a Ph.D. and/or a M.D., postdoctoral training, and a record of research excellence. The applicant will be expected to develop a competitive independent research program within these areas, and receive extramural grant funding.

Veterinary Scientist

We are recruiting a Veterinarian/Scientist to provide professional oversight for infectious disease diagnoses and assure strain performance standards of all Jackson Laboratory mice and rats. Duties include direction of a staff skilled in microbiology, serology, and molecular testing of our established, imported, and cryopreserved rodent colonies. An interest in relevant research and/or a clinical pathology background would be desirable. Board Certification a plus.

Postdoctoral Opportunities

The Jackson Laboratory provides a unique research environment for training postdoctoral fellows in mammalian genetics. Areas of expertise include Cancer, Developmental Biology/Aging, Genetics of Complex Traits, Genomics, Immunology/Hematology, Metabolic Diseases, Neurobiology, Bioinformatics, and Statistical Genetics.

Information and Application

The Laboratory offers excellent collaborative opportunities, unparalleled mouse and genetic resources, and an outstanding shared scientific services program. The Laboratory is located adjacent to Acadia National Park, an area of great natural beauty. Letters of inquiry should include: curriculum vitae, statement of research interests, and names of three references and be directed to:

**The Director's Office
The Jackson Laboratory
600 Main Street
Bar Harbor, ME 04609**

The Jackson Laboratory is an EOE/AA Employer.



Genome Systems, Inc., a wholly owned subsidiary of Incyte Pharmaceuticals, Inc., is a leader in providing genetic engineering products, reagents and services for the general scientific community.

Group Leader/ Senior Scientist

Genome Systems, Inc. seeks a highly motivated, results oriented individual with excellent communication and molecular biology skills to fill a technology driven position which manages a molecular biology staff. Must have current knowledge of molecular biology techniques in the field of knockout and transgenic technologies. Position is expected to stay current on technological advances in the field. Masters degree in related field with 6-8 years experience in transgenics technologies or Ph.D. with 2-3 years experience req'd. A proven record of accomplishment in gene targeting and transgenics technologies a must. Biotech experience a plus.

If you recognize these qualities in yourself, we want to hear from you. We offer competitive salaries, an outstanding benefits package and significant opportunities for professional growth. Mail/fax your resume with cover letter specifying position to Genome Systems, Inc., H.R. Dept., Job #GS0213, 4633 World Parkway Circle, St. Louis, Missouri, 63134 FAX (314) 506-6421.



An Equal Opportunity Employer, M/F/V/D.

The University of Michigan Ann Arbor - Vice President for Research

The University of Michigan, Ann Arbor, one of the nation's premier research universities with an annual expenditure for research of over half-a-billion dollars, is seeking a Vice President for Research, who serves as an Executive Officer and chief research officer of the University. The Vice President for Research works closely with the Provost and Deans and Directors of major Schools, Colleges, and Institutes to provide leadership for the University on issues of research policy in relation to academic programs and to maintain and enhance the University of Michigan's position as a research university. She or he is also expected to assume a leadership position in national and international discussions regarding research policy. Important current local, national, and international issues include integration of research and education, both graduate and undergraduate, inter-disciplinary and cross-disciplinary research, technology transfer, research infrastructure, federal and state research support policy, national and international cooperative ventures in research, and initiation of activities that provide opportunities for participation of a broad range of individuals with interests in careers of research, scholarly, or creative activity.

The Vice President for Research reports to the Provost and leads and oversees the activities of the Office of the Vice President for Research, which includes three faculty Associate Vice Presidents, the Associate Vice President and Executive Director of Research Administration, and two administrative Assistant Vice Presidents.

The Vice President for Research should be a nationally and internationally recognized scholar with a strong background in a research-intensive discipline and deeply committed to stimulating collaboration across multiple disciplines. Tenure appointment in an appropriate academic unit will provide a base for continuing active personal scholarship.

Nominations and applications will be reviewed on an ongoing basis beginning July 8, 1998, and will be accepted until the position is filled. Candidates from underrepresented groups are encouraged to apply. Correspondence should be addressed to: **Nancy Cantor, Provost and Executive Vice President for Academic Affairs, University of Michigan, 3074 Fleming Administration Building, Ann Arbor, MI 48109-1340. Email may be addressed to OVPRSEARCH.nom@umich.edu**

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The University of Michigan

GLOBAL OPPORTUNITIES



UNITED ARAB EMIRATES UNIVERSITY FACULTY OF MEDICINE AND HEALTH SCIENCES

1st Specialist/Laboratory (Electron Microscopy)

Joining a team of three technical support staff and reporting to the Department Chairman, we are looking for applicants who have a first Degree in Biological Science with a minimum of eight years experience, six years of which are in a routine electron microscopy laboratory with hands on experience of electron microscope operation. Excellent communication skills are required.

The position will be actively involved in current on-going research projects of the department and practical demonstrations to undergraduate medical students.

The successful candidate will be offered a tax free salary, free accommodation, furniture allowance, annual air passage and an end of service bonus. Interested candidates may forward their curriculum vitae together with the names and addresses of two professional referees and a covering letter with an indication of current salary to:

The Personnel Department
Faculty of Medicine and Health Sciences
United Arab Emirates University
P O Box 17666
Al Ain, United Arab Emirates
Fax No. +971-3-672001

Applications will be closed 3 weeks after the date of publication.

MEETING

SIXTH INTERNATIONAL CONGRESS ON PLATELET-ACTIVATING FACTOR AND RELATED LIPID MEDIATORS

Come enjoy New Orleans and the latest on cell signaling by bioactive lipids including clinical studies

Abstract Deadline for late-breaking research: August 15, 1998
Meeting Date: September 21-24, 1998
at the New Orleans Sheraton

Sponsored by the LSUMC Neuroscience Center of Excellence

Honorary Chairpersons:

Donald J. Hanahan,
U. Texas Health Science Ctr.
Peter J. Henson, Natl.
Jewish Hospital
Fred L. Snyder, Oak Ridge
Asso. Univ.

Organized by:

Nicolas G. Bazan, Chair,
LSUMC
Keizo Inoue, U. Tokyo
Clive Page, Kings Coll.
Stephen M. Prescott, Eccles
Inst. Hum. Gen.
Takao Shimizu, U. Tokyo

The Scientific Program includes: Biochemistry, molecular biology, physiology and pharmacology of bioactive lipids. Receptors, and signal transduction. Oxidative stress, signaling by oxidatively modified phospholipids, plasma-type and intracellular PAF-AH. Significance of PAF in cell differentiation/proliferation/survival/regeneration/repair, inflammation and apoptosis, infectious diseases and ischemia-reperfusion injury; cardiovascular and reproductive systems, cancer, etc. in nervous system, synaptic transmission, LTP, neuronal migration and plasticity, stroke, epilepsy, neurodegenerative diseases including retinal degeneration. Clinical trials of PAF receptor antagonists and PAF-AH.

Information: **Nikole Blair, LSU Neuroscience Center;**
phone: (504) 599-0835, Fax: (504) 568-5801, E-mail:
nblair@lsuic.edu, or visit our website: <http://www.neuroscience.lsumc.edu/paf.html>.

CONFERENCE

NATIONAL INSTITUTE ON DRUG ABUSE, NIH
AND
THE ROBERT WOOD JOHNSON FOUNDATION

CO-SPONSORS

NATIONAL CANCER INSTITUTE, NIH
OFFICE ON SMOKING AND HEALTH, CDC

Addicted to Nicotine

A National Research Forum

NATCHER CONFERENCE CENTER
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND
JULY 27-28, 1998

A 2-day national conference being held at the NIH campus (Natcher Auditorium, Building 45) focusing on the latest research findings about the behavioral, cognitive, and neurobiological sources of nicotine addiction, prevention of tobacco product use, and state-of-the-art treatment strategies.

FOR FURTHER INFORMATION CONTACT:

Robyn Bowie-Semsker or Mark Brown of
Capital Consulting Corporation
telephone: (301) 468-6004, x431



PULMONARY PATHOBIOLOGIST (Respiratory Tract Toxicity/ Oncogenicity)

CIIT is seeking a scientist to join its research staff in the Respiratory Toxicology Program. Qualified individuals will have a Ph.D. in the molecular or cell biology research area. The successful applicant should have at least three years postdoctoral experience and research interests and experiences in the general area of inhalation toxicology, pulmonary pathobiology, and the biology of fiber- and particle-induced respiratory tract disease. The successful candidate will be a member of a multidisciplinary research team that includes individuals with training and experience in aerosol science, disposition of inhaled materials, and pathobiology of particles and fibers. The successful individual should have excellent scientific credentials, a team orientation, excellent oral and written communication skills, and be prepared to work in a fast-paced environment.

The programmatic research areas of CIIT include carcinogenesis, respiratory toxicology, neurotoxicology, and endocrine, reproductive, and experimental toxicology, with an emphasis on mechanistic studies and interdisciplinary collaborative research directed toward a better understanding of potential human health risks from exposure to chemicals. CIIT has a strong postdoctoral program and there are excellent opportunities for interactions with nearby outstanding universities.

CIIT is an independent, not-for-profit research institute. The Institute is located in Research Triangle Park, NC, which offers many cultural and recreational activities. We offer competitive salary and benefits and a stimulating work environment. Interested applicants should submit a curriculum vitae with the names of three professional references, representative reprints, and a summary of research interests to: **Human Resources Manager, PATHOBIOLOGIST Position-CIIT, P.O. Box 12137, Research Triangle Park, NC 27709.**

CIIT is an Equal Opportunity Employer.

Protein Biochemist

Headquartered in a 66,000 square foot research facility in the San Francisco Bay Area, **Tularik Inc.** is a rapidly growing, privately-held biopharmaceutical company dedicated to the discovery and development of novel therapeutic agents that regulate gene expression. We have ongoing projects in the following areas: immune disorders, inflammation, obesity, hypercholesterolemia, viral diseases, bacterial diseases and cancer. Our continued growth has created a unique opportunity for a dedicated Protein Biochemist to join our R&D team and help us shape the future of human therapeutics.

Working with a team of highly motivated scientists in our Structural Biology Department, the successful candidate will help determine the structure of novel proteins of medicinal interest and study their interactions with other proteins or small molecules as part of the drug discovery process. He/she will also be responsible for the production, purification and characterization of proteins for use in X-ray crystallography & NMR spectroscopy. Qualified candidates will have a Ph.D. along with at least 2 years of postdoctoral experience in biochemistry or protein chemistry. Fermentation experience would be an asset.

In addition to an attractive total compensation package, including competitive salary, comprehensive benefits and equity participation, Tularik offers experienced leadership and an exciting research environment that recognizes achievement. Interested candidates should forward their resume to:

Tularik Inc., Human Resources
Position Code# SBX2
Two Corporate Drive
South San Francisco, CA 94080
Fax: (650) 829-4303
email: resume@tularik.com

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Creating Drugs That Regulate Genes



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INC.



OPPORTUNITIES

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Postdoctoral Fellows
Junior Scientists**

Cytoklonal Pharmaceuticals is a publicly traded Biopharmaceutical Company developing products for Treatment and Diagnosis of Cancer and Infectious Disease. Programs include: Paclitaxel (Taxol®) production by Fungal fermentation and Paclitaxel treatment of Polycystic Kidney Disease; Human Gene Discovery using Patented Retroselection™ for disease-related genes such as the Company's patented LCG gene for lung cancer; a Mycobacteria Vaccine Delivery system; and a proprietary Antisense program.

Seeking Outstanding Candidates:

Candidates for Research Assistant should have B.S. or preferably M.S. degree in Biochemistry or Biology/Chemistry.

Candidates for Postdoctoral Fellow should have Ph.D's in Biochemistry or Molecular Biology.

Candidates for Junior Scientist should have Ph.D's in Biochemistry or Molecular Biology and two years experience as a Postdoctoral Fellow.

Preference is for candidates with experience in the activities listed above.

Please send applications and letters of recommendation to **Human Resources, 9000 Harry Hines Blvd., Suite 330, Dallas, TX 75235.**

NASDAQ: CYPII, CYPHW, CYPHZ

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**Chair,
Department of Environmental
Sciences and Engineering (ESE)
The University of North Carolina
at Chapel Hill**

One of eight departments in the School of Public Health; ESE comprises 43 faculty (37 tenured or tenure-track), 215+ students (85% graduate, 15% undergraduate), and has an annual operating budget of \$11 million. The faculty and student body represent a broad range of disciplinary backgrounds, including specialties within biology, chemistry, economics, engineering, mathematics, microbiology, physics, policy, and toxicology. Administratively organized into six academic program areas, ESE currently offers a Bachelor's degree, four Master's degrees, and the Doctoral degree. Candidates must have an earned doctorate in a discipline closely associated with the fields of environmental sciences or environmental engineering and a record of research, scholarship, and professional activity that demonstrates preeminence at the national and international levels. The position will be filled at the tenured Full Professor level.

Qualified applicants should possess a record of constructive leadership; a commitment to excellence in scholarship, teaching, and outreach to the constituencies of the department, the School of Public Health, and the University of North Carolina; skills necessary to integrate faculty, students, and staff to enhance productivity; an ability to assist the faculty in developing curricula and programs that respond to current and emerging needs in environmental sciences and engineering; a vision for enhancing the diversity of the faculty and student body; a willingness to promote cross-disciplinary activity within the department and between the department and other units within the School of Public Health or other units on campus; and a commitment to seek and secure prospective resources to accomplish the overall missions of the department in teaching, research, and service. Applications will be reviewed beginning in August 1998 and will continue to be reviewed until the position is filled.

Applications consisting of curriculum vitae and the names and contact information of four references should be sent to:
Dr. Lawrence L. Kupper, Chair of the ESE Chair Search Committee, Department of Biostatistics, CB#7400, School of Public Health, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7400.
E-mail: kupper@bios.unc.edu.

The University of North Carolina at Chapel Hill is an Equal Opportunity, Affirmative Action Employer and encourages women and minorities to apply.

**NATIONAL INSTITUTES OF HEALTH
NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM
DIRECTOR, DIVISION OF INTRAMURAL CLINICAL
AND BIOLOGICAL RESEARCH**

An outstanding clinician-investigator or researcher to establish an independent research program and oversee intramural clinical and applied research is sought by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health (NIH). The position is located in Bethesda, Maryland.

The Director, Division of Intramural Clinical and Biological Research (DICBR) oversees a research program of national and international scope and importance and is a vital member of the senior scientific staff. The DICBR is organized into 4 Laboratories and staffed by approximately 200 employees, fellows, and guest researchers with an annual budget of nearly \$22 million.

The applicant must possess a medical and/or other doctoral-level degree in a biomedical or related field and be involved in the full range of investigations into the basic or clinical sciences related to alcohol issues or a related research area. Salary may range from \$77,798 to \$151,800 per year and additional compensation may be authorized depending on the individual's qualifications.

All applications should include the following: a statement of research interest; a career synopsis; a current curriculum vitae and bibliography; and the name and addresses of five references. A list of the requirements or additional information about the position may be obtained by contacting **Ms. Hanratty** at the address listed below. Applications should be sent and received no later than September 30, 1998, to:

**Ms. Kathleen Hanratty
NIH, Bldg. 31, Room 1B58
31 Center Drive MSC 2088
Bethesda, MD 20892-2088
Telephone: (301) 402-2997
FAX: (301) 402-0016**

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



Shape the Future of Drug Discovery at Parke-Davis

Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, offers a challenging scientific environment where you can pursue a rewarding future of research and discovery as a:

MOLECULAR ONCOLOGIST

You will be the senior group leader in molecular oncology dedicated to the discovery and evaluation of novel anticancer agents and the development/application of appropriate models and assays required for target validation and proof of drug function in vitro and in vivo. Research activity will be initially centered in the general areas of oncogenic signal transduction and cell cycle regulation.

A Ph.D. in Molecular Biology, Biochemistry or related area along with 4-8 years' experience in an anti-cancer drug discovery environment is required. A record of sustained productive research in oncogenic signal transduction, cell cycle regulation, apoptosis or closely related area; the ability to lead a diverse group of discovery scientists; and the capacity to interface across several projects and departments are required.

Influence the future of drug discovery at Parke-Davis, and enjoy a competitive salary, benefits and an environment that supports your professional growth. Qualified candidates please mail, fax or e-mail your resume*, indicating **Job Code RJB-98235, Parke-Davis Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: (310) 337-3367. E-mail: parkedavis@isearch.com**

*Please submit resume on laser-quality white paper, with legible 10 point or larger type, and avoid boldface, italics, borders, etc.

Warner-Lambert "Pharmaceutical Company of the Year" -Med Ad News September 1997

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ONCOLOGY

Cephalon, Inc., headquartered in West Chester, PA, is an international biopharmaceutical company dedicated to the discovery, development and marketing of innovative products to treat neurological diseases and cancer.

