

(continued from page 1487)

Antibody Fragment and Fusion Protein Isolation

IDA Chelating CellThru BigBead resins are for purifying antibody fragments and fusion proteins directly from cell culture or fermentation harvest. The resins make it possible to remove cells while simultaneously capturing and concentrating recombinant antibody fragments and other proteins having a metal chelating domain. High dynamic binding capacities optimize product capture. The resin allows flow rates of up to 10,000 cm per hour at back pressures of less than 10 psi. CellThru BigBead technology increases both product recovery and overall process economy by combining clarification, product capture, and concentration into a single low-pressure,

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packed-bed column chromatography operation. **Sterogene.** For information call 800-535-0735 or circle 143 on the Reader Service Card.

Cell for Flow Cytometry

Dynal CELlection Kits are for the immunomagnetic separation and release of human CD2+ cells or the user's specific target cell type. The kits combine Dynabeads cell isolation technology with a new general release method for "bead-free" cells for flow cytometry analysis or other downstream applications. Cell isolations are performed in one tube with no centrifugation or columns, ensuring maximum sensitivity and minimum cell loss. **Dynal.** For information call 800-638-9416 or circle 144 on the Reader Service Card.

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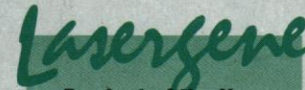
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Literature

Report on Safe, Appropriate Uses for Filtered Self-Contained Enclosures is an eight-page paper designed to assist laboratory personnel who are considering purchasing and using this kind of equipment. It discusses the advantages and problems associated with this equipment, provides information on chemicals and carcinogens, filter cell types, and methods to determine filter life. **Labconco.** For information call 800-821-5525 or circle 150 on the Reader Service Card.

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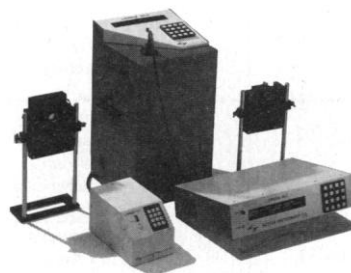
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1998 Meeting Schedule

1998 SUMMER AND INTERNATIONAL SCHEDULES

	COLBY-SAWYER COLLEGE <i>New London, New Hampshire</i>	HOLDERNESS SCHOOL <i>Plymouth, New Hampshire</i>	KIMBALL UNION ACADEMY <i>Meriden, New Hampshire</i>	NEW ENGLAND COLLEGE <i>Henniker, New Hampshire</i>
JUNE 7-12	Industrial Ecology (NEW) <i>Thomas Graedel</i> Motile & Contractile Systems <i>Mary Beckerle</i>		Second Messengers & Protein Phosphorylation <i>Joseph Beavo</i>	Basement Membranes <i>Peter Yurchenco</i> Prod. Design & Manufacture, Theo, Found (NEW) <i>George Hazelrigg & Robert Schafrik</i>
JUNE 14-19	Meiosis <i>Terry Orr-Weaver</i> Nuclear Chemistry <i>Lee Sobotka</i>	Energetic Materials <i>Steve Coffey & Anatoly Dremim</i>	Lasers in Medicine & Biology <i>Joseph Izatt & Willem Star</i>	Environmental Sciences: Water <i>Philip Gschwend</i> Polymers (East) <i>Virgil Percec</i>
JUNE 21-26	Bacterial Cell Surfaces <i>Howard Shuman & Anthony Pugsley</i> Catalysis <i>Raymond Gorte</i>	Physical Metallurgy <i>Ronald Gibala & Samuel Allen</i>	Research at High Pressure <i>James Schilling</i>	Chemotactic Cytokines <i>Thomas Schall</i> Serum Amyloid A: Amyloidosis to Atherosclerosis 3 DAY (6/26-28) <i>Mahamad Navab</i>
JUNE 28-JULY 3	Atomic & Molecular Interaction <i>Robert Wyatt</i> Nitrogen Fixation <i>Dennis Dean</i>	Tribology <i>Said Jahanmir</i>	Lipoprotein Metabolism <i>David L. Williams</i>	Interior of the Earth <i>Michael Gurnis</i> Molecular Basis of Microbial 1-C Metabolism (NEW) <i>F. Robert Tabita</i>
JULY 5-10	Corrosion, Aqueous <i>Douglas Sinclair</i> Proteolytic Enzymes & Their Inhibitors <i>Charles Craik</i>	Drug Metabolism <i>Henry Strobel</i>	Biocatalysis <i>Tomas Hudlicky & David Dodds</i>	Natural Products <i>Steven Davidsen</i> Pattern Formation in the Earth Sciences <i>Ivan L'Heureux & Anthony Fowler</i>
JULY 12-17	Gravitational Effects on Living Systems <i>Michael Evans</i> Point & Line Defects in Semiconductors <i>Chris van de Walle</i>	Intermediate Filaments <i>Jean-Pierre Julien</i>	Enzymes, Co-enzymes, & Metabolic Pathways <i>Donald Hupe & John Blanchard</i>	Chemical Sensors & Interfacial Design <i>Art Janata</i> Organic Reactions & Processes <i>William Bailey</i>
JULY 19-24	Cardiac Regulatory Mechanisms <i>Eduardo Marban</i> Disorder in Materials <i>Sherwin Singer</i>	Cellular & Molecular Mycology <i>Jay Dunlap & Gillian Turgeon</i>	Chemistry at Interfaces <i>Kyle Vanderlick</i>	Bioelectrochemistry <i>Paul Gailey</i> Plant Molecular Biology <i>Pamela Green</i>
JULY 26-31	Chemotherapy of Experimental & Clinical Cancer <i>Patrick O'Connor</i> Solid State Chemistry <i>Jack Johnson</i>	Biological Regulatory Mechanisms <i>Cynthia Kenyon & Jeff Roberts</i>	Hormone Action <i>David Moore</i>	Electron Spectroscopy <i>Denise Caldwell</i> Mechanisms of Toxicity <i>Cheryl Walker</i>
AUG. 2-7	Medicinal Chemistry <i>James McCarthy</i> Separation & Purification <i>Michael Doherty</i>	Water & Aqueous Solutions <i>H. Eugene Stanley</i>	Solid State Studies in Ceramics <i>Gary Messing</i>	Biom mineralization <i>Irving Shapiro</i> Microbial Stress Response <i>Bruce Dempfle</i>
AUG. 9-14	DNA Alteration in Transformed Cells <i>Melanie Ehrlich</i> Electrodeposition <i>Gery Stafford</i>	Organic Geochemistry <i>Kenneth Peters</i>	Peptide Growth Factors <i>Joan Massague</i>	Hormonal & Neural Peptide Biosynthesis <i>Betty Eipper</i>
AUG. 16-21			Green Chemistry <i>William Tumas</i>	
MAY 3-8 Chemical Oceanography <i>Francois Morel</i> Complex Fluids <i>Erich Sackmann</i> IlCiocco, Barga, Italy	MAY 10-15 Aging, Biology Of <i>Tom Kirkwood</i> Fractals <i>Jens Feder</i> IlCiocco, Barga, Italy	JULY 26-31 Malaria (NEW) <i>Dyann Wirth</i> Somerville, Oxford, UK	AUG. 16-21 Salt & Water Stress In Plants <i>J. Andrew C. Smith</i> Queen's College, Oxford, UK	AUG. 23-28 Diamond Synthesis <i>Karen Gleason</i> Queen's College, Oxford, UK