The following positions have been created to expand our Oncology Department:

SENIOR SCIENTIST

Ph.D. • 10+ years exp.

Seeking an experienced investigator in oncology drug discovery and research. Particular area of expertise should include signal transduction, angiogenesis, protease technologies or cytotoxic agents. Management experience and demonstrated success in a pharmaceutical drug discovery environment preferred. **Pos. Code 01**

RESEARCH SCIENTIST

Ph.D. • 3+ years exp.

Demonstrated expertise with in vitro and in vivo models of tumor biology. Experience in the areas of signal transduction, angiogenesis or protease technologies preferred. **Pos. Code 02**

RESEARCH SCIENTIST

Ph.D. • 0-1 year exp.

Demonstrated expertise with in vitro and in vivo models of tumor biology. Experience in the areas of signal transduction, invasion and metastasis is preferred. The ability to conduct tumor growth assays utilizing nude mice is required. **Pos. Code 03**



Cephalon, Inc.

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RESEARCH ASSOCIATE IV

BA/BS • 7+ years exp.

Experience with in vitro and in vivo models of angiogenesis. Experience in cell and tissue culture methods is required. **Pos. Code 04**

RESEARCH ASSOCIATE IV

BA/BS • 7+ years exp.

Demonstrated expertise with methods of cell culture and flow cytometry is required. **Pos. Code 05**

RESEARCH ASSOCIATE IV

BA/BS • 7+ years exp.

Experience with methods of cell biology and biochemistry of signal transduction is required. Familiarity with molecular biology techniques is preferred. **Pos. Code 06**

RESEARCH ASSOCIATE III

BA/BS • 3+ years exp.

Demonstrated expertise with in vitro and in vivo models of tumor biology. Ability to perform tumor growth experiments in nude mice is required. **Pos. Code 07**

RESEARCH ASSOCIATE II

BA/BS • 2+ years exp.

Ability to perform cell culture-based assays is required. Experience with animal models of tumor growth is preferred. **Pos. Code 08**

Please send your resume indicating **POSITION CODE** (resumes without Position Code will not be accepted) and salary requirements to: **Recruitment Manager, Cephalon, Inc., 145 Brandywine Parkway, West Chester, PA 19380-4245.**

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Synthetic Organic Chemist

NeoRx Corporation, a Seattle based, publicly held biotechnology company, develops targeted biopharmaceuticals to treat cancer and cardiovascular disease.

We are currently seeking talented Ph.D. and/or MS Synthetic Organic Chemist(s) with 0-5 years' biopharmaceutical or pharmaceutical experience. This person will be required to contribute to the success of multi-disciplinary project teams by designing, synthesizing, purifying, and characterizing novel agents at R&D to cGMP manufacturing scales.

The successful candidate must have a solid background in both classical and modern synthetic chemistry. Extensive experience in modern chromatography, analytical techniques, pharmacology, and medicinal chemistry is most desirable.

Interested candidates are invited to forward their resume with a cover letter in strict confidence to: **Denise Lucero, NeoRx Corporation, 410 West Harrison Street, Seattle, WA 98119.** NeoRx is an Equal Opportunity Employer.

NEORX

Genome Systems, Inc., a wholly owned subsidiary of Incyte Pharmaceuticals, Inc., is a leader in providing genetic engineering products, reagents and services for the general scientific community.

Microinjectionist

Genome Systems, Inc. has an immediate opening for a Microinjectionist. This position would be responsible for embryo production, blastocyst injection, surgical transfer to recipient mice, and tracking offspring. Additional responsibilities include customer updates, writing and submission of animal care and use protocols, attendance at and participation in IACUC meetings. This position is 60% laboratory and 40% administrative. B.S. degree in biology required, Masters degree a plus. Position requires 2 - 4 years of experience, good communication and interpersonal skills. Demonstrated experience in ES cell culture a plus.

If you recognize these qualities in yourself, we want to hear from you! We offer competitive salaries, an outstanding benefits package and significant opportunities for professional growth. Mail/fax your resume to Human Resources Dept., Genome Systems, Inc., Job #1379, 4633 World Parkway Circle, St. Louis, MO 63134 FAX (314) 506-6421. An Equal Opportunity Employer, M/F/V/D.



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CENTER FOR SCIENTIFIC REVIEW NATIONAL INSTITUTES OF HEALTH

The Center for Scientific Review (CSR) wants to identify research scientists with expertise in HIV/AIDS who are interested in serving as Scientific Review Administrators (SRA) in the management of the NIH peer review process.

Scientific Review Administrators (GS-12/13/14) Responsible for the overall management of committees composed of leading scientists in their respective fields who meet to judge the scientific merit of investigator-initiated research grant applications.

Supervisory Scientific Review Administrator (GS-15) Supervises SRAs and support staff in the AIDS and Related Research Initial Review Group (IRG); assigns research grant applications to individual committees of the IRG best qualified to evaluate the scientific value and adequacy of the proposed research, and manages a study section that assesses the scientific merit of assigned grant applications.

Those interested in applying should have research experience in one or more of the following areas: virology, immunology, drug development/design, opportunistic infections and epidemiology related to HIV/AIDS and its sequelae, or the social and behavioral science aspects of HIV infection, transmission, and disease progression in the individual, group, and community.

Applicants must be U.S. citizens, have earned the Ph.D. or M.D. (or have equivalent training and experience), and a record of research accomplishment. Salaries for these positions range from \$47,066 to \$118,400 per year depending upon qualifications.

Please submit curriculum vitae by July 6, 1998, to:

Bruce A. Maurer, Ph.D.
National Institutes of Health
6701 Rockledge Drive
Center for Scientific Review
Room 5108, MSC 7852
Bethesda, MD 20892-7852

E-mail: scirev@drg.nih.gov

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



Roche
Diagnostics

Scientific Opportunities

Who we are

Roche Diagnostics, a subsidiary of world-renowned Hoffman-LaRoche, Inc., is a leader in the development, manufacture, and marketing of analytical systems and in vitro diagnostics for hospitals, clinical laboratories, and physicians. We currently have several opportunities for Scientists to participate in the research and development of automated and decentralized immunochemically based testing systems on the leading edge of discovery in Drugs of Abuse and Therapeutic Drug Monitoring. These positions currently reside at our Branchburg, New Jersey facility and will require a 6-9 month training period at this location. All candidates must be willing to relocate to our Center of Excellence for Drug Monitoring in Indianapolis, Indiana.

Scientists – R&D

BS/MS in Chemistry or Biochemistry required along with 0-5 years laboratory experience. A good understanding of analytical chemistry and/or protein-hapten conjugation methods is a must. Knowledge of various clinical chemistry analyzers or immunochromatography is desirable. Candidates who have a demonstrated ability to design and execute relevant laboratory experimentation and determine short term project goals preferred. Strong written and verbal communication abilities and good computer skills are essential.

Research Scientists – R&D

Ph.D. with 0-3 years or BS/MS in Chemistry or Biochemistry with 5-10 years of experience with relevant laboratory techniques required. The ability to take basic research methods into feasible development is a must. Strong written and verbal communication skills are essential with good project management abilities desirable.

Principal Scientists/Managers – R&D

Ph.D. in Chemistry or Biochemistry with 5-10 years of experience in the in vitro diagnostic area required. Proven management and supervisory skills are necessary to direct the activities of up to 10 individuals including Ph.D. scientists. The ideal candidate will have experience bringing diagnostic products to market. An understanding of the new federal regulations for product design is essential as well as strong written and verbal communication skills.

Scientists – Hybridoma Technology

BS/MS in Biology, Biochemistry or Microbiology required along with 0-5 years experience in hybridoma antibody techniques. These individuals should have a good understanding of sterile tissue culture techniques, myeloma fusion, cell maintenance, and screening techniques. Demonstrated ability to design and execute relevant laboratory experimentation and determine short term project goals desired along with strong written and verbal communication abilities and good computer skills.

Research Scientists – Hybridoma Technology

Ph.D. with 0-3 years or BS/MS in Biology, Biochemistry or Microbiology with 5-10 years of experience in the operations of a hybridoma facility. These individuals should have a good understanding of GMP practices for antibody cell lines and be able to take basic research methods into feasible development. Supervisory and project management skills are preferred. Strong written and verbal communication skills are essential.

Who to contact

We offer an excellent compensation and benefit program including a 401(k). Qualified individuals should send a resume, including salary requirements, to: **Roche Diagnostics, HR-Dept. CBSM, 9115 Hague Road, P.O. Box 50457, Indianapolis, IN 46250-0457**. Principals only please. Roche is committed to providing equal opportunity to a diverse workforce.

www.roche.com

DATABASE INFORMATICS: BIOLOGISTS

Professional positions are available in the expanding Informatics Programs at The Jackson Laboratory working with the Mouse Genome Database, Gene Expression Resource, and Tumor Biology Database. Successful candidates will be primarily responsible for data acquisition and database maintenance, including literature searching, evaluating and analyzing data to be incorporated into the databases, and interacting with research laboratories to facilitate electronic data contributions. In addition, they will participate in database and interface design work, through input into database content and display concepts. Applicants should have experience with molecular biology or mammalian systems and be versed in developmental, cellular, or tumor biology. Knowledge of genetics a plus. Other desirable attributes include writing/communication skills and experience using computers. M.S. or Ph.D. degree in Life Sciences required.

The Jackson Laboratory is one of the world's foremost centers for mammalian genetics research. Located in Bar Harbor, Maine, the lab is adjacent to Acadia National Park. Mountains, ocean, forests, lakes, and trails are all within walking distance. If you love high-tech challenges but you're looking for a more natural environment, this could be the opportunity you've been searching for. Qualified candidates should send résumé to:

The Jackson Laboratory
Attn: Joanne Bradt
Human Resources Generalist
600 Main Street
Bar Harbor, ME 04609
207/288-6100
jobs@jax.org

ASSISTANT PROFESSOR NEUROSCIENCE

Kinsmen Laboratories
University of British Columbia

The University of British Columbia invites applications for a tenure track position in the Division of Neurological Sciences, Department of Psychiatry. Outstanding candidates from all areas of Neuroscience are encouraged to apply, particularly individuals with expertise in the cellular or molecular bases of neurodegenerative disorders. Candidates must hold Ph.D. and/or M.D. degree and show clear evidence of a capacity for independent, original research. The Division of Neurological Sciences is a research group in basic neuroscience and offers excellent research facilities. Generous start-up funds are available. Salary will be commensurate with qualifications and experience.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. UBC hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply.

Anticipated start date is November 1, 1998. Applicants should send a curriculum vitae, list of publications, a statement of research interests, and the names and addresses of three referees by July 31, 1998 to:



Dr. Steven R. Vincent, Head
Division of Neurological Sciences
Department of Psychiatry
University of British Columbia
2255 Wesbrook Mall
Vancouver, B.C. CANADA
V6T 2A1



**St. Jude Children's
Research Hospital**

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POSTDOCTORAL POSITION

A postdoctoral position is available to study leukemogenic effects of topoisomerase II-directed anticancer drugs. Studies are focused on the identification of predisposing factors that affect the risk of leukemogenesis from etoposide, including the contribution of host-specific genetic factors, other anticancer drugs, cytochrome P450 metabolism, development of useful biomarkers of somatic cell DNA rearrangements, and genetic polymorphisms of human drug metabolism. Candidates with strong backgrounds in pharmaceutical sciences, molecular epidemiology, pharmacology, or molecular biology will be considered. St. Jude Children's Research Hospital offers an exciting research environment, competitive salary and excellent benefits for fellows.

Please send a letter of interest and curriculum vitae to: **Dr. Mary V. Relling, Pharmaceutical Sciences, St. Jude Children's Research Hospital, 332 N. Lauderdale, Room D-1052, Memphis, TN 38105. E-mail: mary.relling@stjude.org**

Affirmative Action/Equal Opportunity Employer

AWARDS

The American Association for the Advancement of Science invites nominations for the 1998 Mentor Awards. The two categories are Lifetime Mentor Award and Mentor Award. These annual awards honor individuals who during their careers demonstrate extraordinary leadership to increase the participation of underrepresented groups, specifically women of all racial/ethnic groups; African American, American Indian, and Hispanic men; and/or people with disabilities, in science and engineering fields and careers.

The Mentor Awards recognize individuals who have mentored and guided significant numbers of students from these underrepresented groups to the completion of doctoral studies and/or who have affected the climate of a department, college, or institution in such a manner as to significantly increase the diversity of students pursuing and completing doctoral studies. These individuals will have demonstrated scholarship, activism, and community building on behalf of women, minorities, and/or people with disabilities in science and/or engineering fields and careers through work at colleges and universities, institutions, or community-based organizations.

The Lifetime Mentor Award, a prize of \$5,000 and a commemorative plaque, honors an individual who has served in such a role for 10 years or longer. The Mentor Award, a prize of \$2,500 and a commemorative plaque, honors an individual who has served in such a role for less than 10 years.

The deadline for nominations for the 1998 Mentor Awards is July 31, 1998.

For a nomination form or for more information, please contact:

Nathan E. Bell

AAAS

1200 New York Ave., NW
Washington, DC 20005

(202) 326-7019

FAX: (202) 371-9849

nbell@aaas.org



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Our Analytical Sciences Center, a corporate research team, is seeking ten skilled professionals in Analytical Chemistry with a Ph.D. or B.S./M.S. with experience in related fields to staff a variety of new projects.

Protein Biochemist with Ph.D., experienced in mass spectrometry. **Job Code: (PB-1)**

Bioinformaticist with Ph.D. or equivalent, experienced in protein pathways and database searching. **Job Code: (BPhD-1)**

Biochemist with Ph.D., experienced in protein separations by 2D gel electrophoresis. **Job Code: (BPhD-2)**

Biochemist with Ph.D., separations extraction experience. **Job Code: (BPhD-3)**

Chemist/Biochemist with Ph.D., experience in separation of lipids, fats and oils. **Job Code: (CBPHD-1)**

Chemist/Biochemist with BS/MS, experienced in extractions, particularly, of lipids and proteins. **Job Code: (CBBS-2)**

Biochemist with Ph.D., experienced in separations and mass spectrometry, particularly, applied in pharmacokinetics/ pharmacodynamics and metabolite identification. **Job Code: (BPhD-4)**

Chemist/Biochemist with Ph.D., experienced in developing protein enzymatic assays. **Job Code: (CBPHD-2)**

Biochemist/Seeds Analyst with Ph.D., experienced in applying various spectroscopic and other analytical techniques in high throughput screening. **Job Code: (BSA-1)**

Electron Microscopist with Ph.D., experienced in biological microscopy of plant and animal tissues. **Job Code: (EM-1)**

Candidates must have solid analytical and communication skills. All positions are located in St. Louis, MO.

Please send resumes to: **The Monsanto Company, Attn: OST Staffing, Job Code: _____** (Please select from above), Mail Zone: **E2NB, 800 N. Lindbergh Blvd., St. Louis, MO 63167. Fax: 314-694-2014.** EEO/AA Employer M/F/D/V. Please visit our web-site at: www.monsanto.com.

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National Cancer Institute
National Institutes of Health, Public Health Service

**CANCER PREVENTION
FELLOWSHIP PROGRAM**

The National Cancer Institute is accepting applications for the Cancer Prevention Fellowship Program (CPFP). The purpose of this program is to train individuals from a multiplicity of health science disciplines in the field of cancer prevention and control. The program provides for: *Master of Public Health training* (at accredited one-year university programs); *Participation in the Cancer Prevention and Control Summer Academic Course* (open to physicians and scientists interested in specialized instruction on the principles and practice of cancer prevention and control); *Mentored research training* in cancer prevention and control at the National Cancer Institute; *Brief field assignments* in cancer prevention and control programs at other institutions. Fellows will be accepted for up to five years of training, beginning July 1, 1999. Benefits include selected relocation and travel expenses, paid federal holidays, and participatory health insurance.

Research opportunities include but are not limited to: chemoprevention, clinical epidemiology, diet, nutrition and other lifestyle factor studies, evidence-based 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.

ELIGIBILITY

M.D., D.D.S., or D.O. from a U.S., territorial, or Canadian Medical School. Foreign medical graduates must have current USMLE or ECFMG certification and appropriate experience, e.g., one-year residency in a training program approved by the Accreditation Council for Graduate Medical Education.

OR

Ph.D. or other doctoral degree in a related discipline (epidemiology, biostatistics, and the biomedical, nutritional, public health, or behavioral sciences). Foreign education must be comparable to that received in accredited U.S., territorial, or Canadian institutions.

PLUS

The applicant must be a citizen or resident alien of the United States eligible for citizenship within four years.