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JUNE 7-12		Laser Interactions with Materials <i>Richard Haglund</i>	Stereochemistry <i>Franklin Davis</i>	Theoretical Biology & Biomathematics <i>Mark Lewis & John Milton</i>
JUNE 14-19	Cell Biology of the Neuron <i>Susan Amara & Reinhard Jahn</i> Solar Radiation & Climate (NEW) <i>Warren Wiscombe</i>	Bioorganic Chemistry <i>Donald Hilvert & Kevin Judice</i>	Biopolymers <i>Michael Brenowitz & Stephen Harvey</i>	Multiphoton Processes <i>Kenneth Kulander</i>
JUNE 21-26	Mutagenesis <i>Susan Wallace</i> Thin Film Mechanical Behavior (NEW) <i>Michael Drory</i>	Diffraction Methods in Molecular Biology <i>Randy Read</i>	Nucleic Acids <i>Alan Lambowitz & Carol Greider</i>	Nanostructure Fabrication <i>John Randall</i>
JUNE 28-JULY 3	Hemostasis <i>Evan Sadler</i> Vascular Cell Biology <i>Denisa Wagner & Mark Majesky</i>	Lysosomes <i>Sandra Schmid & Hans Geuze</i>	Heterocyclic Compounds <i>Paul Ornstein</i> Statistics in Chemistry & Chemical Engineering <i>Sijmen de Jong</i>	Computational Chemistry <i>Jeffry Madura</i>
JULY 5-10	Mammalian Gameto. & Embryogenesis <i>John Eppig</i> Reproductive Tract Biology <i>Kenneth Korach</i>	Proteoglycans <i>Jeffrey Esko</i>	Neural Development <i>Sue McConnell</i> Radiation Chemistry <i>Michael Sevilla</i>	Ion Channels <i>David Clapham</i>
JULY 12-17	Environmental Endocrine Disruptors (NEW) <i>Harriette Phelps</i> Postharvest Physiology <i>Donald Grierson</i>	Microbial Toxins & Pathogenicity <i>Erik Hewlett</i>	Chemical Senses: Taste & Smell <i>John Kauer & Marion Frank</i> Biology & Chemistry of Tetrapyrroles <i>J. Clark Lagarias & Peter Jordan</i>	Chromatin Structure & Function <i>Carl Wu</i>
JULY 19-24	Correlated Electron Systems <i>Laura Greene & Subir Sachdev</i> High Temperature Materials, Processes & Diagnostics <i>James Gole</i>	Molecular Cytogenetics <i>Thomas Cremer & Peter Lichter</i>	Inorganic Chemistry <i>Dennis Riley</i> Molecular Genetics <i>Patrick O'Farrell</i>	Membrane Transport Proteins, Physiol. & Path. Implic. of (NEW) <i>Matthias Hediger</i>
JULY 26-31	Education in Materials Science 3 DAY (7/26-29) (NEW) <i>Thomas Stoebe & Thomas Pearsall</i> Vibrational Spectroscopy & Molecular Dynamics <i>Bruce Hudson & Alex Harris</i>	Bioengineering & Orthopedic Science <i>Linda Sandell</i>	Electronic Processes in Organic Materials <i>Shaul Mukamel</i> Organometallic Chemistry <i>Richard Schrock</i>	Photonuclear Reactions <i>William Bertozzi</i>
AUG. 2-7	Developmental Physiology (NEW) <i>Lionel Jaffe & Laurence Etkin</i> Synaptic Transmission (NEW) <i>Meyer Jackson & Larry Trussell</i>	Modeling of Flow in Permeable Media <i>Thomas Hewett</i>	Cancer <i>Saraswati Sukumar</i> Nuclear Waste & Energy <i>Alan Waltar</i>	Science of Adhesion <i>Alphonsus V. Pocius</i>
AUG. 9-14		Plant & Fungal Cytoskeleton 3 DAY (8/9-12) <i>David Drubin</i>	Electron Donor/Acceptor Interactions <i>Marshall Newton</i> Illicit Substance Detection: Nuclear, Biological, Chemical <i>David Boyd & Keith Ward</i>	Plasma Processing Science <i>Gerrit Kroesen</i>
AUG. 16-21		Molecular Biology of the Egg (NEW) <i>S.Y. Takahashi & Henry Hagedorn</i>	Polymer Physics <i>Edwin Thomas</i>	Myogenesis <i>Charles Ordahl</i>
AUG. 30-SEPT. 4 Electron Distribution & Chemical Bonding <i>Karlheinz Schwarz</i> Queen's College, Oxford, UK	SEPT. 1-5 Molecular & Cellular Neurobiology (NEW) <i>Bai Lu & Chien Ping Wu</i> Beijing, China	SEPT. 6-11 Superconductivity <i>Colin Gough & Bertram Batlogg</i> Queen's College, Oxford, UK Organic Structures & Properties <i>Yasuhiro Aoyama</i> Fukuoka, Japan	SEPT. 13-18 Macromolecular Org. & Cell Function <i>Douglas Kell & John E. Wilson</i> Queen's College, Oxford, UK Mitochondria & Chloroplasts <i>Gottfried Schatz</i> Les Diablerets, Switzerland	SEPT. 20-25 Science Education: Europe Visualization In Chem. (NEW) <i>Louis Pignolet & Bolko Flintjer</i> Queen's College, Oxford, UK

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Chair, Women's Studies Search
c/o Secretarial Services
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Southeastern Louisiana University seeks an individual at the level of Professor with expertise in estuarine ecology to serve as the Edward G. Schlieder Endowed Chair of Environmental Studies in the Department of Biological Sciences. Southeastern maintains a research station in the oligohaline wetlands of the Lake Pontchartrain Basin, a large estuarine system. Specific areas of environmental study include, but are not limited to, systems and landscape modeling, biogeochemistry, conservation, trophic interactions, and restoration ecology. The selected individual will be expected to work closely with government agencies and the private sector in addressing environmental problems and implementing new technologies that will enhance ecosystem productivity and sustainability. The candidate must have a distinguished history of refereed publications, invited presentations, and proven success in obtaining substantial extramural support. Interested applicants are encouraged to submit a packet including (1) a two- to four-page narrative describing how the applicant would use the Endowed Chair to enhance their academic productivity and Southeastern's interdisciplinary program in environmental studies, including graduate and undergraduate research opportunities, (2) a current curriculum vitae, (3) names of three to five references, and (4) copies of all transcripts (originals required upon employment) to: **Dr. Nick Norton, Department Head, Department of Biological Sciences, Southeastern Louisiana University, SLU 736, Hammond, LA 70402-0736.** Applications must be postmarked no later than December 19, 1997. Southeastern Louisiana University enrolls over 15,000 students and has been recognized as one of the fastest growing universities in the nation during the past five years. The Department of Biological Sciences has 32 full-time faculty, over 30 nationally recruited graduate students, offers the Bachelor's and Master's degree, and is housed in four buildings, one of which is undergoing a multi-million-dollar renovation (for details, refer to our website: <http://www.selu.edu/Academics/Depts/Biology/pages/biology/main.htm>). Southeastern is Affirmative Action/Equal Employment Opportunity/ADA Employer.

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Applicants in all fields will be considered, although two areas of specialization have been identified as priority areas for this position:

Global change, with interests in utilizing advanced computer models such as Ocean/Climate General Circulation Models (OGCMs) for the understanding of biogeochemical and/or climate cycles.

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Applicants should contact or send a résumé and statement of research interests to: **Professor Douglas E. Hammond, Search Committee Chair, Department of Earth Sciences, University of Southern California, Los Angeles, CA 90089-0740.** Applications will be accepted until the position is filled, but the selection process is expected to commence by March 1, 1998. Those wishing to obtain further information can contact **Professor Hammond at Telephone: 213-740-5837; e-mail: dhammond@usc.edu.** Additional information about the Department and the Wrigley Institute can be found at website: <http://www.usc.edu/dept/earth/> and <http://wrigley.usc.edu/>.

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Individuals with experience in pharma protein research, including protein expression, purification, stability, pharmacokinetics and biological activity. Experience with library formats such as phage display desired. New formats for protein expression are in development for rapid screening/selection of novel protein pharmaceuticals.

MAXYGEN

Maxygen has 20 open positions in the above fields. The successful candidates will be innovative, motivated, creative and team-oriented individuals with a proven scientific track record. Maxygen is an independent company, created as a spin-off from Affymax Research Institute and GlaxoWellcome. Maxygen is a state-of-the-art technology center focused on development of directed evolution technology ('molecular breeding') for the optimization of DNA and protein sequences. **Please see our Website at WWW.MAXYGEN.COM for information and detailed job listings. Resumes, including e-mail address to: Rose Sturgess, Maxygen, 3410 Central Expressway, Santa Clara, CA 95051 or e-mail CVs to: david_kashyap@maxygen.com**

Application Molecular Modeler System Administrator

Merck Research Laboratories has immediate openings for Application Molecular Modelers, Computational Chemists/Biologists, a UNIX Systems Administrator, and a Web master. This is an excellent opportunity for individuals interested in joining an exciting, creative, team-oriented environment focused on New Lead Discovery. The candidate must demonstrate that she/he has worked effectively on teams and possesses good problem-solving skills.

Application Scientists — Successful candidates will apply and extend methodology directed towards pharmacophore development and representation, SAR extraction from traditional medicinal chemistry approaches as well as from combinatorial and modular chemical libraries, and have an active interest in data- and knowledge-based development and mining. Experience in applying typical modeling techniques to problems of interest to the pharmaceutical industry is essential. Candidates will be expected to provide computational support and function as a member of multi-disciplinary teams for various Merck therapeutic projects in a stimulating and challenging environment.

Qualifications: B.S./M.S. degree in Chemistry, Biochemistry, Biophysics or the equivalent is required. We are looking for those with experience in using computational approaches to solve problems of biological interest. Skills in any of the following areas would be an asset: data- and knowledge-based mining, bioinformatics, 3D structure generation from biophysical information, receptor-based ligand design or homology modeling.

Systems Administrator — A motivated, self-starting individual is being sought to administer UNIX Web and data servers in support of pharmaceutical research. This will involve the general administration of users; planning for and performing system and software upgrades; integrating these servers with other supporting servers and services; and proactive performance monitoring and tuning of both the system and application software. The successful candidate will be expected to interact closely with developers and end-users of the systems.

Qualifications: The candidate should have a B.S./B.A. degree in Computer Science or equivalent experience; a knowledge of UNIX system management and TCP/IP networking; an ability to write shell and Perl scripts; and good verbal and written communication skills. Highly desirable are: experience with managing Web-server and database software and C or C++ programming.



Merck Research Laboratories are located in Rahway, New Jersey, approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent. For consideration, send your resume with the names of three references to **Merck & Co., Inc., P.O. Box 2000, AD #59, Rahway, New Jersey 07065, RY80A-3**. EEO/AA/V/H Employer.

University of Rhode Island Coastal Institute Director

The Coastal Institute is a new University of Rhode Island initiative to bring natural and social sciences to bear on critical science and public policy issues in the coastal and marine environment. The Institute will comprise faculty, researchers and external partners who will work as a multi-disciplinary organization to address complex and multi-faceted problems of coastal zones. The Institute builds on the University's long-standing excellence in marine and environmental studies, and is housed in three new buildings with state-of-the-art facilities.

The Director of the Coastal Institute will lead this initiative. Working with University and non-University partners, the Director will identify issues and problems for investigation and action, formulate the Institute's research agenda, and develop proposals. S/he will also rigorously maintain the Institute as a neutral location in which controversial issues can be discussed and researched. The Director will report to the Vice-Provost for Marine Programs, will directly supervise a small Institute staff, and will represent the Institute within and outside the University.

The Director will have outstanding qualifications in the fields of science or public policy, and administrative and facilitative skills to effectively coordinate the diverse interests and abilities of faculty and partners in the Institute. A Ph.D. or equivalent degree or experience is required, as are demonstrated abilities to obtain funding, to manage interdisciplinary projects, and to study coastal issues. Also required are leadership abilities and entrepreneurial spirit necessary to establish and maintain the Institute as an internationally prominent organization. The position may include a tenure-track appointment within an academic department of the University.

For more information on the required and preferred qualifications, visit the Coastal Institute's Web page at http://www.oce.uri.edu/grilli/coastal_i.html, or contact Dr. Margaret Leinen, Vice Provost for Marine Programs, by email at mleinen@gso.uri.edu, or at the University of Rhode Island, Kingston, RI 02881, USA. **Submit a letter of application and resume to: Margaret Leinen, Search Committee Chair (Log #091219), University of Rhode Island, P.O. Box 6, Kingston, RI 02881. Applications will be evaluated starting January 5, 1998 and continue until the position is filled. The University of Rhode Island is an AA/EEO Employer and is committed to increasing the diversity of its faculty, staff and students. Persons from underrepresented groups are encouraged to apply.**

National Science Foundation (NSF)

NSF's Division of Biological Infrastructure (DBI), the Division of Environmental Biology (DEB), the Division of Integrative Biology and Neuroscience (IBN), and the Division of Molecular and Cellular Biosciences (MCB) seek qualified applicants to serve as Program Directors in the areas listed below.

Positions will be filled on a one- or two-year Visiting Scientist/temporary basis beginning late summer/early fall 1998. The current salary range is \$64,555 to \$100,611. Responsibilities include research proposal evaluation, budget development, and scientific planning. Broad knowledge and specific research accomplishment are key qualifications.

Qualification requirements are a Ph.D. or equivalent experience plus 6 or more years of independent research experience beyond the Ph.D.

For information RE: DBI programs: Instrument Related Activities, Training, and Research Resources, call **Dr. Machi F. Dilworth, 703/306-1470**; RE: DEB programs: Population Biology, Systematics, Ecology, Ecosystems Studies, Biotic Surveys, and Inventories, call **Dr. Bruce P. Hayden 704/306-1480**; RE: IBN programs: Developmental Mechanisms, Physiology and Ethology, and Neuroscience, call **Dr. Bruce L. Umminger, 703/306-1420**; or RE: MCB programs: Biochemistry, Biophysics, Genetics, and Cell Biology, call **Dr. Maryanna Henkart, 703/306-1440**.

Applicants must submit a resume or other application form of choice. Applications must specify the job title for which you are applying, and should include the following information: country of citizenship; information about education, including major and type and year of degree(s); complete information about experiences related to this job, including job titles, duties and accomplishments, employer's name and phone number, starting and ending dates and year, and salary to: **National Science Foundation, Staffing and Classification Branch, Suite 315, 4201 Wilson Blvd., Arlington, VA 22230, Attn: Catherine Handle, 703/306-1185, extension 3027**. Hearing impaired individuals should call **703/306-0189**.

NSF is an Equal Opportunity Employer committed to employing a highly qualified staff that reflects the diversity of our nation.



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to practical application transforms
molecules to medicines*

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At Schering-Plough's Biotechnology Process Development Facilities in Union, NJ, scientists skillfully perfect innovative and cost-effective methods to bring quality pharmaceutical products to market. In this technologically advanced environment, you will provide the vital link between research and manufacturing.

We seek talented individuals to characterize mammalian cell expression systems for the production of biopharmaceuticals as well as provide necessary cellular physiology and kinetic data that are critical for process development.

ASSOCIATE PRINCIPAL SCIENTISTS

Requires a PhD in Cell Biology, Biochemistry, Virology or a related discipline and several years of postdoctoral experience in mammalian cell culture technology. Background must include a fundamental understanding of cellular physiology, cellular metabolism and characterization of genetically modified cells at biochemical and genetic levels. Experience with viral vector systems and/or recombinant mammalian cell expression systems is highly desirable. The ability to work in a multidisciplinary team environment is a must. To be considered for these positions, please reference Dept. BD97-20-BHS.

ASSISTANT/ASSOCIATE SCIENTISTS

Positions require a BS or MS in Cell Biology, Biochemistry or a biotechnology-related discipline and 0-7 years of experience (minimum 2 years with BS) in mammalian cell culture processes. You will work with senior level scientists as part of a multidisciplinary team requiring self-motivation and an ability to work well with others from diversified scientific backgrounds. To be considered for these positions, please reference Dept. BD97-13-BHS.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing the Dept. code for your position of interest, to: Schering-Plough Research Institute, Human Resources-BHS, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



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Research Institute**

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WHERE "IMPOSSIBLE" IS UNACCEPTABLE.