To receive an application catalog either call, fax, e-mail, or send a postcard or letter with your name, home address, and where you heard about the program to:

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

Further Inquiries:

Mrs. Barbara Redding
TEL (301) 496-8640
FAX (301) 402-4863
e-mail: br24v@nih.gov
<http://dcp.nci.nih.gov/cpfp/>

DEADLINE FOR RECEIPT OF APPLICATIONS:
SEPTEMBER 1, 1998

Selection for this training program will be based solely on merit, with no discrimination for nonmerit reasons, such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

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PEW

Latin American FELLOWS PROGRAM in the BIOMEDICAL S·C·I·E·N·C·E·S

A Program Sponsored by The Pew Charitable Trusts to support young scientists from Latin America for post-doctoral training in the United States. The Program is intended to provide such individuals with an opportunity to further their scientific knowledge, promote scientific exchange and collaboration between investigators in the U.S. and Latin America, and advance basic scientific research in Latin America. Ten Fellows will be selected in 1999. An award of \$50,000 will be provided as a salary stipend for the fellow during the period of training (\$25,000 per year for 2 years) and will be administered by the sponsoring U.S. institution. The sponsoring institution is expected to supplement the

salary stipend with at least \$5,000 each year and provide medical benefits for the fellow. Following the two-year fellowship, the Program will issue the sponsoring institution an additional \$35,000 award for the fellow to purchase equipment and supplies to establish a laboratory in his or her home country.

Applicants must have held a Ph.D. and/or M.D. degrees, or equivalent, for no more than five years as of October 1, 1998. Strong preference is given to applicants who have not had any previous training outside of Latin America. Applicants are not required to have a commitment of a position and laboratory space after the fellowship. However, the application requires a written statement of intent to return to Latin America. Fellows must have a confirmed position and laboratory space in Latin America by the end of the fellowship 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. Assistance with the identification of an appropriate laboratory and sponsor in the United States is available by contacting Silvia Montano de Jiménez, Program Coordinator at montano@itsa.ucsf.edu before August 15, 1998.

The program will accept applications from Mexico, Central and South America. Applications may be obtained by the Regional Committee chairperson in your country listed here or from our website at <http://futurehealth.ucsf.edu/pewlatin.html>. The application deadline is October 1, 1998. Winners will be notified in April 1999 and the fellowship should begin no later than August 1999.

APPLICATION DEADLINE IS OCTOBER 1, 1998

ARGENTINA:

Israel Algranati,
Fundación Campomar,
Av. Patricias Argentinas 435,
1405 Buenos Aires, Argentina
Tel: 863-4018 Fax: 865-2246
e-mail: algra@iris.iib.uba.ar

BRASIL:

Carlos E. Rocha Miranda,
Academia Brasileira de Ciencias,
Rua Anfilóbio de Carvalho, 29, 3º Andar, 20030-060
Rio de Janeiro, RJ - Brasil
Tel: 220-4794 Fax: 240-4695
e-mail: cerm@abc.org.br

CHILE:

Manuel Kukuljan, Ph.D.
Universidad de Chile
Departamento de Fisiología y Biofísica
Casilla 70005 Santiago 7 Chile
Tel: 2-678-6310 Fax: 2-777-6916
e-mail: kukuljan@bitmed.med.uchile.cl

MEXICO:

Hugo Aréchiga,
UNAM, Ciudad Universitaria
04510 Mexico, D.F.
Tel: 622-0725 Fax: 550-8859
e-mail: arechiga@servidor.unam.mx

ALL OTHER COUNTRIES:

Silvia Montano de Jiménez
The Pew Latin American Fellows Program,
1388 Sutter Street Suite 805,
San Francisco, CA 94109
Tel: 415-476-5116 Fax: 415-476-4113
e-mail: montano@itsa.itsa.ucsf.edu

POSITIONS OPEN

FACULTY POSITION IN PHARMACEUTICAL SCIENCES

The College of Pharmacy invites applications for a nine-month, **TENURE-TRACK POSITION** in pharmaceutical science. Successful candidates must hold a Ph.D. in pharmaceutical sciences with a background in medicinal chemistry. The candidate's research interests should be complementary to the current areas of research in the department, including cellular control mechanisms, metabolism, cancer, neuropharmacology, toxicology, immunology, and drug delivery. Candidates able to maintain an extramurally funded research program, with evidence of scholarly productivity, and with experience in pharmacy education are preferred. Interested individuals should submit an application letter containing a summary of teaching and research interests, curriculum vitae, and the names, addresses, and telephone numbers of three references to: Eric J. Jarvi, Ph.D., Chair, Search Committee, Idaho State University, Campus Box 8334, Pocatello, ID 83209. E-mail: jarvie@otc.isu.edu. The position will be available July 1, 1999, and will remain open until filled. Idaho State University is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF MASSACHUSETTS MEDICAL CENTER DEPARTMENT OF CELL BIOLOGY

Applications are invited for a tenure-track faculty position at the **ASSOCIATE PROFESSOR** level in the Department of Cell Biology at the University of Massachusetts Medical Center. The successful candidate for this position must have an established, extramurally funded research program and demonstrated excellence in teaching cell and organ system histology to medical students. Review of applications will begin immediately and continue until the position is filled. Please send a letter of interest, curriculum vitae, statement of experience in research and education, and contact information for three references to: Dr. Susan Billings-Gagliardi, Chair, Department of Cell Biology Search Committee, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655. The University of Massachusetts is an Equal Opportunity Employer and encourages applications from female and minority candidates.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSORS DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS Harvard Medical School

The Department of Microbiology and Molecular Genetics invites applications for two tenure-track faculty positions at either the Assistant or Associate Professor level. The successful candidates will conduct independent research in virology, particularly in the areas of viral pathogenesis, cell biology, replication, and host immune response to viral infection. The successful candidates will also participate in teaching graduate and medical students. Applicants should possess a Ph.D. or M.D. degree and have at least two years of postdoctoral training. Applicants should send a curriculum vitae, selected reprints, a short summary of research interests, and the names and addresses of four references to: Dr. John Mekalanos, Chair, Department of Microbiology and Molecular Genetics, Harvard Medical School, 200 Longwood Avenue, Boston, MA 02115. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.

ASSISTANT OR ASSOCIATE PROFESSOR ECOLOGY

The Department of Biology, University of Tampa invites applications for a tenure-track position beginning in August 1999 to teach introductory biology, ecology, environmental science, and conservation biology. We are interested in attracting a broadly trained Aquatic or Terrestrial Ecologist. The successful candidate is expected to involve undergraduates in research activities. Ph.D. required; prior teaching and research experience with undergraduates desirable. Salary is competitive and start-up funds are available. Send curriculum vitae, statement of teaching philosophy and research interests, official transcripts, and three references to: Ecology Search c/o Human Resources, University of Tampa, 401 West Kennedy Boulevard, Tampa, FL 33606-1490. Review of applications will begin September 1998 and continue until the position is filled. For more information, e-mail: kotto@alpha.utampa.edu.

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

POSITIONS OPEN

ASSISTANT PROFESSOR of biology. Applications are invited for a full-time tenure-track faculty position, beginning January 1999. Applicants must have a Ph.D. degree in biology or a related area (expertise in animal ecology or conservation biology preferred). Successful candidate will conduct research and teach introductory biology (evolution, biodiversity, and ecology) for majors, environmental biology for non-majors, and upper-level courses in area of specialization.

Purdue University Calumet, a campus of the Purdue system, enrolls over 9,000 students in more than 80 Associate, Bachelor's, and Master's degree programs in 16 academic departments. The 12-building, commuter campus is situated on 180 wooded acres in northwest Indiana, less than one hour by car or train from Chicago. The Department of Biological Sciences offers programs leading to a B.S. degree and an M.S. degree in biology.

To apply, send a statement of teaching and research experience and interest, curriculum vitae, copies of transcripts, and three letters of recommendation to: Search Committee, Biological Sciences, Purdue University Calumet, Hammond, IN 46323. Reviewing process begins September 1, 1998; applications will be accepted until position is filled. Purdue University Calumet is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR

The Department of Anatomy and Cell Biology seeks applications for a tenure-track faculty position. Research encompassing the cytoskeleton and its role in metastasis, extracellular matrix and nuclear interactions, and molecular neurobiology given priority; other related research areas considered. Candidates expected to develop a strong, independent research program with external funding; start-up funds available. Teaching medical students histology and/or neuroscience required; additional teaching opportunities available in biomedical sciences graduate program. Requires a Ph.D. or equivalent degree and at least two years of postdoctoral experience. Must be eligible for employment under Immigration Reform and Control Act. Send curriculum vitae, statement of research interests, and three letters of reference to: Dr. Kirby Jarolim, Chairman, Department of Anatomy and Cell Biology, Oklahoma State University College of Osteopathic Medicine, 1111 West 17th Street, Tulsa, OK 74107. OSU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION IN CELLULAR AND DEVELOPMENTAL NEUROBIOLOGY

Position available for a recent Ph.D. to study cell interactions involved in the formation of the nervous system, including cell migration, axon guidance and synaptogenesis. Approaches involve targeted mutation of genes, the biochemistry of surface receptors and evaluation of tissue function through micro-anatomical analyses and optical imaging.

The candidate should have a strong background in one or more of the following areas: developmental neuroscience, cell biology of surface membranes, or structure/function studies of proteins.

Letters of application, including a C.V. and letters from two references should be sent to: **Urs Rutishauser, Ph.D., Cellular Biochemistry & Biophysics Program, Box 290, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021. EOE/AA**



**Memorial Sloan-Kettering
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The best cancer care. Anywhere.



**The University of New Orleans
and the Audubon Institute
announce an Endowed Chair
for the Study of
Conservation of Endangered Species**



The University of New Orleans invites nominations and applications for the Doris Zemurray Stone Chair in Reproductive Biology and Species Preservation. The successful candidate will have research experience in reproductive physiology with emphasis on assisted reproduction techniques. Experience with collection, cryopreservation, and transfer of gametes and embryos in laboratory animals, domestic livestock, and/or exotic species is essential.

The Doris Zemurray Stone Chair in Reproductive Biology and Species Preservation will establish a dynamic research program on reproduction and preservation of wild species, particularly those with endangered status. The Chair will be appointed to the faculty in the Department of Biological Sciences at the University of New Orleans and will participate in its teaching programs and in the direction of graduate students. Research will be conducted at the nearby Audubon Center for Research of Endangered Species (ACRES), a new state of the art research facility.

Candidates should have credentials appropriate for appointment at the rank of Professor, but exceptional candidates at the rank of Associate Professor will also be considered. For more information, see <http://www.uno.edu/~bios>.

Send nominations or applications including: curriculum vita, statement of research interests, and contact information for five references by July 8, 1998 to:

Endowed Chair Search Committee
Department of Biological Sciences
University of New Orleans
New Orleans, LA 70148

The University of New Orleans is an equal opportunity/affirmative action employer.



**St. Jude Children's
Research Hospital**

ALSAC • Danny Thomas, Founder

POSTDOCTORAL POSITION GENETICS

St. Jude Children's Research Hospital offers an excellent research environment with state-of-the-art facilities. The Genetics Department, chaired by Dr. Gerard Grosfeld, consists of five faculty and thirty support staff. Two positions are available immediately in Dr. Alessandra d'Azzo's laboratory for enthusiastic individuals with a recent Ph.D. or MD-Ph.D. degree. Work in this productive and well-funded laboratory involves studying the molecular, biochemical and therapeutic aspects of lysosomal storage diseases (LSDs). Both in vitro and in vivo systems are employed to investigate the intracellular trafficking, stability and association of lysosomal proteins, to perform structure function studies of mutant genes and proteins, and to develop new therapeutic strategies for treatment of mouse models of specific LSDs. Experimental approaches range from the generation of knockout and transgenic mice to crystal structure determination of overexpressed lysosomal proteins.

Interested individuals should have practical experience in molecular biology, cell biology and/or biochemistry. Experience with handling laboratory animals will be advantageous. For additional information, please visit our web site at:

www.stjude.org

Please send a curriculum vitae and three letters of recommendation to: **Alessandra d'Azzo, Ph.D., Department of Genetics, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. Fax: 901-526-2907.**

An Affirmative Action/Equal Opportunity Employer.

TENURE TRACK POSITION

The Laboratory of Cardiac Energetics in the National Heart, Lung and Blood Institute is searching for a tenure track cardiologist to direct an independent clinical research program in cardiovascular magnetic resonance imaging (CMRI). The Laboratory has been actively developing the use of magnetic resonance imaging for cardiovascular disease diagnosis. Areas of interest have included studies of cardiac function, perfusion and viability as well as vascular anatomy/physiology and MRI contrast agent development. Clinical studies include ischemic heart disease, myocardial hypertrophy/myopathy, valvular disease and peripheral vascular diseases. The program currently has a dedicated 1.5T cardiac magnetic resonance imaging system designed for cardiac and cardiovascular applications. The Laboratory will be installing a similar devoted system in a regional hospital for acute patient evaluation within the next year that will become a major component of the clinical research program in the Laboratory. In addition, the Laboratory is equipped with state-of-the-art echocardiography and a fully equipped animal model cardiovascular physiology lab along with a 4T whole body MRI system. The position will be supported with 4 clinical fellows/postdoctoral positions as well as technical support positions. The Laboratory has electrical and mechanical engineering as well as image and data analysis support as core programs. A MD degree is required along with Board Certification in Cardiovascular Diseases and the ability to obtain a medical license in the state of Maryland. Experience in clinical research using cardiac imaging modalities is required, with knowledge in CMRI desirable. Salary is commensurate with previous experience and training.

Applications must be received within six weeks of the publication of this advertisement. Please submit a curriculum vitae and brief statement of research interests along with three letters of reference to: **OFFICE OF THE SCIENTIFIC DIRECTOR, NHLBI, NIH, 10 CENTER DRIVE MSC 1668, BETHESDA, MD 20892-1668.**

NIH is an Equal Opportunity Employer

POSITIONS OPEN

CHAIR DEPARTMENT OF PHARMACOLOGY YALE UNIVERSITY SCHOOL OF MEDICINE

The Yale University School of Medicine invites applications and nominations for the position of Chair for the Department of Pharmacology.

The Department of Pharmacology at Yale has strong programs in biochemical and molecular pharmacology with special emphasis on neuroscience and cancer pharmacology and an emerging program in structural biology.

Founded at the turn of the century, the Department has a rich history of discovery, interactions, and collaborations with both the basic and clinical departments and serves as a bridge department between the two areas. The Department has 14 full-time and 33 research faculty housed in 35,000 square feet of laboratory space.

We are seeking an individual of national stature with demonstrable leadership qualities, a substantial record of scholarly achievement, and an appreciation for the varied and complex ramifications encompassed by modern pharmacology departments.

Candidates should have a Ph.D. or M.D. degree and academic credentials for a tenured faculty appointment at Yale University School of Medicine. Nominations and applications should be received by 1 October 1998.

Please send nominations, including names, addresses, and telephone numbers to:

Vincent T. DeVita, Jr., M.D.
Chair, Pharmacology Search Committee
Yale University School of Medicine
333 Cedar Street, WWW 205
P.O. Box 208028
New Haven, CT 06520-8028

Applicants should include a letter of interest and a curriculum vitae and names of three references.

Nominations of women and minority group members are encouraged.

FACULTY POSITION in microbiology and molecular genetics. The Department of Microbiology and Molecular Genetics at the University of California, Irvine is seeking applicants for a faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level, depending upon qualifications. The applicant's previous work should have been judged by peer review to have been scientifically rigorous, and he/she should have been successful in obtaining sufficient funds from peer-reviewed grants (including Postdoctoral Fellowship support for Assistant Professor candidates). We are seeking a faculty member whose research is in one of three broad areas: (1) eukaryotic gene expression: nuclear architecture, transcriptional/posttranscriptional regulation; (2) molecular pathogenesis: molecular genetics of bacterial, viral, fungal, or parasitic infections, including the immune response to infectious agents; functional genetics of human disease; (3) molecular physiology: intracellular signaling pathways, nuclear-cytoplasmic transport. Candidates must have a Ph.D. and/or M.D. The successful candidate will have some teaching responsibilities but will have considerable time available for research and research-related activities. Please send curriculum vitae, summary of research interests, and names of three references to: Dr. Alan L. Goldin, Search Committee Chair, Department of Microbiology and Molecular Genetics, College of Medicine, University of California, Irvine, CA 92697-4025. E-mail: agoldin@uci.edu. The University of California, Irvine is an Equal Opportunity Employer, committed to excellence through diversity.

OPHTHALMIC GENETICS FACULTY POSITION AT THE WILMER EYE INSTITUTE Johns Hopkins University Baltimore, Maryland

The Wilmer Eye Institute invites applications for a new faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level in the area of ophthalmic genetics including, but not limited to, gene mapping/positional cloning, genetic mechanisms underlying hereditary blindness, animal models, gene therapy, genetic epidemiology. The candidate will receive an appointment in the Wilmer Eye Institute and in a basic science department.