The goals we have set and the products we are developing are simply too important to be changed, stopped, or delayed by words like "improbable," "unrealistic," or even "impossible." So we have developed a unique environment where those words are unacceptable ... and where innovation, excitement, and exploration are both encouraged and rewarded.

Millennium Pharmaceuticals is committed to finding cures for major common diseases that affect millions of people and that are under-served by existing therapeutic alternatives. Our environment and highly focused approach have already helped us make significant progress towards discovering therapeutic and diagnostic products for obesity, atherosclerosis, asthma, cancer, and other challenging diseases.

We seek talented professionals who, like us, believe that nothing is impossible in making a better quality of life a reality for people worldwide. If you see the impossible as a challenge to overcome ... rather than a reality to accept ... then we invite you to join us in one of the following positions.

Scientist - Myocardial Biology

You will lead an effort in the identification of novel genes and the characterization of underlying molecular mechanisms in normal and diseased myocardium. Signal transduction pathways involved in hypertrophy, contractility, and apoptosis are of particular interest. Millennium offers a rich, highly interactive environment and access to exceptional technologies for gene discovery and functional biology. To be successful, you must have proven leadership and scientific skills demonstrating the ability to achieve results working as an interactive member of a team. The ideal candidate must have a Ph.D. or M.D. and at least two years of postdoctoral experience in cell/molecular biology. Experience in cardiac myocyte biology is preferred.

JOB CODE: SMBK

Scientists - Oncology

We have openings for two Scientists to lead their own groups involved in the effort to characterize genes that are implicated to function in the development and progression of cancer. You will determine the biological role of these genes and their protein products and ascertain if they are targets for small molecule drug development. Qualified candidates must have a Ph.D. in molecular/cellular biology or biochemistry and several years of postdoctoral experience. Some managerial experience would be a plus. Additionally, you should be an effective leader, communicator and team player. JOB CODE: SOK

Scientist - CNS

We are looking for a Scientist with a background in biochemistry and molecular biology of bipolar affective disorders, depressive illness or schizophrenia. Candidates should have a demonstrated research track record in the neurochemical basis of schizo-affective disorders. Candidates must have a publication record indicating expertise in these areas and be conversant with current underlying hypotheses of behavioral, neurochemical and molecular techniques employed in this field. A Ph.D. with 3-5 years of post-doctoral training is required. JOB CODE: SCNSK

Scientist - Anti-Bacterial Program

This Scientist is responsible for coordinating screen configuration and the running of high throughput screens. He/she is responsible for coordinating the exchange of data, information and material with the alliance partner for the Antibacterial Program. Familiarity with standard assay modes for high throughput screening, protein purification, use of reporter gene systems, screening automation, data analysis and data management required. Familiarity with use of natural products extracts in screening is desirable. Ph.D. is required. Previous experience developing/running screening assays in an industrial context is strongly preferred. JOB CODE: SABA

Enjoy the rewards of a collaborative environment, the challenge of progressive science, the incentive of stock ownership, opportunities for career growth and a generous compensation package. All listed positions are for our Cambridge, MA site. Please send your resume by mail to our Resume Processing Center: Millennium Pharmaceuticals, Inc., Source Code: SC112197, PO Box 798, Burlington, MA 01803. Email: Millennium@webhire.com (paste/type in resume first with cover letter at the end. No file attachment).



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The UMMC's Biologic Laboratory is an FDA-licensed facility for development and manufacture of biologic products including human vaccines and plasma products.

Director

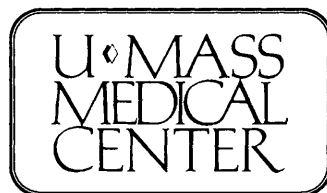
Massachusetts Biologic Laboratories - Boston, MA

The University of Massachusetts Medical Center (UMMC) seeks a Director for its Massachusetts Biologic Laboratories (MBL), located in Boston. The MBL, which is licensed by the U.S. Food and Drug Administration (FDA) to manufacture biologic products for human use, has as its primary mission the improvement of public health through research, development and production of vaccines and plasma products. The MBL, with a staff of over 160, has been fulfilling this mission since 1894.

The Director's primary responsibility is to lead the research and development functions in a dynamic and innovative manner that will continue to allow the Massachusetts Biologic Laboratories to maintain a leadership position in product development. The Director's tasks shall include developing and implementing a strategic plan, and fostering effective relationships with public and private institutions. The Director will have a faculty appointment in an appropriate department of the University of Massachusetts Medical School.

The candidate must have either an M.D. or Ph.D. in a biological science, demonstrated leadership abilities and nationally recognized scientific credentials. Candidates with prior experience or understanding of the development of biologic products, specifically in vaccine development, are preferred. Other relevant experience includes an understanding of clinical trial management and evaluation, as well as success in establishing collaborative agreements with the pharmaceutical/biotech industry.

All candidates should submit a curriculum vitae with a bibliography, which provides information on relevant experience and accomplishments, and a list of at least three references with their postal and E-mail addresses, telephone and fax numbers. Applications will be accepted until the position is filled, although evaluation will begin immediately.



Please send all inquiries to:
Edward Bresnick, Ph.D.,
Vice Chancellor for Research,
University of Massachusetts Medical Center,
55 Lake Avenue North,
Worcester, MA 01655.

UMMC/MBL is an equal opportunity,
affirmative action employer.

Department of High Throughput Screening and Automation

Merck Research Laboratories in Rahway, New Jersey, a world leader in biological and pharmaceutical research, has immediate openings in the Department of High Throughput Screening and Automation.

Assay Development Biochemist — The successful candidate will be responsible for developing automated enzyme and receptor high throughput assays for drug discovery. The responsibilities include designing enzyme and receptor assays and adapting these to an automated screening format.

The position requires a BS or MS in the Biological or Biophysical Sciences and at least two years of basic research experience in biochemistry or related field. Your background should include some of the following: enzyme kinetics and assay design, receptor assays, fluorescence assays, radiometric assays, and immunoassays. A good understanding of enzyme kinetics and protein biochemistry is required. Experience with automated microplate instrumentation such as pipetting stations, dispensers, and microplate readers would be helpful. Knowledge of emerging technologies in fluorescence (HTRF) and radiometric assays (SPA) would be a plus. Good analytical skills, knowledge of good laboratory techniques, knowledge of computers, good interpersonal skills, and strong communication skills are expected. You should be strongly motivated and able to work independently as well as in a team environment. **Position #1**

Assay Development Cell Biologist — The successful candidate will be responsible for developing automated cell-based high throughput assays for drug discovery. The responsibilities include maintaining a tissue culture facility and adapting whole cell screens to automated systems.

The position requires a BS or MS in the Biological Sciences and at least two years of basic research experience in biology or microbiology. Extensive tissue culture experience and general knowledge of cellular biology is required. Your background should include some of the following: tissue culture, proliferation assays, reporter gene assays, enzyme or receptor assays, fluorescence assays, or immunoassays. Experience with automated microplate instrumentation such as pipetting stations, dispensers, cell harvesters/washers, and microplate readers would be helpful. Good analytical skills, knowledge of good laboratory techniques, knowledge of computers, good interpersonal skills, and strong communication skills are expected. You should be strongly motivated and able to work independently as well as in a team environment. **Position #2**



Merck Research Laboratories are located in Rahway, NJ, approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent. For consideration, send your resume with the names of three references to **Merck & Co., Inc.,** **Position # _____, P.O. Box 2000, AD #57, Rahway, New Jersey 07065, RY80A-3.** EEO/AA/VH Employer.

Director Marine Corps Science and Technology

The Office of Naval Research (ONR) is seeking an outstanding individual to serve in this Civil Service position in the Senior Executive Service (SES). Salary range is \$97,000 to \$115,700 (plus locality pay) per year, depending on qualifications. In addition to salary, career SES appointees are eligible to compete for performance awards and bonuses. The primary duty location of this position is Quantico, VA. Filling of this position is subject to position allocation availability.