Applicants should send a curriculum vitae, a short research plan, and three letters of references to:

Dr. Irene H. Maumenee
Head of the Search Committee
Johns Hopkins Hospital
Baltimore, MD 21287-9237

JHU is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DEPARTMENT OF NEUROLOGY SCHOOL OF MEDICINE The University of North Carolina at Chapel Hill

The School of Medicine of the University of North Carolina at Chapel Hill is searching for an individual to Chair the Department of Neurology and to provide continued scholarly, academic, and administrative leadership to its already outstanding and existing programs. The nationally recognized department has an established residency program providing for a total of 10 Residents with four Fellowship programs in subspecialty areas. The department has excellent facilities, including clinical and research space in the new North Carolina Neurosciences Hospital, and strong collaborative relationships with other departments, research centers, and programs within the University. Other academic and industrial institutions in the Research Triangle enhance the scientific and diverse environment.

Minimum qualifications include a M.D. degree, a distinguished record of clinical excellence, creative research productivity, administrative skills, and a commitment to medical education. Letters nominating qualified candidates are requested. Letter of interest, curriculum vitae, and the names, addresses, and telephone numbers of four or more references from qualified candidates are welcomed. Reply to:

Robert N. Golden, M.D.
Chair, Department of Neurology Search Committee
c/o Office of the Dean, School of Medicine
CB# 7000, MacNider Hall
The University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7000
Attention: Jane Teeter

The University is an Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.

ASSISTANT PROFESSOR QUANTITATIVE PLANT GENETICS PURDUE UNIVERSITY

Purdue University invites applications for a 10-month, tenure-track faculty position in the Department of Forestry and Natural Resources with duties assigned 70 percent research and 30 percent teaching. The successful candidate will collaborate with and complement a team in forest biotechnology and regeneration that includes departmental faculty and Forest Service Scientists located at Purdue. The position will also involve teaching two courses each year. The successful candidate must hold a Ph.D. with a specialization in quantitative plant genetics and training in the use of the contemporary tools of molecular biology. Academic training in forest genetics is desirable as is postdoctoral experience.

Applicants should submit a letter of application, résumé, university transcripts, a list of three references, and reprints of selected publications to: Dr. Andrew R. Gillespie, Chair, Genetics Search Committee, Department of Forestry and Natural Resources, Purdue University, 1159 FORS, West Lafayette, IN 47907-1159. Screening of applicants will begin September 15, 1998, and continue until the position is filled.

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

FACULTY POSITION VASCULAR BIOLOGY

The Division of Hematology, Oncology, and Transplantation at the University of Minnesota is seeking an M.D. or Ph.D. scientist in the area of vascular biology research. Area of emphasis should be directly related to hemostasis/thrombosis and/or endothelial biology and the development of new therapy. Those candidates wishing to participate in clinical activity should be Board-certified in internal medicine and Board-certified/eligible in hematology or oncology. Opportunity exists for participation in the Department's Molecular Medicine and Vascular Biology Program and broad intramural collaborations. This appointment will be at the rank of tenure-track ASSISTANT or tenured ASSOCIATE PROFESSOR, depending upon qualifications. Candidates must have demonstrated strong skills in research, with evidence of innovation and productivity, as well as ability to obtain extramural funding. Inquiries are welcomed. Application consisting of a curriculum vitae and names of three references should be sent to: Dr. Nigel Key, Box 480 Mayo, 420 Delaware Street S.E., Minneapolis, MN 55455. Applications will be reviewed beginning July 31, 1998, and will be accepted until position is filled. The University of Minnesota is an Equal Opportunity Educator and Employer.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION IN DEVELOPMENTAL BIOLOGY

The Molecular and Cell Biology Department of the University of Texas at Dallas invites applications for a tenure-track faculty position in the area of molecular developmental biology to begin January 1, 1999. We are particularly interested in individuals using *Arabidopsis* or *C. elegans* as model systems. The preference is for candidates at the ASSISTANT PROFESSOR level, but highly qualified applicants at more advanced levels will also be considered. The Department is actively involved in basic research, graduate training at the doctoral level, and educating a select group of undergraduate students. Applicants should have at least two years of postdoctoral experience and demonstrate a vigorous and independent research program capable of obtaining external support. Teaching responsibilities will include participation in appropriate graduate and undergraduate courses. The start-up package, salary, and teaching requirements are competitive. Applicants should forward a curriculum vitae and three letters of reference, plus a description of research plans and teaching interests, to: Academic Search Number 2027, The University of Texas at Dallas, P.O. Box 830688, Richardson, TX 75083-0688.

Review of applications will begin immediately and applications will be accepted until the position is filled. *Indications of sex and ethnicity is requested as part of the application for Affirmative Action statistical purposes but is not required. The University of Texas at Dallas is an Affirmative Action/Equal Opportunity Employer.*

FACULTY, TRANSFUSION MEDICINE

The Department of Pathology and Laboratory Medicine at the University of Pennsylvania invites applications for a faculty position in the TENURE TRACK of the Division of Laboratory Medicine available upon completion of search in fall 1998. Rank will be commensurate with experience. The candidate must hold M.D. or M.D.-Ph.D. degrees and be Board-eligible or Board-certified in clinical pathology. The successful applicant will be a dynamic individual with a strong background in the scientific and clinical aspects of transfusion medicine. Specifically, the applicant will be expected to further develop our expanding research program in transfusion biology and medicine.

Applicants with an interest in cellular immunotherapy and graft versus host disease will receive preference. The environment for collaborative research within the Department and at the University of Pennsylvania is outstanding, including the presence of the Cancer Center and the Institute for Human Gene Therapy. Curriculum vitae, a statement describing previous experience, and the names of three references should be submitted by August 15, 1998, to: Leslie E. Silberstein, M.D., Chairman of the Search Committee, Department of Pathology and Laboratory Medicine, 284 John Morgan Building, University of Pennsylvania, Philadelphia, PA 19104-6082. The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer; women and minorities are encouraged to apply.

ASSISTANT PROFESSOR VIROLOGY OR PROTEIN STRUCTURE-FUNCTION

Applications are invited for a tenure-track position of Assistant Professor in the Department of Microbiology and Immunology, University of British Columbia. The position is subject to final budgetary approval. Preference will be given to individuals with research experience in either one of the following two areas: (1) virology; (2) protein structure-function/protein engineering with an emphasis on microbial physiology. The successful applicant will be responsible for teaching an upper-level undergraduate course in either virology or biotechnology and will eventually participate in teaching an introductory microbiology course. The existing members of the Department have attracted a high level of funding and the Department has a very successful graduate program.

Please submit application, curriculum vitae, and the names of three referees to: Dr. G. Weeks, Department of Microbiology and Immunology, University of British Columbia, 300—6174 University Boulevard, Vancouver, British Columbia V6T 1Z3 Canada. Applications should include a brief summary of research aspirations and be received by September 1, 1998. The University of British Columbia hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.

FACULTY POSITIONS IN DEVELOPMENTAL BIOLOGY

Applications are now being accepted for four new tenure-track faculty positions at the rank of ASSISTANT or ASSOCIATE PROFESSOR for a new research group centered on cardiac developmental biology. Areas of interest include the molecular regulation of lineage determination, cell cycle regulation, and terminal differentiation as they pertain to cardiomyocytes, the coronary arteries, and the cardiac nervous system. There is particular interest to assemble a group of investigators with complementary systems approaches.

Applicants must possess a Ph.D. and/or M.D. degree and have a record of research productivity and grant support. Successful candidates will have academic appointments in Pediatrics and in a basic science department of the Medical School and are expected to establish a strong externally funded research program and contribute to graduate and medical education. Positions come with generous start-up packages.

This recruitment represents an expansion of the Herman B Wells Center, a highly interactive and multidisciplinary research center. Active programs currently include cardiomyocyte cell cycle regulation, hematopoiesis and myeloid gene regulation, gene therapy, DNA repair and fetal and neonatal metabolic physiology. Transgenic and gene targeting facilities and a mass spectrometry core facility are available on site.

Applicants should submit a curriculum vitae, summary of research accomplishments and future research plans, and the names of at least three references by July 25, 1998, to:

Dr. Loren Field
Chair, Search Committee
Wells Center for Pediatric Research
Riley Hospital for Children
702 Barnhill Drive, Room 2600
Indianapolis, IN 46202
ljfield@iupui.edu

INDIANA UNIVERSITY
SCHOOL OF MEDICINE

Indiana University is an EO/AA Educator, Employer, and Contractor.

WESTVACO CORPORATION FOREST RESOURCES DIVISION FOREST SCIENCE & TECHNOLOGY RESEARCH SPECIALISTS IN FOREST TREE MOLECULAR BIOLOGY AND TISSUE CULTURE

Westvaco is a major manufacturer of paper, envelopes, 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 and organogenesis, DNA transformation, and DNA mapping. We are seeking five highly motivated candidates to join our programs in the areas of molecular biology and tissue culture.

Three positions are available in molecular biology in the areas of flower development and DNA marker analysis. Minimum qualifications are a Bachelor's degree and preferably at least two years experience or a Master's degree in biology (or a related field) with experience in molecular biology including DNA extractions, PCR, restriction digestion, DNA ligation, and gel-electrophoresis. For one of these positions a Master's degree with at least four years relevant experience is required. Practical knowledge of methods used in gene construction is essential.

Two positions are available in the area of pine somatic embryogenesis and hardwood tissue culture. These positions require a Master's degree in a plant science-related field and preferably at least two years of experience in plant tissue culture and cell culture. Candidates should be familiar with plant transformation methods. Experience with woody plants is desirable but not required.

All candidates should be able to function within a team environment with a moderate degree of independence. Additional duties may include general lab maintenance, ordering of supplies, field collection of samples, and caring for transgenic plants.

Authorization to work in the U.S. is required. Applications will be accepted until July 31, 1998, or until qualified applicants are found. For consideration, please send résumé, college transcripts, and three letters of recommendations to: **Cindy McCord, Westvaco Forest Science Laboratory, P.O. Box 1950, Summerville, SC 29484.** Inquiries: (843) 851-4733; or e-mail: clmccor@westvaco.com.

Westvaco is an Equal Opportunity Employer, M/F.

Our Competitive Advantage Lies IN OUR PEOPLE

At Galderma Research, Inc., a subsidiary of L'Oreal and Nestle, the excellence of our products is supported by the excellence of our people...that's our competitive advantage! As a leader in the research, development and marketing of prescription and over-the-counter dermatological products, we are currently expanding our research activities to a facility located near Princeton, NJ. Contributions of excellence are needed for the following opportunities:

Medicinal Chemistry Investigators and Senior Investigators

We are seeking synthetic chemists with good practical and theoretical knowledge of a wide range of organic chemical reactions. Emphasis will be placed on the practical aspects of research, but for the senior position, planning, supervisory and budgetary activities will be included. Candidates will have a Ph.D.; at least 5 years post-doctoral experience is required for the senior position. Familiarity with biochemical/molecular processes will be essential in the design phase of the programs for which the selected individuals will be responsible. Experience with solid/liquid phase combinatorial synthesis of small libraries is preferred.

Biology Investigator and Senior Investigator

These positions will focus on the research of molecular aspects of skin-related diseases for drug discovery. Chosen individuals will be expected to work together with Chemists and other Biologists in an integrated discovery team. Candidates will have a Ph.D. and 0-5 years post-doctoral experience. Also requires good working knowledge of molecular biology with strong background in nuclear transcription factors, immunology and cellular aspects of skin biology. The senior position will involve planning, supervisory, practical and budgetary duties.

Informatics Senior Investigator

This position entails leading a team involved in the creation and management of a biological and chemical database. The objective is to design, conduct and manage the results from high throughput screens designed to identify new leads for our research programs. Selected individual will report directly to the Assistant Director for Research and work closely with the chemistry, biology and clinical pharmacology research teams. Candidates should have a Ph.D. in the chemistry or biology fields and strong computer skills. Experience with HTS workstation and a good working knowledge of at least 1 software program such as Oracle, Isis Base or Chemex are desirable.

Galderma is proud to offer a competitive salary, comprehensive benefits including medical/life/dental/vision and a generous profit sharing trust plan. Qualified applicants are encouraged to send credentials to: **Galderma Research, Inc., Attn: Staffing, 10835 Altman Row, Suite 250, San Diego, CA 92121; fax: (619) 453-5343.** EOE, MFDV

GALDERMA



POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, DAVIS

Position #2206. The Department of Psychiatry at the University of California, Davis is seeking applications for a full-time **ASSOCIATE/FULL PROFESSOR** in the Ladder Rank series with research expertise in the area of neuroimaging. The candidate must hold an M.D. and/or Ph.D. degree and have a demonstrated record of solid academic accomplishment including ability to compete for extramural research support. The candidate will preferably have expertise in structural and/or functional magnetic resonance imaging and will be interested in developing a neuroimaging research program. UC Davis has made a major commitment to neuroscience research and the Department of Psychiatry will expand its neuroimaging program in coordination with the overall growth of clinical neuroscience research. The new faculty member will be tenured in the School of Medicine. He/she will be expected to collaborate in the development of a larger functional neuroimaging research facility at UC Davis Medical Center that will serve not only his/her own research program but also the research of other clinical and basic neuroscience and medical investigators. Please send curriculum vitae, a letter summarizing past and future research directions, and the names of three references to: **Dr. David Amaral, Chair, Neuroimaging Search Committee, Department of Psychiatry, University of California, Davis Medical Center, 4430 V Street, Sacramento, CA 95817.** Applications will be accepted until the position is filled, but not later than December 31, 1998. *The University of California, Davis is an Equal Opportunity Employer.*

ADULT MEDICAL GENETICS PROGRAM

The Department of Medicine at the University of Colorado is launching a Program in Adult Medical Genetics, which will be interdivisional across all 14 Divisions. To develop this program a national search has been initiated for an academically oriented, well-funded **GENETICIST**. The level of academic appointment is flexible depending on the individual's qualifications. The individual can have expertise and thus an appointment in any of the subspecialty Divisions in the Department of Medicine. There will be seed funds available to support the development of this program, which will include clinical, educational, and research (both basic and clinical) components. This program in the Department of Medicine will be an integral part of the University of Colorado Health Sciences Center Program in Human Genetics.

Those interested should send their curriculum vitae to: **Robert W. Schrier, M.D., Professor and Chairman, Department of Medicine, University of Colorado School of Medicine, 4200 East Ninth Avenue, B178, Denver, CO 80262.**

Two positions beginning January, 1999.

ASSISTANT PROFESSOR. Aquatic invertebrate zoology, nine-month, tenure-track. Ph.D. in biological sciences. Teaching and postdoctoral research experience preferred. Teach introductory biology, limnology, invertebrate zoology, environmental science, and conduct research. Participation in ongoing funded projects possible.

BIOLOGY INSTRUCTOR/MULTIMEDIA SPECIALIST. 12-month, renewable, non-tenure-track. Teach biology and develop multimedia content. Ph.D. in biological sciences. Details at website: <http://bioweb.wku.edu>. Submit application by August 14, 1998, to: **Chair, Aquatic Invertebrate Zoologist Search Committee or Chair, Multimedia Specialist Search Committee, Department of Biology, Western Kentucky University, 1 Big Red Way, Bowling Green, KY 42101-3576.**

HEALTH RESEARCH ANALYST

ECRI, a nonprofit health research agency, seeks Master's or Doctoral-level scientists with life science, social science, or epidemiology training and a voracious reading ability to join our Health Technology Assessment Group. This group evaluates clinical literature and critiques health technologies. Excellent analytical and science-writing skills essential. This is a full-time in-house position. Send or FAX résumé to: **Department CT, ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462. FAX: 610-834-1275. Equal Opportunity Employer/Affirmative Action.**

POSITIONS OPEN



ARIZONA STATE UNIVERSITY

BIOIMAGING LABORATORY MANAGER

The W. M. Keck Bioimaging Laboratory at Arizona State University seeks applications for a full-time Manager who will oversee the daily operations of a multi-user facility dedicated to the application of new imaging techniques to research in the biological, medical, and bioengineering fields. This position is on a renewable, state-funded, annual contract. The successful candidate must have at a minimum a M.S. degree, at least three years of experience in bioimaging, and experience in using computer software and hardware dedicated to imaging tasks. In addition, the candidate must have the ability to interact productively with users, to conduct training sessions, and to assist in writing grant proposals on behalf of the Laboratory. Desired qualifications include ability to conduct independent or collaborative research and a Ph.D. in life science discipline. This position is intended to provide up to 20 percent time for collaborative research in bioimaging. Salary will be competitive and commensurate with experience. Applicants must submit a curriculum vitae, a statement of experience and research interests in bioimaging, appropriate reprints, and arrange to have three letters of recommendation sent to: **Dr. Douglas E. Chandler, Director, W. M. Keck Bioimaging Laboratory, Arizona State University, Department of Biology, P.O. Box 871501, Tempe, AZ 85287-1501.** Application deadline is August 15, 1998, with applications reviewed weekly thereafter until the position is filled. *Arizona State University is an Affirmative Action/Equal Opportunity Employer.*

MOLECULAR, CELLULAR, AND CHEMICAL TOXICOLOGISTS

Openings are available in the Environmental Chemistry and Toxicology Laboratory at the University of California at Berkeley for **POSTGRADUATE RESEARCH SCIENTIST** positions in the non-tenure track to investigate the mechanism of action of pesticides, xenobiotics, and related biologically active compounds. Appointments are for one year with possible extension based on performance. The specifications for each position depend on the programmatic needs. The laboratory is currently soliciting applications in a relatively wide range of areas from which specific qualified candidates will be selected. Applicants must hold a Ph.D. or equivalent degree with emphasis on one or more of toxicology, pharmacology, molecular biology, cell biology, chemical mechanisms (medicinal, pharmaceutical, or agricultural chemistry), protein isolation/sequencing, radioligand binding studies, and photoaffinity probes to investigate mechanisms of mammalian toxicity. Each appointment is made at a level commensurate with academic qualifications and experience. Send curriculum vitae, publication list, and names of three professional references to: **Dr. John E. Casida, Department of Environmental Science, Policy, and Management, 114 Wellman Hall, University of California, Berkeley, CA 94720-3112. Telephone: 510-642-5424; FAX: 510-642-6497. The University of California is an Equal Opportunity/Affirmative Action Employer.**

MOLECULAR BIOLOGIST/GENETICIST PROSTATE CANCER RESEARCH

The Division of Urologic Surgery at Washington University School of Medicine, seeks a highly qualified Molecular Biologist/Geneticist to join its multidisciplinary prostate cancer research team. This position requires a Ph.D.; postdoctoral experience desired. Salary and faculty appointment level will be competitive and dependent on experience. Please send curriculum vitae, statement of research interests, and three references to: **William J. Catalona, M.D., Professor and Chief, Division of Urologic Surgery, Washington University School of Medicine, 4960 Children's Place, St. Louis, MO 63110.**

PH.D. OR M.S. with experience in virology and cell culture to work in busy commercial laboratory involved in testing of antimicrobials. Successful applicant would also assist in research and development. Please forward curriculum vitae to: **Dr. J. C. Pugh, MicroBioTest, Inc., 105B Carpenter Drive, Sterling, VA 20164. FAX: 703-925-9366; e-mail: pugh@microbiotest.com.**

POSITIONS OPEN

ASSOCIATE SPECIALIST NUCLEAR ENGINEERING UNIVERSITY OF CALIFORNIA Berkeley, California

Salary: \$41,820 to \$50,364 Per Year

Associate Specialist position at the University of California, Berkeley, for a one-year appointment with possibility of renewal.

Duties: develop and conduct research projects on the interaction of technical and social aspects of nuclear materials management, supervise graduate students pursuing interdisciplinary research in related areas, prepare publications and annual reports, facilitate communication among research staff from technical and social science disciplines.

Qualifications: advanced degree or equivalent in energy and resources and demonstrated ability to synthesize insights from different disciplines including physical sciences, engineering, anthropology, and the sociology of technology.

Deadline: July 31, 1998, or 30 days from publication date, whichever is later.

Apply to: Send curriculum vitae and name/address of three references to:

**William F. Kastenberg
Nuclear Engineering
University of California
4153 Etcheverry
Berkeley, CA 94720-1730**

UNIVERSITY OF MICHIGAN MEDICAL CENTER

SUPERVISOR National Gene Vector Laboratory (NGVL) and Vector Core facility. The University of Michigan is seeking a Ph.D. to supervise the NGVL and Vector Core facilities at the University of Michigan Medical School. The NGVL provides clinical grade vectors to eligible investigators for gene therapy clinical trials. The Vector Core provides retroviral, adenoviral, and other vector production and testing services to the faculty and staff at the Medical School, for use in both basic and clinical research.

The Supervisor will coordinate GMP and GLP production and quality control testing of vectors, prepare and track material transfer agreements, review applications for use of the NGVL facility, supervise the technical staff, provide advice to Principal Investigators, and prepare progress reports and grant submissions. Applicants must have scientific expertise and organizational skills, as well as experience in all aspects of vector production and screening. Applicants should send a cover letter and curriculum vitae to: **Judith Stein, 4520 MSRB I, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0650. The University of Michigan is an Equal Opportunity Employer.**

MODELER, CONSERVATION ECOLOGY/FISHERIES THREE PERMANENT POSITIONS National Oceanic Atmospheric Association San Francisco Bay Area

The Tiburon Laboratory of the National Marine Fisheries Service, a National Oceanic Atmospheric Association (NOAA) research facility, invites applications for three positions to develop and implement statistical and simulation models of Pacific salmonid populations. Research emphasis is on threatened and endangered species and their interactions with other populations, fishing, and the environment. Experience in modeling salmonids or other endangered species is desirable. Salary \$49,167 to \$76,007. Announcement W/NMF/980316.BC closes June 30, 1998; for details, Telephone: 206-526-6294; website: <http://www.pfeg.noaa.gov/tib/jobs>. U.S. citizenship required. The Department of Commerce is an Equal Opportunity and Affirmative Action Employer.

PROTEIN PURIFICATION SCIENTIST

Wayne Hughes Institute, a nonprofit research organization, dedicated to combating cancer, AIDS, and diseases of the immune system has a position available for a Protein Purification Scientist in the Structural Biology Department. A M.S. degree in biochemistry/chemistry or related field is required plus five years of experience in protein purification. Additional experience in cloning preferred. Interested applicants should send curriculum vitae and salary requirements to: **Wayne Hughes Institute, Attn: Human Resources, P.O. Box 8178, St. Paul, MN 55108. FAX: 612-697-0645. Equal Opportunity Employer.**

Widen your career

across a broad
spectrum of drug
development issues

Excellent Salaries + Attractive Company Benefits

SmithKline Beecham is renowned as a world leader in innovative pharmaceutical development, healthcare and healthcare management.

Drug Development Sciences was established within Safety Assessment in January 1998. Its principal aim is to create a focus of expertise in drug development, and thereby to design and manage high quality preclinical toxicology programmes that will support the successful registration and marketing of drugs. This requires an ability to deliver innovative, rational, science-based products that will support clinical trials and pre-empt or answer regulatory concerns, and to work successfully with regulatory agencies towards mutually acceptable goals.

Within this challenging and rewarding environment, we now require two scientists who wish to broaden their career expertise in toxicology by helping to shape Safety Assessment's future influence in bringing drugs to market, and contributing to multidisciplinary teams that encompass the whole spectrum of drug development.

Welwyn, Hertfordshire

Senior Drug Development Scientist

Supervising 1-3 toxicologists and reporting to the Unit Director, your remit ensures both high quality drug development and the strategic direction of DDS.

As a Project Representative, you must be extremely self-sufficient, have a thorough understanding of preclinical toxicology sciences and worldwide regulatory requirements, and have an appreciation of the other disciplines that are key to drug development. Excellent negotiation and communication skills are needed. You will represent Safety Assessment on multidisciplinary project teams that are committed to driving a drug's progress through to filing and beyond. The role involves continuous and complex two-way interaction with individuals and groups, along with the influencing of colleagues in their management of targets. You will be expected to develop both personal and strategic interfaces with Development department colleagues, Discovery, Project Management, Clinicians, Regulatory Affairs and others.

Your responsibilities will include preparation of high standard summary documents, and presentation of data to internal review committees and regulatory agencies worldwide. As a senior scientist, you will also critically review documents prepared by your direct reports and other Project Representatives. Within Safety Assessment, you will act as a key consultant for innovative development programmes and strategies.

By leading or joining teams drawn from within Safety Assessment, you will design and direct investigative programmes aimed at resolving issues with immediate or potential impact on a drug's clinical or regulatory progress.

Along with acting as a mentor for less experienced Project Representatives, your responsibilities will extend to supporting delivery of a formal Project Representatives training programme. You will also assist in development of the partnership between Project Representatives and Study Directors, who are members of the same strategic unit.

You will also contribute to the unit's other strategic roles of shaping the external regulatory interface, creating and managing an 'institutional memory' database, and developing relationships with Contract Research Organisations.

Together with 5-10 years' essential pharmaceutical industry or

drug development experience, applicants will have a PhD in toxicology, pharmacology, biochemistry or a related subject and/or a DVM or equivalent. Ref: SA/SAS/051/SC.

Drug Development Scientist

As a Project Representative you will be a member of multidisciplinary teams committed to driving a drug's progress through to filing and beyond. Successful interaction will require self-confidence, and good communication and influencing skills. You will apply your broad knowledge of preclinical toxicology to provide sound advice on both scientific and strategic needs and plans to meet clinical and regulatory requirements, and ensure that senior management in Safety Assessment are informed promptly of all issues. In addition, you will prepare reports (in close partnership with Study Directors), summaries, regulatory documents and responses to regulatory questions to high quality standards and on time, in order to ensure that milestones are met.

Along with providing scientific leadership of study design and interpretation, and conveying arguments effectively to internal and external groups, you will be required to maintain an awareness of trends in toxicology, GLP issues and appropriate regulatory guidelines. You will also lead or participate in teams formed to investigate issues potentially impacting a compound's progress through development, and advise colleagues in Discovery Programmes.

With considerable scope for the planning and executing of your role, you must be a creative and investigative thinker who has the ability to persuade and influence colleagues within and outside Safety Assessment, while accepting appropriate advice and direction.

The successful applicant will also be expected to have a 'hands-on' role in the unit's applied research activities, currently centering on nuclear magnetic spectroscopy of tissues and fluids, and be willing to develop interest and experience in the appropriate area. The work includes liaison with the one of the world's foremost academic biofluid NMRS laboratories.

Applicants must have 3-5 years' experience in a drug development environment, or other appropriate pharmaceutical industry experience. While the minimum requirement is an MSc, a PhD in toxicology, pharmacology, biochemistry or a related subject and/or a DVM or equivalent is preferred. Ref: SA/SAS/052/SC.

Both positions offer the opportunity to work with cutting edge technology with a world leading company in order to further your career. To apply, please send your CV, quoting the appropriate reference, on both letter and envelope, to the UK Recruitment Manager, SmithKline Beecham Pharmaceuticals, c/o A.E.P., Suite 6, Silk Mill House, 21 Marsh Parade, Newcastle-under-Lyme, Staffordshire ST5 1BT. Closing date: 26th June 1998. For more information on SmithKline Beecham, visit our website at www.sb.com

It is part of our fundamental philosophy at SmithKline Beecham that we recruit, train, develop, reward and promote persons in all job areas solely on the basis of qualifications, skills, abilities and aptitudes. Decisions based on race, colour, age, religion, sex, sexual orientation, disability, ethnicity or national origin are unacceptable to the Company.

New Frontiers for Healthcare

SB
SmithKline Beecham
Pharmaceuticals
Research & Development

POSITIONS OPEN

PRODIGENE

A world leader in expression and purification of recombinant proteins in plants invites applicants for full-time positions. All candidates should be highly motivated, possess excellent communication skills, and desire to work in a high-performance environment with multidisciplinary teams. All candidates will need to have excellent skills.

RESEARCH ASSISTANT/ASSOCIATE FOR CELL BIOLOGY

We are seeking a highly motivated individual to join our cell biology group, to assist in plant tissue culture in our product development activities. This position requires a Bachelor's degree in plant biology or related field with two to three years of experience. This experience must include tissue culture with a crop plant.

MOLECULAR BIOLOGY

We are seeking a highly motivated individual to join our molecular biology group, to assist in the construction of gene expression vectors. This position requires a Bachelor's degree in biochemistry or related field with two to three years of experience. This experience must include familiarity with standard cloning techniques and DNA manipulation software.

Please send a letter of interest and curriculum vitae to:

Liz Eickenhorst
ProdiGene
1500 Research Parkway, Suite 220
College Station, TX 77845

TRANSGENIC SCIENTIST PURDUE UNIVERSITY CANCER CENTER

The Purdue University Cancer Center has an immediate opening for a qualified individual to assume operational responsibility for the Cancer Center's newly developed and fully operational Transgenic Mouse Core Facility (TMCF). The TMCF offers both knockout and conventional transgenic services to the Purdue University community. Responsibilities and duties for this position include the generation of transgenic mice by pronuclear injection, gene targeting in ES cells, and the derivation of chimeric mice. The qualified candidate will have an M.S. or Ph.D. degree, experience in both ES cell culture and transgenic procedures, plus excellent communication and interpersonal skills. Qualified applicants should send their curriculum vitae and the names of at least three references to: Transgenic Mouse Core Facility Position, Purdue University Cancer Center, Hansen Life Sciences Research Building, West Lafayette, IN 47907-1524.

Purdue University is an Equal Opportunity Employer.

INTERDISCIPLINARY PROGRAM IN MUSCLE BIOLOGY UNIVERSITY OF MARYLAND, BALTIMORE

PRE- and POSTDOCTORAL POSITIONS for training in biophysics, biochemistry, physiology, and cellular, developmental, and molecular biology of skeletal, cardiac, and smooth muscle.

Postdoctoral applicants should e-mail their letter of interest, curriculum vitae, and list of references to: e-mail: kreineck@umaryland.edu. Predoctoral candidates should request an application via e-mail. NIH-NIAMS-funded positions available for U.S. citizens and permanent residents only.

Further information available at website: <http://som1.umaryland/muscle/home.html> or contact: Dr. Martin Schneider, 108 North Greene Street, Baltimore, MD 21201. E-mail: mschneid@umaryland.edu.

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

POSTDOCTORAL POSITIONS AVAILABLE

Applicants should be individuals with a Ph.D. and/or M.D. who have experience and interest in the field of molecular immunology and allergy. Research centers on dissecting the genes and molecular mechanisms underlying the development of allergic diseases, with a specific focus on cytokine receptors and signaling pathways. Techniques include molecular and cellular biology, biochemistry, and mouse transgenic models. Send curriculum vitae and cover letter to: Gurjit Kaurana Hershey, M.D., Ph.D., Division of Allergy and Immunology, Children's Hospital Medical Center, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. E-mail: hersg0@chmcc.org; FAX: 513-636-4615. Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.

POSITIONS OPEN



MANUFACTURING DEVELOPMENT SCIENTIST

Ambion, Inc. is a rapidly growing biotechnology company, specializing in RNA-related research products for Molecular Biologists. Ambion is in Austin, Texas, situated at the edge of the Texas hill country, the location of the state capitol, and the University of Texas. Ambion seeks a creative scientist who can add depth to our manufacturing group as a product and process development scientist for the position of Manufacturing Development Scientist (Job #182). Requirements for this position include a B.S. in biochemistry or related field (M.S. or Ph.D. preferred), strong experience in protein expression/purification, and knowledge of general molecular biology techniques. Previous experience in an industrial manufacturing environment a plus. Must interact well with both research and development and manufacturing scientists.

Ambion offers a stimulating work environment, competitive salary, benefits, 401(k), and employee bonus plans. Send résumé to: Ambion, Inc., Job #182, 2130 Woodward Street #200, Austin, TX 78744-1832. Equal Opportunity Employer.

PULMONARY CRITICAL CARE

OPEN RANK. The Pulmonary/Critical Care Section of the Department of Medicine, Baylor College of Medicine, is undergoing significant expansion of a collaborative group of Basic Investigators in inflammatory biology related to the lung. We are seeking highly qualified M.D. or Ph.D. Basic Investigators. Successful applicants will be full-time faculty at an appropriate academic rank. For consideration, please send a letter of interest and curriculum vitae to: Joe R. Rodarte, M.D., Pulmonary/Critical Care Section, Department of Medicine, Baylor College of Medicine, 6550 Fannin, Suite 1225, Houston, TX 77030. Baylor College of Medicine is an Equal Opportunity/Affirmative Action and Equal Access Employer.

POSTDOCTORAL POSITIONS available to study cellular immune response against *Toxoplasma gondii*. Previous background in immunology required. These are NIH-funded positions for at least three years. Send curriculum vitae and three letters of references to:

Intiaz Khan, Ph.D.
Dartmouth Medical School
Department of Medicine
HB 7506
One Medical Center Drive
Lebanon, NH 03756
E-mail: intiaz.khan@dartmouth.edu

POSTDOCTORAL FELLOW, VISITING SCHOLAR POSITIONS (2) are available immediately for Laboratory of Growth and Development at Davies Medical Center and University of California-San Francisco. Will study protein structure of components of the insulin-like growth factor (IGF) system. Prior hands-on experience in the purification and expression of proteins is required.