The Director, Marine Corps Science and Technology (S&T) is responsible for ensuring a strong link between ONR with its S&T infrastructure and resources and the Marine Corps' S&T programs. The Director serves both as ONR's Director for Marine Corps S&T and as the Director for Marine Corps S&T Management in the Marine Corps Combat Development Command (MCCDC). A primary function of the position will be to develop the general and specific plans for the S&T portions of concept explorations performed by the Marine Corps Weapons Laboratory. Specifically, the Director will head the S&T Office of Science and Innovation (OSI) in MCCDC and will supervise a staff of scientists, engineers and support personnel. The purpose of the office is to apply the vision, operational concepts, and requirements of the Marine Corps into the development of a coherent and comprehensive S&T program. The position is responsible for advising the Commanding General, MCCDC, the Director of OSI, the Heads of ONR S&T Departments, and the Director of MCWL concerning a wide range of S&T issues including, but not limited to, the validity, feasibility and applicability of experimental technologies and concepts; areas of technical risk and their assessment; and the field testing of experimental technologies and concepts.

Candidates must have progressive, responsible and substantial experience (preferably with professional education at the doctoral level) in the performance and management of research, technology and/or developmental programs in any of the Navy/ Marine Corps related physical science areas. This experience must be evidenced by such factors as recent publications, presented papers, invited talks, leadership roles in professional organizations, substantial growth in programmatic responsibility, etc. Candidates must also have recent experience in the direct management and coordination of large integrated science and/or technology projects. Progressive and responsible experience in the performance or management of programs relating to environmental or logistics issues of relevance to the Naval Forces is desirable.

Applicants are requested to complete the appropriate supplemental forms. Applicants may download a copy of the vacancy announcement from ONR's web site (<http://www.onr.navy.mil>). Those applicants who do not have access to the Internet, may request a copy of the vacancy announcement from ONR's Vacancy Hotline (703)696-0972. Hearing impaired applicants may use our TDD (Telecommunication Device for the Deaf) number on (703)696-6357. For additional information on applying for this position, applicants may call Dr. E. Zimet on (703)696-4773. Applications will be accepted through Dec. 31, 1997 and must be received by that date. Interested persons should submit their application and supplemental forms to:

**OFFICE OF NAVAL RESEARCH
SATELLITE HUMAN RESOURCES OFFICE
ATTN: ANNOUNCEMENT #97-38(SCI)
800 NORTH QUINCY STREET
ARLINGTON, VA 22217-5660**

ONR IS AN EQUAL OPPORTUNITY EMPLOYER AND PROMOTES DIVERSITY IN THE WORKPLACE. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.

DIRECTOR, FOGARTY INTERNATIONAL CENTER AND ASSOCIATE DIRECTOR FOR INTERNATIONAL RESEARCH, NIH

The John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC), National Institutes of Health (NIH), located in Bethesda, MD, is recruiting for a person to serve as both the Director, Fogarty International Center and Associate Director for International Research, NIH.

The ideal candidate must possess at least a Bachelor's degree with major study in the biomedical or health sciences with a Ph.D. or an M.D. degree in a medical discipline appropriate to the NIH mission. In addition applicants must possess professional experience in the international medical research or international public health field at the senior level (GS-15 or equivalent) that meets the following mandatory knowledge, skills, and abilities as listed below.

1. Ability to provide visionary leadership in international medical research and research administration, as demonstrated through having achieved a leadership position and/or recognized stature in the medical/public research community;
2. Medical or scientific research expertise in illnesses that afflict the population of the world as demonstrated by a broad publication record in peer-reviewed journals; and,
3. Skill in representing the organization through interacting and negotiating with Federal, private sector and multinational leaders to develop international collaborative research opportunities.

This is a civil service position in the Senior Executive Service (SES) with an annual salary ranging from ES-1 to ES-6 (currently \$103,897 to \$123,100). A recruitment bonus of up to 25% of base pay may be paid to a non-Federal applicant or a relocation bonus of up to 25% of base pay may be paid to a Federal applicant selected for this position. Physicians may be eligible for a Physicians Comparability Allowance of up to \$20,000.

Applicants are required to submit a bibliography and curriculum vitae, resume or any other written format which addresses the requirements indicated in this announcement. *All applications are to be postmarked no later than close of business December 19, 1997.*

Ms. Karen Webb, National Institutes of Health, NHLBI Personnel Office, Building 31, Room 5A28, 31 Center Drive, MSC 2484, Bethesda, MD 20892-2484.

National Institutes of Health is an Equal Opportunity Employer

BIOINFORMATICS SCIENTIST AND COMPUTATIONAL BIOLOGIST

Pharmacia & Upjohn, Inc., is one of the world's largest pharmaceutical companies. We are involved in areas such as Oncology, Infectious, Metabolic, Inflammatory, and Central Nervous System Diseases to help people live longer and fuller lives. If you would like an opportunity to make a difference with Pharmacia & Upjohn contact us. We are expanding our bioinformatics capabilities to keep pace with strategic initiatives in both eukaryotic and bacterial genomics and have two positions available for individuals with M.S./Ph.D. degrees or equivalent experience.

Bioinformatics Scientist

This position will maintain and develop genomic database systems which contain public and proprietary genomic data and will provide GCG and general bioinformatics support to program teams. The successful candidate will also develop and apply new computational genomics analysis methods to database searching, sequence/structure/function prediction and pattern recognition. They will contribute to development or deployment of an integrated interface to diverse genomic data. Experience with UNIX, SQL, RDBMS design and maintenance and GCG is required. Experience in bioinformatics, Perl and WWW development is highly desirable. Strong interpersonal and communication skills are required. Please refer to position #970044 in your correspondence.

Computational Biologist

The ideal candidate will develop and apply sequence analysis methods for database mining, prediction of protein structure and function and pattern recognition from relational genomic databases. Demonstrated experience in database mining predicting the function of polypeptides encoded by orphan genes and a thorough working knowledge of UNIX are essential. Experience with relational database tools (SQL) is also desirable. Excellent communication skills and the desire to work as a part of multidisciplinary discovery teams are essential. Please refer to position #970038 in your correspondence.

At Pharmacia & Upjohn you can make a difference, not only for the sake of your career, but also for the millions of people around the world whose lives will be enhanced by the solutions you help us provide. Pharmacia and Upjohn offers competitive salary and benefits.

For confidential consideration, please send your resume with the appropriate position number and a description of your research experience to: **Pharmacia & Upjohn, Recruiting, 7000 Portage Road, Kalamazoo, MI 49001.** We are an equal opportunity employer with a commitment to work place diversity.



Pharmacia & Upjohn

**DIRECTOR, BARRETT CANCER CENTER
UNIVERSITY OF CINCINNATI
COLLEGE OF MEDICINE
AND HEALTH ALLIANCE OF GREATER CINCINNATI**

The University of Cincinnati College of Medicine and the Health Alliance of Greater Cincinnati seek applicants for the position of Director of The Barrett Cancer Center. The College of Medicine is affiliated with the Health Alliance, an integrated organization of six teaching hospitals and a large group of associated physicians. There are also close academic and clinical ties with other institutions including the Children's Hospital Medical Center and the Veterans Affairs Medical Center.

The Barrett Cancer Center Director will provide leadership in research program development and integration. The Center Director will facilitate application of research advancements to the benefit of patients and their physicians in the Greater Cincinnati area. There is substantial institutional commitment of new laboratory space, clinical research infrastructure, and research start-up funds to support the Director in this endeavor. He/she will report jointly to the Dean of the College of Medicine and to the Senior Executive Officer for Cancer Care of the Health Alliance.

The Barrett Cancer Center Director must be a nationally recognized authority in cancer research and have a history of substantial extramural support for his/her research program. The Director must qualify for appointment as Professor or Associate Professor in a clinical department in the College of Medicine. He/she must have significant breadth of expertise in both basic and clinical research to facilitate their union in the Center. The Director must be able to demonstrate effective leadership ability, interpersonal skills, and financial acumen to enable successful management of a complex organization.