Please mail or FAX résumé to: Davies Medical Center, Human Resources Department, Castro and Duboce Streets, San Francisco, CA 94114. FAX: 415-565-6066.

POSTDOCTORAL POSITION

Postdoctoral positions available immediately for candidates with expertise in molecular biology. Projects include gene therapy and epithelial biology. Send curriculum vitae and names of three references to: Dr. Paul A. Khavari, Stanford University School of Medicine, MSLS Building P206, Stanford, CA 94304-5486. FAX: 650-723-8762; website: <http://cmgm.stanford.edu/khavari>. Stanford University is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITION available immediately to study the structure and dynamics of oligonucleotide intermediates in genetic recombination. A background in fluorescence spectroscopy, nucleic acid chemistry, or biophysical chemistry is preferred. Send curriculum vitae and names of three references to: Dr. David Millar, Department of Molecular Biology, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037. FAX: 619-784-9067; e-mail: millar@scripps.edu.

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** are available to investigate virulence mechanisms of *Haemophilus ducreyi*, the etiologic agent of chancroid. Emphasis will be placed on genetic analysis of bacterial products involved in the formation of genital ulcers, especially toxins (see: *PNAS* 94:4056, 1997) and other bacterial factors that interact directly with the host environment. Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis in conjunction with a relevant animal model. Positions include salary, fringe benefits, and the opportunity to work in a dynamic research environment. First position available after August 1, 1998. Second position available after January 1, 1999. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048. FAX: 214-648-5905; e-mail: hansen01@utsw.swmed.edu. UT Southwestern is an Equal Opportunity/Affirmative Action Employer.

The Division of Gastroenterology and Hepatology at Mayo Clinic in Rochester, Minnesota, is recruiting an individual to fill a **RESEARCH POSITION**. The candidate must hold a M.D. or Ph.D. degree, have national/international visibility as an Investigator, and have a track record of sustained federal funding in the United States or its equivalent abroad. His/her research interest should be relevant to gastroenterology and/or hepatology. The Mayo Clinic provides an outstanding research environment with substantial intramural support. Academic rank will be commensurate with the individual's experience. Interested applicants should submit a statement of research interests, curriculum vitae, bibliography, and a list of references to: Dr. Nicholas F. LaRusso, Chair, Division of Gastroenterology and Hepatology, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905. E-mail: thornton.lisa@mayo.edu. Deadline for application is July 1, 1998. Mayo Foundation is an Affirmative Action/Equal Opportunity Educator and Employer.

UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE

POSTDOCTORAL POSITION available immediately to perform neurophysiology experiments in behaving monkeys to study functions of brain monoaminergic systems. The successful applicant will join an active group recording noradrenergic and dopaminergic neurons in locus coeruleus and midbrain during performance of cognitive tasks aimed at testing the roles of these systems in attention, reinforcement, and learning. Applicants with neurophysiology experience preferred. Excellent salary and benefits. Send curriculum vitae and names of three references to: Dr. Gary Aston-Jones, Department of Psychiatry, University of Pennsylvania, VAMC (151), University and Woodland Avenues, Philadelphia, PA 19104.

TWO POSTDOCTORAL POSITIONS DEVELOPMENTAL BIOLOGY AND TUMOR IMMUNOLOGY

Positions available to study (1) expression/function of homeobox genes in prostate development and disease using cell/organ culture, biochemical, and transgenic approaches; (2) role of antigen presentation, MHC genes, and T cell activation in tumor immunity and immunotherapy of cancer using mouse and human models. Applicants should have a Ph.D. or M.D. and background in molecular biology, immunology, or genetics. Send curriculum vitae and names of three references to: Dr. Chuck Bieberich (development), or Dr. S. Ostrand-Rosenberg (tumor immunology), Department of Biological Sciences, University of Maryland, Baltimore, MD 21250. UMBC is an Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE position for recent Ph.D./M.D. to study checkpoint pathways. Project One is to establish the molecular link between mechanochanical activities of human kinetochores and mitotic checkpoint kinases. Project Two is to characterize the DNA damage checkpoint pathway by studying ATM and its associated proteins. Strong background in cell cycle control, signal transduction, or mitosis is desired. Send curriculum vitae and reference list to: Dr. Tim J. Yen, c/o Human Resources, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. E-mail: tj_yen@fccc.edu. Equal Opportunity Employer.

CNS Research at Schering-Plough

A Biology Unit of the Schering-Plough Research Institute is based at the San Raffaele Biomedical Science Park in Milan. This research group in Italy is specifically involved in the field of Neurosciences, with a focus on ischemic cerebral injury and neurodegeneration. Thus, models that closely mimic pathologies occurring in humans have been set up. Biological mechanisms underlying brain injury are being studied aiming to identify those critical steps that can be relevant as the target for the drug discovery process.

We provide a stimulating environment for dedicated researchers. Interaction with groups located at the San Raffaele Biomedical campus, as well as collaboration with other research centers of Schering-Plough and academia, are essential. Publication of relevant data is encouraged.

Applications are invited for the following position:

Staff Scientist in Neuropharmacology

We are seeking to recruit an expert in Neurosciences with a strong background in Pharmacology. The candidate should have a Ph.D. or equivalent degree and 3 to 5 years' postdoctoral experience, gained within a laboratory directed in studies on neurodegenerative processes. A background in drug discovery is required.

The successful candidate is expected to conduct research projects that may ultimately lead to implementation of drug discovery programmes. Demonstration of scientific leadership and collaborative skills is essential.

Compensation package for this permanent position will depend on experience. Applications should include a curriculum vitae, a list of publications, a statement of research interest, and the name of three referees. They should be sent to:

Schering-Plough Research Institute
San Raffaele Science Park
Via Olgettina 58
I-20132 Milan, Italy
Fax: 39 2 21219253
E-mail: schering-plough@science-park.spr.it



Schering-Plough
Research Institute

Using Science for Human Advantage

A major
European
pharmaceutical
company wishes
to recruit for its
Research Centre
located
west of Paris

SCIENTIST cardiovascular pharmacology

Involved in research projects aiming at the discovery of novel drugs, you will manage a small team and be more particularly responsible for research program on hemodynamic technics and will perform in vivo models, specially myocardial ischemia.

Qualifications include a PhD with postdoctoral experience in cardiovascular research. Applicants should have a practical experience of operative technics.

Our material and technical facilities are excellent. You will join a high-level multidisciplinary team and evolve in a stimulating scientific environment.

Please send your application file (CV, handwritten letter and photo) to **PUBLIVAL/6011**
 27 route des Gardes - 92190 MEUDON (FRANCE)

N°1 world vaccine manufacturer, based near
Lyon, France, we are looking for a

RESEARCH SCIENTIST IN IMMUNOLOGY

Your mission will be to define strategies and technical innovation in the area of human immunology. Your expertise in human cellular immunology will be of particular value in the elaboration of new vaccines as in the improvement of those already existing.

You will propose strategic research approaches as part of a project team, and be responsible for a research unit (2-4 people) within the immunology department. You will develop a network of scientific collaborations in order to maintain a high level of professional scientific and technical competence in your discipline. Qualified in human cellular immunology with post-doctoral experience, an additional experience in the area of anti-bacterial or innate immunity will be an advantage. Your team spirit and management skills are essential to success. Fluency in English is required.

Male or female candidates should send a comprehensive CV and a hand-written letter (ref. S-01) to Pasteur Mérieux Connaught - Valérie Dervieux
 Direction des Ressources Humaines France
 1541, avenue Marcel Mérieux - 69280 Marcy l'Etoile
 FRANCE. E-mail : vdervieux@fr.pmc-vacc.com.

 **PASTEUR MÉRIEUX CONNAUGHT**
 GROUPE RHÔNE-POULENC

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE POSITION AVAILABLE IMMEDIATELY

Postdoctoral Research Associate position available immediately for recent Ph.D. or M.D.-Ph.D. graduate (within two years of receipt of degree) in cellular or molecular biology with an interest in lipid-mediated signal transduction. The project involves the identification of the receptor for a monohydroxy fatty acid metabolic product of arachidonic acid, which has been demonstrated to regulate tumor cell metastasis. The project involves the cloning of the receptor as well as the study of downstream signaling effectors in tumor cells. This work involves state-of-the-art molecular and cellular biological techniques. Successful candidates should have demonstrated experience with standard molecular biology and cell biology techniques. Previous experience with receptor isolation or signal transduction is desirable. Preference will be given to candidates with demonstrated research ability and strong written communication skills. Minimum salary \$28,000 dependent upon experience. Please send a brief statement of research interests, capabilities, and goals; curriculum vitae; address, FAX and telephone numbers; and three references to: **Dr. Kenneth V. Honn, Professor, re: Lipid-Mediated Signal Transduction, 431 Chemistry Building, Wayne State University, Detroit, MI 48202. E-mail: k.v.honn@wayne.edu.**

Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, structures, and vehicles at Wayne State University are smoke-free. Wayne State University—people working together to provide quality service.

POSTDOCTORAL POSITION available to study outer-membrane proteins of *Borrelia burgdorferi*, the Lyme disease spirochete. Focus of project shall be to use diverse genetic and protein-based approaches to identify and characterize novel lipid-modified and nonlipid-modified borrelial outer-membrane proteins. Experience with recombinant DNA techniques is required, as is a solid understanding of membrane biology and membrane protein structure-function relationships. Position includes salary (negotiable), fringe benefits, and the opportunity to work in a stimulating research environment. Send curriculum vitae and names, telephone numbers, and e-mail addresses of three references to: **Dr. Justin Radolf, Division of Infectious Diseases, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9113. FAX: 214-648-5476; e-mail: jradolf@mednet.swmed.edu.**

UT Southwestern is an Equal Opportunity Employer.

Clinical chemistry **POSTDOCTORAL FELLOW-SHIPS** at Mayo Clinic. Seeking applicants for two-year ComACC-approved Fellowship directed toward qualified individuals (Ph.D. or M.D. required) pursuing careers in clinical chemistry. Individuals completing the program are eligible for certification by the American Board of Clinical Chemistry. Applications on file by October 31, 1998, will be considered for appointment beginning in July 1999. Contact: **Mary F. Burritt, Ph.D., Division of Clinical Biochemistry and Immunology, Mayo Clinic, Rochester, MN 55905** for more information. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION

Postdoctoral position available immediately. Investigation of cytoplasmic signaling and regulation of cytokine receptor gene transcription. Model uses hepatic mesenchymal cells (stellate cells) (*JBC* 268:25132; 270:3642; 271:25994). Major molecular biology experience required. Proof of U.S. citizenship or its equivalency required. Mail/FAX curriculum vitae and the names of three references to: **Dr. Bernard Davis, Department of Medicine, University of Chicago, MC4076, 5841 South Maryland Avenue, Chicago, IL 60637. FAX: 312-702-2182. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION PEDIATRIC HEMATOLOGY/ONCOLOGY Washington University School of Medicine

Position available to study the role of transcription factors in cardiac gene expression and development. References: *Devel. Biol.* 189:270, 1997; *Devel.* 124:3775, 1997. Candidates with experience in molecular biology and/or developmental biology should send a curriculum vitae and three references to: **Dr. David B. Wilson, M.D., Ph.D., e-mail: wilson_d@kids1.wustl.edu. An Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH APPOINTMENT IN FLUID DYNAMICS

The Separations and Materials Research Group in the Chemical and Energy Research Section, Chemical Technology Division at the Oak Ridge National Laboratory (ORNL) seeks a qualified individual to perform research in the application of electric fields for the enhancement of separations processes. The studies may involve both experimental and theoretical work on the effect of electric fields on equilibrium and transport processes in multiphase systems.

A Ph.D. in chemical engineering or related field and experience in experimental, computational, or theoretical fluid dynamics is required. Specific experience in electrohydrodynamics is preferred. The research duties will be carried out in close collaboration with experienced ORNL staff members, but the applicant should have demonstrated a capability to perform independent research. Interested candidates must have excellent communication skills, both written and verbal, and must have a desire to work in a team environment on challenging problems.

Interested candidates are invited to e-mail or mail a cover letter briefly stating his/her research interests and a résumé with the names and addresses of three references to: **Dr. Costas Tsouris, Oak Ridge National Laboratory, Chemical Technology Division, P.O. Box 2008, Oak Ridge, TN 37831-6224. E-mail: tq9@ornl.gov.**

This appointment will be for one year, tenable immediately, and renewable for up to three years. It is offered through the ORNL Postdoctoral Research Associates Program which is jointly administered by ORNL's Office of University and Science Education and the Oak Ridge Institute for Science and Education. The program is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.

Please reference project ORNL #98-6 when applying for this position.

POSTDOCTORAL RESEARCH OPPORTUNITIES

The Department of Cancer Immunology and AIDS at the Dana-Farber Cancer Institute has immediate openings at the Postdoctoral level for molecular and cellular studies of lymphocyte development and function to be conducted in newly constructed laboratories within the Smith Research Building. Dana-Farber/Harvard Medical School offer substantial scientific resources within a stimulating research environment. A joint appointment will be held in an appropriate department of the Harvard Medical School with opportunities for advancement. Highly qualified candidates should send a curriculum vitae to: **Harvey Cantor, Chairman, Department of Cancer Immunology and AIDS, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-4630; e-mail: alison_angel@dfci.harvard.edu. DFCI is an Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.**

TEACHING POSTDOCTORAL POSITION IN BIOCHEMISTRY

Responsible for instructing and monitoring innovative upper-division laboratory modules in protein purification and characterization and molecular biology techniques. Opportunity to modify molecular biology modules, create training videos, and establish a World Wide Web-based program. Position available for two academic years starting in July 1998.

Submit letter of application with statement of teaching philosophy, curriculum vitae, and have three letters of reference sent to: **Dr. Frederick Rudolph, Rice University, Department of Biochemistry and Cell Biology MS 140, P.O. Box 1892, Houston, TX 77251-1892. E-mail: fbr@rice.edu.**

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

POSTDOCTORAL POSITION available immediately to study the regulation of calcium mobilization by protein kinases. The research involves the use of fluorescent calcium indicator dyes and the patch clamp technique (*PNAS* 95:1613-1617, 1998). Applicants should preferably have experience in these areas. Send curriculum vitae and contact information for three references to: **Dr. Alan Fein, Department of Physiology, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3505. FAX: 860-679-1269; e-mail: afein@neuron.uchc.edu.**

POSITIONS OPEN

TWO POSTDOCTORAL/JUNIOR FACULTY POSITIONS. Department of Orthopaedic Surgery, Harvard Medical School, Children's Hospital are immediately available.