APPLICATIONS SHOULD BE ADDRESSED TO:

John C. Winkelmann, M.D., Search Committee Chair
The University of Cincinnati College of Medicine
Office of Faculty Affairs ML-0554
231 Bethesda Avenue
Cincinnati, OH 45267-0554

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

IMMUNOLOGY POSITIONS

DNAX Research Institute, located near Stanford University, has staff positions available in the Department of Immunobiology. Candidates should hold either a Ph.D. and/or MD degree and have completed postdoctoral training. Experience as an independent investigator is preferred.

The Institute conducts research in a variety of areas of molecular and cellular biology with an emphasis on immunology, hemopoiesis and oncology. We are particularly interested in individuals with expertise in the areas of autoimmunity, regulation of immune responses by the TNF family, and lymphocyte apoptosis.

The Department of Immunobiology is presently comprised of ten research groups with a focus on cytokine regulation of immune responses, T and NK cell differentiation and activation, cell adhesion and migration, murine models of inflammation and disease, chemokines and chemokine receptors, and dendritic cell biology. We are looking for creative individuals who will contribute innovative science to this productive research program, and who would enjoy strong interactions with colleagues in our Departments of Cell Signaling and Molecular Biology.

The successful candidates will be expected to establish an independent basic research program in their area of interest. DNAX scientists work in an academically styled environment complemented by a strong, international postdoctoral program.

Qualified applicants should send a *curriculum vitae*, a one-page statement of research interest, and the names of three references to: Human Resources Department, DNAX Research Institute, 901 California Avenue, Palo Alto, CA 94304-1104. DNAX is an equal opportunity employer, m/f/h/v.

DNAX Research Institute

Expanding Minds

Improving Bodies

Chiron Technologies, The Center for Gene Therapy, is a world leader in the development of innovative gene transfer treatments for viral diseases, cancer and genetic disorders. With a solid track record and new HIV and cancer treatments under clinical trial, we're experiencing significant success, which creates an excellent opportunity for a:

QC Manager

As a key member of our Technical Operations Team, you will perform and direct the Quality Control activities to test clinical grade gene therapy products, their precursors and intermediates, in compliance with cGMP.

Responsibilities include: review QC test data; design and/or maintain databases, statistical process control functions/models or other methods to track QC assay product test results; perform activities necessary to develop, implement and/or validate assays; maintain laboratory protocols; review QC operations; and design/implement an operator qualification program to train QC analysts.

Qualified candidate must have a BSc/MSc degree with at least 10+ years' of experience in QC and/or QA functions within the pharmaceutical industry. Previous management experience essential. Must have excellent verbal/written communication skills and the ability to work in a fast-paced environment. Knowledge of cGMP/general QC operations, standard operations, instrumentation, and statistical process control necessary. Familiarity with audits and FDA inspections preferred.

Chiron Technologies, The Center for Gene Therapy, offers a highly competitive salary and superior benefits. Please send your resume to: Chiron Technologies, Center for Gene Therapy, HR Dept., 11055 Roselle Street, San Diego, CA 92121; Fax: (619) 452-2616. EOE.

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Center for Gene Therapy

www.monster.com/chiron

**PRINCETON UNIVERSITY
DEPARTMENT OF GEOSCIENCES**

FACULTY POSITION

The Department is seeking applicants for a junior, tenure-track faculty appointment. The search will concentrate on the following areas, but we also encourage outstanding applicants in other areas of the earth sciences.

- **Surficial and Tectonic Processes**—including erosion and deposition, geomorphology, structural geology, continental dynamics, interface between petrology and tectonophysics, and links to climate and geochemistry.
- **Paleoclimates**—including observational and modeling studies of past as well as present climate.
- **Environmental Mineralogy and Biogeochemistry**—chemical and biological processes, particularly with interests in mineralogy and/or microbiology.

Applicants may strengthen, and benefit from, three related programs at Princeton. The Program in Atmospheric and Oceanic Sciences and the NOAA Geophysical Fluid dynamics Laboratory support numerical modeling of atmospheric and oceanic processes and of present and past climate. The Princeton Environmental Institute is involved in research at the interface of biology, engineering, chemistry, and the geosciences. The Princeton Materials Institute facilitates interdisciplinary research in Materials Sciences.

Send résumé, statement of teaching and research interests, and the names, addresses, and phone numbers of at least three references to **Professor George H. Philander, Chairman, Department of Geosciences, Princeton University, Princeton, NJ 08544-1003, (609) 258-4100, FAX (609) 258-5275**. Applications received by January 31, 1998, will receive formal consideration. *Princeton University is an Affirmative Action Equal Opportunity Employer; women and members of minority groups are encouraged to apply.*



POSTDOCTORAL RESEARCH INSTITUTE FOR MEDICINE AND ENGINEERING (IME)

The IME is a new interdisciplinary institute whose mission is to stimulate fundamental research at the interface between biomedicine and the engineering/computational sciences, that will lead to innovative applications in biomedical research and clinical practice. Thus the focus of IME is "molecular biomedical engineering", an unusual and rapidly developing area of research. Postdoctoral opportunities in new laboratories exist in the following areas:

Vascular cell signaling, cell communication, mechanotransduction-Molecular mechanisms of flow signaling in endothelial cells in vasoregulation and atherosclerosis. Gap junction mediated cell communication. Three dimensional GFP-cytoskeletal imaging. Expertise in cell and molecular biology. **Reply to Dr. Peter F. Davies, Director.**

Thrombosis, Thrombolytics, Vascular Therapeutics-Mechanisms of reaction-transport coupling in blood coagulation and thrombolytics. Expression and characterization of chimeric proteins for cardiovascular drug targeting. Excellent opportunity to apply cell/molecular biology experience toward vascular disease and therapy. Endothelial mechanotransduction projects also available. **Reply to Dr. Scott L. Diamond.**

Biomaterials-Design and construction of soft materials (polymers and liposomes) that can be used for biological applications, or construction of novel materials that incorporate biological functionality. Design of mimetics of biological adhesion or viruses. Background in physical sciences needed. **Reply to Dr. Daniel A. Hammer.**

Hematopoiesis, Tumor Biology-Mechanisms of hematopoietic stem cell transformation. Newly developed *in vivo* and *in vitro* assays are being used to understand the pathogenesis of leukemia and to develop new therapies. Emphasis on the role of bcr/abl in CML, the function of notch genes in hematopoiesis and ALL, and hematopoietic stem cell gene therapy. **Reply to Dr. Warren S. Pear.**

Site Specific Therapy-Mechanisms governing localized treatment strategies for cardiovascular disease, wound healing, and regional pathophysiology in general. Project areas concerned with polymeric drug delivery, localized gene therapy, biomaterials, therapeutic polymer design, and mechanical factors governing implant degeneration. Background in cell and molecular biology, or physical and/or pharmaceutical sciences. **Reply to Dr. Robert J. Levy.**

Applicants should send their CV, a brief statement of research interests, and names of 3 references to the appropriate faculty member at:

The Institute for Medicine and Engineering
Univ. of Pennsylvania, 1010 Vagelos Research
Laboratories, 3340 Smith Walk
Philadelphia, PA 19104-6383
www.med.upenn.edu/ime



UNIVERSITY OF PENNSYLVANIA

Equal Opportunity/Affirmative Action Employer

NATIONAL CANCER INSTITUTE

DIVISION OF CANCER TREATMENT AND DIAGNOSIS ■ CANCER DIAGNOSIS PROGRAM

Opening Date: 11-17-97

Closing Date: 12-15-97

Announcement CA-97-2334

SUPERVISORY MEDICAL OFFICER/HEALTH SCIENTIST

Administrator/Chemist/Biologist/Microbiologist

Diagnostics Research Branch Chief

GS-0602/0601/1320/401/403-15

The Cancer Diagnosis Program of the National Cancer Institute seeks an individual with expertise in oncology to head the Diagnostics Research Branch (DRB). The ultimate aim of the Program is to improve the detection and diagnosis of cancer, to increase dramatically our accuracy in predicting a patient's prognosis and response to therapy, and to improve our ability to select effective therapy for individual patients. The Chief of the DRB will direct and manage a dynamic extramural research program of international scope. The DRB will foster the development and clinical testing of powerful new diagnostic technologies that allow the translation of biological insights into clinically useful tools for characterizing tumors and determining outcome. In pursuing this goal, the DRB will interact closely with other NCI units that focus on related aspects of the diagnosis challenge. These include the Technology Development Branch, responsible for development of novel and high-throughput technologies and devices for characterizing tumors; the Resources Development Branch, responsible for development and maintenance of specimen resources crucial to rigorous diagnostics testing; staff from various programs involved in the development of state-of-the-art informatics systems, and statistical and mathematical techniques adequate for the analysis of massive datasets; the Diagnostic Imaging Program, responsible for improvements in the non-invasive imaging of tumor physiology and biochemistry; and the programs involved in the development of more precise outcomes assessment by the NCI-supported multicenter cooperative groups, cancer centers, and specialized research consortia. The incumbent will be expected to have expertise in design of clinical correlative studies and to coordinate with the Cancer Therapy Evaluation Program of the NCI and with regulatory agencies such as the FDA.

Salary - ranges from \$75,935 - \$98,714 per annum; physicians may be eligible for Physicians Comparability Allowance up to an additional \$20,000 per year. **Benefits** - health and life insurance options, retirement, paid holidays, vacation & sick leave.

U.S. citizenship is required. Applicants must meet the basic experience and educational qualification requirements as stated in the announcement for either the Medical Officer, Health Science Administrator, Chemist, Biologist or Microbiologist series. In order to validate your qualifications, it is mandatory that you describe your proficiency in the following knowledge, skills and/or abilities (KSAs): 1) Ability to plan, develop and implement a comprehensive scientific program including the formulation of program objectives, goals and initiatives, 2) Ability to provide scientific leadership and to manage scientific programs and personnel, establishing program priorities and assessing program effectiveness, 3) Ability to communicate clearly both in writing and orally about scientific issues and to establish and maintain effective collaborative relationships with other scientists, 4) Knowledge of a broad range of research topics that can potentially be used in formulation of program goals in cancer diagnosis.

For additional information on qualification requirements, and application procedures please request the recruitment bulletin by calling 301-402-2789. To have it faxed to you, please call 1-800-728-JOBS, fax ID 1894.

Please submit your application to the:

NATIONAL CANCER INSTITUTE

PERSONNEL MANAGEMENT BRANCH

6120 EXECUTIVE BOULEVARD, EXECUTIVE PLAZA SOUTH, ROOM 550

ROCKVILLE, MARYLAND 20852

A current curriculum vitae and bibliography must accompany all applications for this position.

NIH is an Equal Opportunity Employer

METABOLIC

DISEASE

LIGAND Pharmaceuticals Inc., a leader in gene transcription technology, is applying Intracellular Receptor and Signal Transducers and Activators of Transcription technology to the discovery and development of small molecule drugs for the treatment of major unmet patient needs. Currently we seek an outstanding individual to join us in our Pharmacology Department.

RESEARCH SCIENTIST

You will design/perform key studies to determine the biochemical and molecular effects of novel compounds in animal models of diabetes and metabolic disease. You must have a Ph.D. in Biology or Life Sciences and post-doctoral training which emphasizes *in vivo* systems (especially for metabolic disease) and the tools of molecular biology or biochemistry. Strong problem solving and presentation skills, as well as the ability to direct the work of others and collaborate across departments are essential. Pharmaceutical experience is preferred.

LIGAND, located in San Diego's Golden Triangle near La Jolla, offers an attractive salary and benefits package, including stock options. Please fax or mail your resume to: LIGAND Pharmaceuticals, Dept. 740-122, 9393 Towne Centre Drive, San Diego, CA 92121. Fax (619)550-7800. EOE.



LIGAND
PHARMACEUTICALS

People Are Our Vision...
and our
purpose.

At Lilly, every advancement we make in science is accomplished by people for people. We bring together the brightest and most committed professionals to create breakthrough pharmaceuticals that help people all over the world lead healthier, happier lives. Our people have important work, and we give them the resources and support to help them do it. People. They're what we're all about.

PHARMACEUTICAL PROJECTS MANAGEMENT ASSOCIATES

Eli Lilly and Company is seeking individuals to actively support management in leading cross-functional program teams to deliver clinical and economically optimal outcomes for Lilly's worldwide customers in record time. These associates will lead subgroups in resolving issues, coordinate specific activities (e.g. research requests), and assist in the development of the global plan and ensure accuracy and completeness. These individuals will also utilize project management techniques, concepts, and computer software packages to facilitate the process of project planning.

The successful candidates will be motivated, team-players with strong leadership skills. To qualify, candidates must have a BS or MS in Science along with communication, self-management, organizational, interpersonal, and computer skills. A background in drug development and/or project management desired.

If you are interested please send resume and cover letter to: Eli Lilly and Company, US Recruiting and Staffing, ADSCMPMII, Lilly Corporate Center, Indianapolis, IN 46285.

We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace.

For more information on Eli Lilly and Company, please visit our website at: www.lilly.com



FACULTY POSITION

Pharmacology/Biochemistry/Molecular Biology

The Department of Veterinary Biomedical Sciences, University of Missouri, is accepting applications for a tenure-track faculty position(s). Although preference will be given to candidates at the Assistant Professor level, outstanding candidates at the Associate Professor level will also be considered. Qualifications include a Ph.D., D.V.M., or M.D. and exceptional potential to develop and maintain a strong biomedical research program competitive for extramural support. Preference will be given to candidates whose research interests enhance existing areas of excellence in cardiovascular biology, exercise science, transmembrane signaling, and membrane transport at the molecular, cellular, organ, or systems level. Teaching responsibilities will be in veterinary and graduate pharmacology and/or cellular and molecular biology courses. A joint appointment at the Dalton Cardiovascular Research Center and/or Biochemistry Department is possible. Minorities and women are encouraged to apply. Applications should include a curriculum vitae, names of three references, and a letter stating professional goals. The closing date for applications is January 16, 1998, or until the position is filled. Address correspondence to:

Dr. Meredith Hay

UMC-Veterinary Biomedical Sciences

E102 Veterinary Medicine Bldg.

1600 East Rollins

Columbia, MO 65211

The University of Missouri is an Affirmative Action/Equal Opportunity Employer and complies with the guidelines of the Americans with Disabilities Act of 1990.

FACULTY POSITIONS IN CELLULAR AND MOLECULAR BIOLOGY DEPARTMENT OF BIOLOGY THE UNIVERSITY OF MICHIGAN

The Department of Biology at the University of Michigan solicits applications for three anticipated tenure-track faculty positions in *i)* animal physiology, *ii)* plant physiology, and *iii)* cell biology.

Animal Physiology. We seek an individual who uses integrative, multidisciplinary approaches, including current molecular biology techniques, to study fundamental problems in animal physiology. The successful candidate will interact with one or more of several research groups within the Department, including cellular and molecular neurobiology, endocrinology, and ecology and evolution.

Plant Physiology. We seek an individual who uses molecular approaches to study fundamental problems in plant physiology, including, but not limited to, hormonal regulation of growth and development, photomorphogenesis, signal transduction, or disease resistance. The successful candidate will join an active group of molecular plant biologists who are part of a larger group of cellular and molecular biologists interested in a variety of fundamental biological questions.

Cell Biology. We seek an individual who uses a wide range of genetic, biochemical, and molecular approaches to study fundamental problems in cell biology. The successful candidate will likely work with *Saccharomyces cerevisiae*, and join an active and expanding group of cellular and molecular biologists interested in a variety of fundamental biological questions.

For all three positions, a Ph.D. in Biology or a related field, as well as postdoctoral experience is required. In addition to establishing a successful research program, the successful candidates will be expected to participate in undergraduate and graduate teaching programs of the department. To apply, send a curriculum vitae, copies of reprints, brief summaries of present research and future research plans, and arrange to have three letters of reference sent directly by January 9, 1998, to: **Chair, Department of Biology, University of Michigan, Natural Sciences Building, Ann Arbor, MI 48109-1048.**

Please indicate clearly in the cover letter for which position you wish to apply.