(1) Research to study the regulatory interactions between osteoblasts, osteoclasts, and matrix proteins. Strong background in molecular, cellular, and biochemical techniques required. Research involves mammalian expression vector constructs, site-directed mutagenesis, analysis of protein-protein interactions, and signal transduction. Send research interests, curriculum vitae, and contact information for three references to: **Peter V. Hauschka, Ph.D., Orthopaedic Research, Children's Hospital, 300 Longwood Avenue, Enders-12, Boston, MA 02115. Telephone: 617-355-6837; FAX: 617-355-6061; e-mail: hauschka@a1.harvard.edu.**

(2) Research requiring experience in molecular biology procedures inclusive of cDNA cloning and screening, expression cloning within both mammalian and bacterial cells, and common procedures for RNA and gene analysis needed. Research projects will involve site-directed mutagenesis. Previous experience in this field will be very helpful. Familiarity with mammalian developmental biology considered a plus. Area of research in orthopaedic musculoskeletal, connective tissue research; familiarity with this research area would be considered a positive feature, but not restricted to this knowledge. Send research interests, curriculum vitae, and contact information for three references to: **Melvin J. Glimcher, M.D., Orthopaedic Research, Children's Hospital, 300 Longwood Avenue, Enders 11, Boston, MA 02115. Telephone: 617-355-6754; FAX: 617-730-0226; e-mail: glimcher@a1.tch.harvard.edu. Equal Opportunity Employer/Affirmative Action.**

POSTDOCTORAL RESEARCH OPPORTUNITIES IN BREAST CANCER LOMBARDI CANCER CENTER Georgetown University Medical Center

Positions are now available in breast cancer research in the following areas: (1) role of the c-myc oncogene in regulation of the cell cycle, apoptosis, genomic instability, and pathogenesis of breast cancer; (2) role of novel protease in matrix degradation, growth factor processing, and pathogenesis of breast cancer. Send curriculum vitae, short statement of research interests, and names and addresses of three references to: **Robert B. Dickson, Ph.D., Associate Director for Basic Science, Lombardi Cancer Center, The Research Building, Georgetown University Medical Center, 3970 Reservoir Road N.W., Washington, DC 20007. An Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS

NIH-funded Postdoctoral position is immediately available in Dr. Tsokos' laboratory to study signaling abnormalities in human lupus T and B lymphocytes (see: *J. Clin. Invest.* 101:1444, 1998). Candidates with expertise in lymphocyte signaling, flow cytometry, and molecular biology (RT-PCR and cell transfection) are preferred. Please send résumés to:

**Human Resources Department
Attn: PL2980237
The Henry M. Jackson Foundation
for the Advancement of Military Medicine
1401 Rockville Pike, Suite 600
Rockville, MD 20852
E-mail: hr@mail.hjf.org**

Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION to study mechanisms underlying behavioral response to amphetamine using differential-display PCR and other molecular biology and pharmacology techniques. Please send curriculum vitae, statement of experience and interests, and names of three references to: **Neil Richtand, M.D., Ph.D., Director, Division of Molecular Neuroscience, University of Cincinnati Department of Psychiatry, P.O. Box 670559, Cincinnati, OH 45267-0559. E-mail: neil.richtand@uc.edu.**

POSTDOCTORAL POSITIONS available at the University of Tennessee, to study (1) the role of MHC and cytokines in controlling susceptibility to autoimmunity, or (2) the role of MMPs and collagenases in degenerative joint disease. Projects involve both cellular and molecular approaches using transgenic and knockout models. Send curriculum vitae and names of three references to: **Dr. Edward Rosloniec or Dr. Karen A. Hasty, Research Service (151), 1030 Jefferson Avenue, Memphis, TN 38104. E-mail: erosloniec@utmem1.utmem.edu.**



UNIVERSITY OF
REGENSBURG



POSTDOCTORAL AND TECHNICIAN POSITIONS VOLKSWAGEN-GROUP

Molecular and Cellular Biology of Neuronal Stem and Precursor Cells

Two Postdoctoral and two Technician positions are available in the Neurogenesis program of the Volkswagen-Group at the University of Regensburg. Presently the University of Regensburg is developing a strong neuroscience program with focus on neurogenesis in the adult brain. Candidates should have a Ph.D. degree or equivalent (for postdoctoral positions) and a substantial background in molecular and cell biology. Applicants should send a curriculum vitae, relevant reprints, and at least two letters of recommendation to: **Dr. Ludwig Aigner, Department of Neurology, Universitaetsstr. 84, University of Regensburg, Regensburg D-93053 Germany. Telephone: +49-941-941-3340; FAX: +49-941-941-3005; E-mail: ludwig_aigner@hotmail.com, or georg.kuhn@klinik.uni-regensburg.de.**

THE UNIVERSITY of York

DEPARTMENT OF BIOLOGY

JACK BIRCH UNIT FOR ENVIRONMENTAL CARCINOGENESIS YAC CHAIR IN MOLECULAR CARCINOGENESIS

We seek applicants for this new post, who have an established record in carcinogenesis research, particularly in the molecular basis of human cancers. A major focus should be the interaction between environmental factors and the carcinogenic process. Ability to work with local clinicians for the analysis of human material is essential. The successful candidate will be expected to collaborate within the Biomolecular Sciences Initiative in the University of York and will have access to world class facilities in Accelerator Mass Spectrometry, and Protein structure determination/modelling.

The position is funded in the first instance by a well-established cancer charity, York Against Cancer, and carries with it the Directorship of the Jack Birch Unit for Environmental Carcinogenesis.

Salary will be within the professorial salary range (current minimum £34,560 pa) and the appointment is available from 1 October 1998.

Further information and details of how to apply may be obtained by writing to the Personnel Office, University of York, Heslington, YORK YO10 5DD or e-mail on jobs@york.ac.uk Please quote advertisement number 5/1008. Applicants may, if they so wish, discuss their interest in the post informally with the Head of Department, Professor Alastair Fitter on +44 (0)1904 432814, e-mail ahf1@york.ac.uk, or the current Director of the Jack Birch Unit, Professor Colin Garner on +44 (0)1904 432900, e-mail rcg2@york.ac.uk The closing date for applications is 24 July 1998.

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JOHN INNES CENTRE The Sainsbury Laboratory Research Group Leaders

The Sainsbury Laboratory will appoint, as soon as possible, up to three Group Leaders to develop innovative research programmes on some aspect of molecular plant pathology. The positions, which will be suitable for scientists who have already acquired some post doctoral experience, will be for five years in the first instance. The appointees will receive a salary of around £35,000 p.a. and be given a budget to support "core" groups. They will be encouraged to apply for additional funding to build up research teams. We particularly welcome applications from scientists trained in any biological discipline who will create innovative approaches to molecular plant pathology. Applications should include a CV, names of three scientific referees, and a statement of about 1000 words summarizing the proposed research programme, and should be submitted to the Head of Laboratory by 10th July 1998. Further information about the Laboratory and the Position may be obtained from the Head of Laboratory, Professor Mike Daniels, or viewed on the Sainsbury Laboratory WWW Home Page (<http://www.uea.ac.uk/nrp/jic/sl.htm>).

The Sainsbury Laboratory is an independent academic research institute for the study of molecular plant pathology and related disciplines. The Laboratory is financed primarily by a grant from the Gatsby Charitable Foundation, and is located at the John Innes Centre, Norwich Research Park, Colney Lane, Norwich, NR4 7UH, UK. The site is Europe's largest centre for fundamental research into plant and microbial sciences, employing over 800 scientists, students and support staff. The Laboratory and the John Innes Centre possess excellent equipment, facilities, and infrastructure.

The Laboratory consists at present of four research groups, each headed by a Senior Scientist (Professor Mike Daniels, Professor David Baulcombe, Professor Jonathan Jones and Dr Paul Shulze-Lefert). Interested persons are invited to contact the Head of Laboratory or other Senior Scientists informally to discuss the position. Phone (44) (0)1603 452571; Fax (44) (0)1603250024; E-mails: Mike.Daniels@bbsrc.ac.uk, David.Baulcombe@bbsrc.ac.uk, Jonathan.Jones@bbsrc.ac.uk.

The John Innes Centre is a registered charity (No. 223852) grant-aided by the Biotechnology and Biological Sciences Research Council and is an Equal Opportunities Employer.

POSITIONS OPEN

POSTDOCTORAL ECOLOGIST. Salary range \$38,593 to 60,135. The Subsurface Protection and Remediation Division of the National Risk Management Research Laboratory, United States Environmental Protection Agency is looking for a Postdoctoral Ecologist to take a lead role in conducting and implementing ecological research related to ecological restoration, community systems, and landscape ecology in terrestrial and aquatic ecosystems, particularly regarding terrestrial/aquatic interactions. The successful candidate will participate as an integral member of a multi-investigator, interdisciplinary research team that includes Plant and Animal Ecologists, Chemists, Soil Scientists, and Microbiologists investigating biotic and abiotic effects on nitrogen use in the ecosystem. Candidates with demonstrated expertise relative to invertebrates, particularly soil invertebrates, will be especially competitive, although other specialties will also be considered. The Subsurface Protection and Remediation Division of the National Risk Management Research Laboratory is a national research facility with a staff of about 150 and is located in Ada, Oklahoma. *U.S. citizenship is a requirement for employment.* To apply, please send curriculum vitae, a letter of recommendation from your senior research advisor or other comparable official, and a letter indicating your research focus to: **Ms. Pat Watson, Attn: Postdoctoral Positions, National Risk Management Research Laboratory, U.S. Environmental Protection Agency, 26 West Martin Luther King Drive, Cincinnati, OH 45268.** Materials must be received by 30 June 1998.

POSTDOCTORAL FELLOWSHIP

A Postdoctoral Fellowship is available to study genes involved in synaptic function in *C. elegans*. Current projects involve genetic analysis of adaptive behavioral responses and mechanisms of neurotransmitter packaging and release. (See: *Nature* 389:870-876; *Nature* 364:334-337; *Nature* 364:337-341).

Applicants should have a Ph.D. Experience in molecular biology, genetics, or cell biology is desirable.

Please send a curriculum vitae, preprints of papers in preparation or in press, and the names and addresses of three references who can provide recommendations to:

Steve McIntire, M.D., Ph.D.

Department of Neurology

Programs in Neuroscience and Biomedical Sciences

Gallo Clinic and Research Center

University of California, San Francisco

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POSTDOCTORAL/RESEARCH ASSOCIATE

A position is available immediately to study molecular determinants of signaling and receptor-ligand interactions of natriuretic peptide receptors. Studies involve site-directed mutagenesis, transfection of cloned receptors into mammalian cells, second messengers, and receptor-ligand interactions. Candidates must have a Ph.D. or a M.D. degree, and must be U.S. citizens or have a permanent resident, or valid working visa. Experience with modern molecular biology techniques, including subcloning, mutagenesis, transfection, and DNA sequencing, is an absolute requirement. Experience with cell culture, and determination of second messengers and receptor-ligand interactions is desirable. Send curriculum vitae and names of three referees to: **Thomas Maack, M.D., Cornell University Medical College, 1300 York Avenue, New York, NY 10021.** FAX: 212-746-8690; e-mail: tmaack@mail.med.cornell.edu.

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POSTDOCTORAL POSITIONS are immediately available to study (1) mechanism of signal transduction and regulation of calcineurin during T cell activation and (2) biochemistry and cell biology of methionine aminopeptidase 2, a recently identified molecular target for the angiogenesis inhibitor TNP-470. Working knowledge in molecular biology and protein biochemistry is required. Background in molecular immunology or angiogenesis is helpful but not required. Interested candidates can send their curriculum vitae and names of three referees to: **Dr. Jun Liu, Center for Cancer Research, MIT, E17-128D, Cambridge, MA 02139** or directly contact him at Telephone: 617-253-5750; FAX: 617-258-6172; e-mail: junliu@mit.edu.

POSITIONS OPEN

RESEARCH ASSOCIATE AND POSTDOCTORAL POSITION

RESEARCH ASSOCIATE POSITIONS (2) and POSTDOCTORAL POSITIONS (3) for research in molecular, cellular biology, and extracellular matrix. Ph.D. or M.D.-Ph.D. and experience with brain tumors preferred.

Send curriculum vitae and three references to:

Jasti Rao, Ph.D.

The University of Texas

M. D. Anderson Cancer Center

Department of Neurosurgery—Box 064

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POSTDOCTORAL POSITIONS AT HARVARD/MASSACHUSETTS EYE AND EAR INFIRMARY

Two positions are available to study developmental defects of the zebrafish auditory and visual systems. Topics of research involve behavior-based genetic screens, analysis of mutant phenotypes, and characterization of mutant genes. State-of-the-art zebrafish aquarium system and genomics facilities are available to study these projects. Highly motivated individuals with a recent Ph.D. and/or M.D. and experience in molecular biology and/or embryology are invited to apply. Send curriculum vitae, two recent reprints, and names of three references to: **Dr. Bill Sewell and Dr. Jarema Malicki, Harvard Medical School/Massachusetts Eye and Ear Infirmary R513, 243 Charles Street, Boston, MA 02114.** *Participation of minority candidates is strongly encouraged.*

POSTDOCTORAL POSITIONS to study the molecular regulation of neuronal cytoskeletal protein dynamics in transgenic mice and cell culture and its relationship to neurological disease. Emphasis on protein phosphorylation, neuron-glia interactions, axonal transport. Experience in one or more of the following areas desirable: molecular biology, neuronal cell culture, protein analysis, electron microscopy. Send curriculum vitae and names of three references to: **Ralph Nixon, M.D., Ph.D., Nathan Kline Institute, New York University Medical Center, 140 Old Orangeburg Road, Orangeburg, NY 10962.** FAX: 914-398-5422; e-mail: nixon@nki.rfmh.org. *Equal Opportunity Employer/Affirmative Action.*

POSTDOCTORAL RESEARCH POSITION

available in tissue engineering. Areas of study include molecular and cellular biology, immunology, biochemistry of extracellular matrix biomaterials and synthetic biomaterials, using *in vivo* and *in vitro* assay systems. Informal inquiries may be made via e-mail: badyalak@ecn.purdue.edu. Applicants should submit a letter of interest, curriculum vitae, and two letters of reference to: **Dr. Stephen F. Badyalak, Hillenbrand Biomedical Engineering Center, Potter Building, Room 204, Purdue University, West Lafayette, IN 47904-1296.** *Purdue University is an Affirmative Action/Equal Employment Opportunity Employer.*

POSTDOCTORAL PROGRAM for EPA. A project on evaluation of environmental contaminant transfer to foods from contact surfaces is available at the National Exposure Research Laboratory in Cincinnati. Annual stipend begins at \$33,180. A degree received within last three years in food science, food engineering, exposure assessment, or chemistry is preferred. Contact: **Postdoctoral Research Program, National Exposure Research Laboratory/EPA, Attn.: P. Pressley, ORISE—MS 36, P.O. Box 117, Oak Ridge, TN 37831-0117.** FAX: 423-241-5220; e-mail: presslep@ora.gov. Reference project NERL #98-1.

POSTDOCTORAL POSITIONS are available to study (1) gap junction-mediated intercellular communication and signaling mechanisms and (2) receptor tyrosine kinase signal transduction and regulation. Candidate should have a Ph.D. in biochemistry, cell or molecular biology. Please send curriculum vitae and addresses of three references to: (1) **Dr. Jean X. Jiang, Department of Biochemistry** or (2) **Dr. Feng Liu, Department of Pharmacology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOWS BIOINFORMATICS/COMPUTATIONAL STRUCTURAL BIOLOGY Molecular Structure Section Laboratory of Experimental and Computational Biology National Cancer Institute

To survey protein structures to identify cores (structural) and study their geometries and interactions. To develop new ways to infer mechanisms from protein structures with **Dr. R. L. Jernigan.** Requirements: strong structural calculation experience on proteins and recent Ph.D.

To develop receptor models in a project related to breast cancer and develop new computational tools for the discovery of lead compounds for the treatment of breast cancer with **Dr. D. G. Covell** and **Dr. R. L. Jernigan.** Requirements: database, chemical, and molecular computational experience and recent Ph.D.

To develop new models and analyze structures of potassium channels and G protein-coupled receptors with **Dr. H. R. Guy** (two positions). Requirements: computational experience in protein homology modeling, protein sequence analysis, and molecular dynamics and recent Ph.D.

Applicants should indicate for which position they are applying and send résumé and three letters of recommendation to: **Paula Wynn, MSC 5677, Room B-116, Building 12-B, National Institutes of Health, Bethesda, MD 20892-5677.**

POSTDOCTORAL POSITION IN OCULAR CELL AND MOLECULAR BIOLOGY

A Postdoctoral position is available immediately to study function of genes controlling normal eye development. Emphasis will be placed on generation of transgenic and knockout mice as models to study normal and aberrant eye development and molecular mechanism of transcription factors implicated in eye development and human ocular diseases. Our long-term interest is understanding the role of transcription factors in diseases negatively affecting the vision, including the cataract, glaucoma, and corneal and retinal dystrophies. The candidate should have experience with manipulation of transgenic mice and molecular biology. Interested candidates should send a brief synopsis of their research experience, curriculum vitae, and names with telephone numbers of at least three references to: **Dr. Ales Cvekl, Departments of Ophthalmology and Visual Sciences and Molecular Genetics, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, Ullman Building 713, 1300 Morris Park Avenue, Bronx, NY 10461.** *Equal Opportunity Employer.*

PREDOCTORAL AND POSTDOCTORAL POSITIONS IN INTERDISCIPLINARY PROGRAM

Positions on an NIH-funded Interdisciplinary Training Grant are available to individuals interested in intracellular signaling, gene transcription, mitogenesis, lipid metabolism, and several other biological processes involved in a variety of cardiovascular diseases. Visit our website: <http://www.utm.edu/pharmacology/training> for details. Applicants must be U.S. citizens or permanent residents. Please send résumé with names of three references to: **Dr. Tarun B. Patel, Department of Pharmacology, University of Tennessee, Memphis, 874 Union Avenue, Memphis, TN 38163.** E-mail: tpatel@physiol.utm.edu; FAX: 901-448-7300. *University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer. Minorities and women are especially encouraged to apply.*

POSTDOCTORAL/ASSOCIATE POSITION. Nephrology and aging research. The biologic response to advanced glycation end products (AGEs). An NIH-funded Postdoctoral position is available in August 1998 to study mechanisms by which AGEs mediate cellular toxicity in isolated human blood monocytes and mesangial cells in culture. Long-term goals are to elucidate the AGE-induced cellular pathways that result in activation of the NADPH-oxidase in monocytes and PKC β II in mesangial cells. Experience in cell biology, molecular biology, or biochemistry preferred. Please send curriculum vitae and three letters of reference to: **Dr. Miriam F. Weiss, Division of Nephrology, Department of Medicine, Biomedical Research Building, Case Western Reserve University School of Medicine, 2109 Adelbert Road, Cleveland, OH 44106.** E-mail: maf3@po.cwru.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN SIGNAL TRANSDUCTION

Two openings for Postdoctoral Fellow positions are available, one immediate and one within the next year, to study signal transduction by GTP-binding proteins. Projects center on the mechanisms of cell regulation by members of the ADP-ribosylation factor (ARF) family of GTPases; specifically, roles in the regulation of membrane traffic and phospholipase D activity. A number of recent observations offer exciting new avenues, ripe for development by an enterprising Postdoctoral Fellow. Prior experience in cell and molecular biology is preferred for the immediate opening.

Send cover letter, curriculum vitae, and the names of three references to:

Dr. Richard A. Kahn
Department of Biochemistry
Emory University School of Medicine
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FAX: 404-727-3746
E-mail: rkahn@bimcore.emory.edu.

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POSTDOCTORAL POSITIONS DEPARTMENT OF EMBRYOLOGY CARNEGIE INSTITUTION OF WASHINGTON

Cell biology (Dr. Yixian Zheng): investigation of molecular mechanism of microtubule nucleation and centrosome assembly. Recent Ph.D. scientists with strong background in biochemistry, fly genetics, or structural biology are invited to apply.

Developmental biology (Dr. Chen-Ming Fan): investigation of molecular interactions that direct mammalian embryonic development. Embryo dissection, tissue explant culture, mouse transgenesis, ES cell technology, and generation of knockout mice are utilized in the laboratory. Dedicated scientists holding a Ph.D. with experience in molecular biology, tissue culture, and/or embryology are invited to apply.

Send curriculum vitae and three letters of recommendation to: Dr. Zheng or Dr. Fan, Carnegie Institution, 115 West University Parkway, Baltimore, MD 21210. See our website: <http://www.ciwemb.edu/links/lablist.html> for current research information.

Two POSTDOCTORAL POSITIONS are available immediately to study interactions between human papilloma virus oncoprotein E7 and tumor suppressor proteins. Extensive expertise in cell and molecular biology and/or biochemistry is required. Send résumé and three reference letters to: Srilata Bagchi, Ph.D., Center for Molecular Biology, M/C 860, University of Illinois at Chicago, 801 South Paulina Street, Chicago, IL 60602. E-mail: sbagchi@uic.edu.

COURSES & TRAINING

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The *in situ* polymerase chain reaction/hybridization (IS-PCR) method is a tool with tremendous power and potential to aid research investigation through its ability to detect a single copy of a specific gene. In one comprehensive workshop, directed by Professor Omar Bagasra, M.D., Ph.D., learn to perform this technique on cell smears and tissue sections. Participants in this workshop will learn primer and probe design (including the special design methods specific for IS-PCR and RT-PCR) and optimization utilizing solution PCR, oligo design computer programs and Internet tools, and PCR analysis tools. This part of the workshop will include training in the use of World Wide Web molecular biology resources including genbank, blast searching, homology search tools, and various other research resources on the Internet. Participants will learn to detect DNA utilizing the IS-PCR method, as well as detecting RNA utilizing the reverse transcriptase-initiated IS-PCR method (RT-1 IS-PCR). You will learn nonradioactive methods of *in situ* hybridization, and immunohistochemistry in combination with IS-PCR/hybridization. If interested please contact by July 1, 1998, at: Dr. Bagasra, 73 Manassas Place, Laurel Spring, NJ 08021. Telephone: 609-784-2428; FAX: 609-782-8622; e-mail: omarb332@aol.com.

POSITIONS OPEN

POSTDOCTORAL POSITIONS INSTITUTE FOR HUMAN GENE THERAPY Department of Molecular and Cellular Engineering University of Pennsylvania Health System

Positions available for Postdoctoral Fellows in the laboratory of Dr. James M. Wilson to study pathogenesis of cystic fibrosis, stem cell biology in non-hematopoietic tissue, molecular virology of adenovirus and adeno-associated virus, and immunology of gene therapy. Please forward curriculum vitae and the names of three references to: James M. Wilson, M.D., Ph.D., Director, Institute for Human Gene Therapy, University of Pennsylvania Health System, Room 204 Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104-4268.

SYMPOSIUM

SYMPOSIUM ON ELECTRON CRYSTALLOGRAPHY OF BIOLOGICAL MACROMOLECULES Granlibakken Conference Center Lake Tahoe, California December 9-12, 1998

This symposium will cover recent advances in electron crystallography, hybrid crystallography (X-ray and electrons), and high-resolution electron cryomicroscopy and their implications for studies of membrane proteins, cytoskeletal proteins, and large functional complexes.

Invited Speakers: Ueli Aebi, Wolfgang Baumeister, Wah Chiu, James F. Conway, David DeRosier, Kenneth H. Downing, Andreas Engel, John Flanagan, Joachim Frank, Robert M. Glaeser, Nikolaus Grigorieff, Bing Jap, Werner Kühlbrandt, Kaoru Mitsunaka, Atsuo Miyazawa, Keichi Namba, Eva Nogales, Jurg P. Rosenbusch, Michael G. Rossmann, Michael B. Sherman, Gebhard F. X. Schertler, Michael E. Schmid, Thomas A. Steitz, Alasdair C. Steven, Michael H. B. Stowell, Sriram Subramaniam, Kenneth Taylor, John E. Walker, Jochen Walz, Elizabeth M. Wilson-Kubalek, Mark J. Yeager.

For further information and on-line registration, see website: <http://ncmi.bioch.bcm.tmc.edu/ECBM98/ECBM98.html>. Or contact: Mary Jane Perez, e-mail: mperez@bcm.tmc.edu; FAX: 713-796-9438.

EUROPEAN OPPORTUNITIES

University of Tübingen

POSTDOCTORAL MOLECULAR BIOLOGIST/CELL BIOLOGIST University of Tübingen, Medical School Department of Neurology, Germany

A Postdoctoral Scientist position (BAT IIa) is available immediately in the Laboratory of Neurodegeneration at the Department of Neurology. The projects include molecular genetics and biochemistry of apoptosis and excitotoxicity. The major focus will be the adenoviral gene transfer of neurotrophins and inhibitor of apoptosis proteins. Studies will be centered both on cell culture systems and animal models of neurodegenerative diseases.

Candidates should possess an M.D. or Ph.D. degree and should have good knowledge of one or more of the following techniques: molecular biology, viral gene transfer, flow cytometry, or laser scanning microscopy. Send full curriculum vitae and names of three referees (code nr. Z13120) to: J. B. Schulz, M.D., Department of Neurology, Hoppe-Seyler-Strasse 3, Tübingen D-72076 Germany. E-mail: joerg.b.schulz@uni-tuebingen.de. Equally qualified physically impaired persons are preferred.

MOLECULAR BIOLOGY

The Department of Medicine (Cardiology) at University of Freiburg, Germany invites applications for a research position in molecular biology applied to the cardiovascular system. We seek a Scientist with research interests and experience in transgenic animal models and adenovirus gene transfer. Please send curriculum vitae and statement of research interests to: Dr. Manfred Zehender, Innere Medizin III, Hugstetterstrasse 55, Freiburg D-79106 Germany. FAX: D 761-270-3772; e-mail: zehender@mm31.ukl.uni-freiburg.de and Dr. Gideon Koren, Cardiovascular Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115 USA. FAX: US 617-734-5132; e-mail: koren@calvin.bwh.harvard.edu.

EUROPEAN OPPORTUNITIES

POSTDOCTORAL POSITION available to study the neurophysiology of motion and stereo processing in vision and audition. Work involves electrophysiological (single-unit) and behavioral studies in primates. Experience with extracellular recording or behavioral training is an advantage. Send curriculum vitae and names of three references to: P. X. Joris, Division of Neurophysiology, University of Leuven, Medical School, B-3000 Leuven, Belgium. E-mail: philip.joris@med.kuleuven.ac.be.

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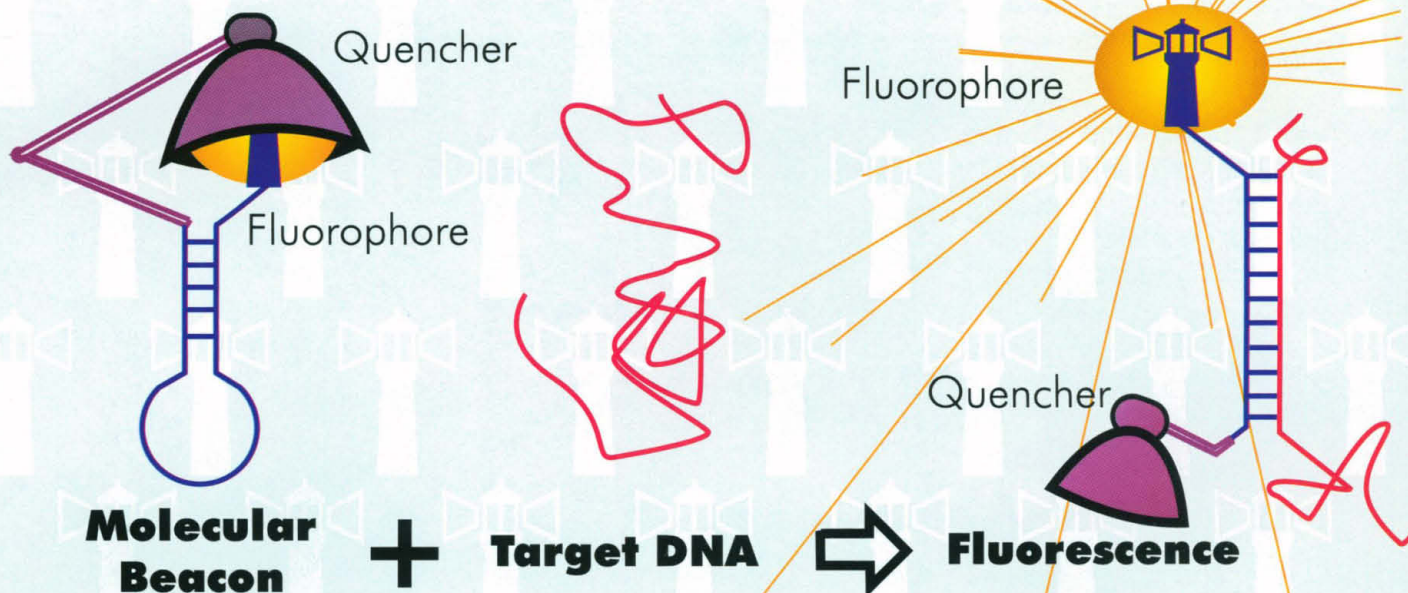
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Molecular Beacons*!



Molecular Beacons are synthetic oligonucleotides that have a fluorophore at one end and a fluorescence quencher at the other end. They are designed with a loop and stem structure, so that the quencher is proximal to the fluorophore. When the molecular beacon comes in contact with a complementary sequence of DNA, it unfolds and hybridizes to this target. The quencher is displaced from the vicinity of the fluorophore, and fluorescence is obtained when the sample is irradiated with light of an appropriate wavelength.

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1. S. Tyagi and F. R. Kramer. *Nature Biotechnology*. **14**, 303 (1996).
2. S. Tyagi, D. P. Bratu, F. R. Kramer. *Nature Biotechnology*. **16**, 49 (1998).
3. L.G. Kostrikis, et al. *Science*. **279**, 1228 (1998).

***Molecular Beacons are distinct from the Beacon® technology, which is a registered trademark of Pan Vera Corporation, Madison, WI.**

Modifications are verified by Mass Spectrometry at MIDLAND



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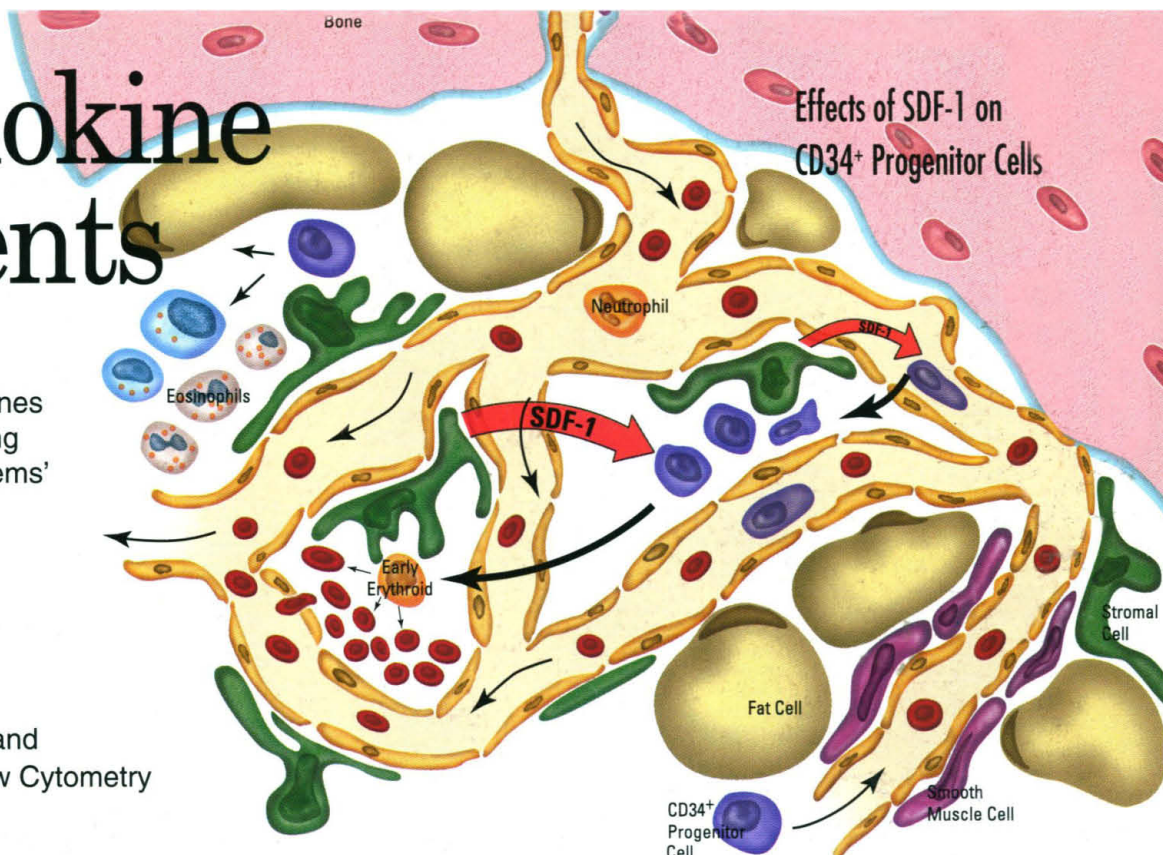
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|-------------|---------------------|---------------------|----|-----|----|-----|---------------------|----|----|-----|
| C10 | C-C | | | | | | ✓ | | ✓ | |
| Eotaxin | C-C | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ |
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| I-309 | C-C | ✓ | ✓ | | ✓ | ✓ | | | | |
| JE | C-C | | | | | | ✓ | | ✓ | |
| MARC | C-C | | | | | | ✓ | ✓ | | ✓ |
| MCP-1 | C-C | ✓ | ✓ | ✓ | ✓ | | | | | |
| MCP-2 | C-C | ✓ | ✓ | ✓ | ✓ | | | | | |
| MCP-3 | C-C | ✓ | ✓ | ✓ | ✓ | | | | | |
| MIP-1α | C-C | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| MIP-1β | C-C | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | |
| MIP-1γ | C-C | | | | | | ✓ | | | |
| MIP-3α | C-C | ✓ | | | | | | | | |
| MIP-3β | C-C | ✓ | | | | | | | | |
| RANTES | C-C | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| TARC | C-C | ✓ | | | | | | | | |
| CRG-2 | C-X-C | | | | | | ✓ | ✓ | | |
| ENA-78 | C-X-C | ✓ | | ✓ | ✓ | | | | | |
| GROα | C-X-C | ✓ | | ✓ | ✓ | | | | | |
| GROβ | C-X-C | ✓ | | | | | | | | |
| GROγ | C-X-C | ✓ | | | | | | | | |
| IL-8 | C-X-C | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| IP-10 | C-X-C | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| KC | C-X-C | | | | | | | | | |
| MIP-2 | C-X-C | | | | | | ✓ | ✓ | | ✓ |
| NAP-2 | C-X-C | ✓ | | | | | | | | |
| SDF-1α | C-X-C | ✓ | ✓ | | | ✓ | | | | |
| SDF-1β | C-X-C | ✓ | | | | | | | | |
| Fractalkine | C-X ₃ -C | ✓ | | | | | | | | |

AF= Antigen-affinity purified polyclonal antibody

MAB= Monoclonal antibody

BAF= Biotinylated antigen-affinity purified polyclonal antibody

AB= Polyclonal antibody

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