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



TWO FACULTY POSITIONS IN BIOLOGY

The Department of Biology at Indiana University – Purdue University at Indianapolis invites applications for two tenure-track positions at the level of Assistant or Associate Professor beginning August 1998.

Position 1:

We seek a highly qualified individual working on Regenerative Biology. Possible research areas might include regulation of vertebrate development and regeneration; stem cells; intercellular signaling; cell/matrix interactions; or tissue engineering. Postdoctoral training is essential. The successful candidate will be expected to establish an externally funded research program and demonstrate a strong commitment to undergraduate and graduate education. Start-up funds are available. Applicants should send their curriculum vitae, a statement of research and teaching interests, and three letters of recommendation to the address below; the cover letter should specify this position.

Position 2:

Candidates should have a doctorate in a Life Science or Biology Education, and a demonstrated commitment to undergraduate education. The successful candidate will be expected to instruct in introductory-level Biology courses and may also teach upper-level courses in their area of specialization, which may include science education. In addition to excellent teaching, they will establish a strong record of scholarship through development of innovative teaching methods and materials, creative curriculum design, research, and publication. Applicants should send their curriculum vitae, a statement of teaching philosophy and accomplishments, plan for professional development, and three letters of recommendation to the address shown below; the cover letter should specify this position.

Chair, Search and Screen Committee
Department of Biology
IUPUI
723 W. Michigan St.
Indianapolis, IN 46202-5132

Indiana University – Purdue University at Indianapolis (IUPUI) is the third largest campus in Indiana. It is located in the state capital, a city of over 1 million people, and it encompasses 18 schools with degree programs ranging from associate degree to the doctorate. The Department of Biology in the School of Science has 21 full-time faculty and is housed in a new classroom and laboratory building in the science, engineering, and technology complex. Research interests in the Department include cell, molecular, and developmental biology; immunology; membrane biochemistry; regeneration; oncology; ecology; and plant biology. There are more than 350 undergraduate biology majors and 80 graduate students including both thesis students and non-thesis pre-professional students. Opportunities for collaborations with other Departments and Schools are available and encouraged. The Biology Home Page is <http://www.biology.iupui.edu>.

Applications should be received by January 15, 1998.

IUPUI is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are particularly encouraged to apply.

STAFF PHARMACOLOGIST/PHARMACOKINETICIST

Toxicology & Pharmacology Branch
Developmental Therapeutics Program
Division of Cancer Treatment and Diagnosis
National Cancer Institute, National Institutes of Health
GS-0405/415/1320-13/14
Vacancy Announcement#: CA-97-2335

The Toxicology & Pharmacology Branch (T&PB) of the Development Therapeutics Program is seeking candidates for the position of Staff Pharmacologist/Pharmacokineticist. The Toxicology & Pharmacology Branch plans, directs and evaluates a collaborative, extramural, contract-supported program to conduct preclinical pharmacology and toxicology studies for anticancer and anti-AIDS drug and vaccine development. Candidates must have earned the Ph.D. degree in Pharmacology, Biochemistry, Chemistry or a closely related discipline and possess a working knowledge of modern pharmacological, biochemical, and biological methods of drug evaluation. The candidate must have post-doctoral experience in the application of such methods to the study of new anti-cancer and anti-HIV agents. Must have at least 5-7 years experience in evaluating antitumor and/or anti-HIV pharmacology and pharmacokinetics results and have demonstrated ability to summarize results and reach conclusions in a highly professional manner.

The Staff Pharmacologist/Pharmacokineticist will be responsible for: (1) managing the development of methodologies to determine levels of drugs and/or their metabolites in biological matrices; (2) determining the pharmacokinetic profile of drugs of interest in various species; (3) integrating pharmacological data into the drug development process in order to minimize undesirable toxicity and to attain effective drug levels; (4) summarizing all pharmacology data and making recommendations for starting doses, dose escalation schemes and treatment schedules for clinical trial.

Selection criteria include: (1) knowledge of preclinical pharmacology study design and implementation; (2) experience in reviewing and critiquing pharmacology/pharmacokinetic studies for adequacy of data and soundness of conclusions; and (3) skill in presentation of preclinical pharmacology studies both by oral and written communication.

To apply for this position, please submit your application/resume to:

NIH/NATIONAL CANCER INSTITUTE
Human Resource Management
& Consulting Branch
Executive Plaza South, Suite 550
6120 Executive Blvd. MSC 7209
Rockville, MD 20852-7209

For further information regarding application procedures, you may call the staffing office at 301-402-2789.

The base salary for this position ranges from \$54,629 to \$83,922. Benefits include health and life insurance options, retirement, paid holidays, and vacation leave.

Applications must be postmarked no later than December 12, 1997. To be considered, applicants must be U.S. citizens.

CHAIR OF DEPARTMENT OF PATHOLOGY

Tufts University School of Medicine and New England Medical Center Hospital are seeking a distinguished physician for the position of Chair of the Department of Pathology.

New England Medical Center, the principal teaching hospital of Tufts University School of Medicine, has recently joined forces with Lifespan, Rhode Island's largest health care system. Like NEMC, Lifespan is a not-for-profit organization. By joining forces with Lifespan, NEMC will be part of a geographically-linked, regional health care network, providing a unique consolidation of teaching and medical resources to serve New England and beyond.

Tufts University School of Medicine enjoys a superior reputation as a medical school and has long been noted for its excellence in research and patient care, as well as for providing its graduates with a solid foundation in basic and clinical sciences.

In addition to its teaching role, the Department of Pathology maintains a substantial number of research programs involving both basic and clinical investigative projects. The Department is composed of 27 full time faculty, 11 of whom are involved in basic research. Total grant support (both direct and indirect awards) increased in this last year from \$3.84 to \$4.29 million. Research efforts are centered in Immunology and include studies of infectious disease pathogenesis, particularly parasitic and viral infections, neuroendocrine pathobiology, and mechanisms of lymphocyte activation and transformation. Faculty members participate in Ph.D. training within the Sackler School of Graduate Biomedical Sciences.

The Department also has a broad range of clinical subspecialties including cardiovascular, pediatric, gynecologic, endocrine, gastrointestinal and pulmonary pathology, molecular pathology, cytopathology, dermatopathology, hematopathology, microbiology, clinical immunology and chemistry.

Nominees/applicants must hold an MD degree and qualify for professorial appointment. Candidates should present evidence of scholarship, be involved in an active, independent research program and have an established reputation as a clinician and educator. The new chair must possess the ability to lead and expand the programs of the Department.

Names and/or CV's of potential candidates should be sent to:

Richard J. Grand, M.D., Chairman, Pathology Search Committee,
c/o Medical Dean's Office, Tufts University School of Medicine,
136 Harrison Ave, Boston, MA 02111

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Endowed Professorship in Equine Lameness. The College of Veterinary Medicine at the University of Missouri-Columbia announces the E. Paige Laurie Missouri Professorship in Equine Lameness. This newly endowed position has been recently approved by the University of Missouri, and will be filled on or

after March 1, 1998. This Professorship offers a unique opportunity for a qualified individual to make a substantial impact toward our understanding of the equine musculoskeletal system. The successful candidate will be expected to develop a sustained, extramurally funded research program investigating disorders contributing to equine lameness. The E. Paige Laurie Missouri Professor in Equine Lameness should be a program builder and an active team member, as he or she will be expected to provide leadership in developing and coordinating unit-wide research programs and in contributing to existing DVM and graduate training programs.

Presently, the equine unit consists of two ACVS board-certified veterinary surgeons, one ACVIM board-certified internist, one ABVP board-certified equine specialist, four postgraduate trainees, and four veterinary technicians. Excellent opportunities for collaboration with other College and University investigators, particularly in the School of Medicine and the College of Engineering, also exist. An individual with dual training and interest in research and clinical lameness is desirable, as an opportunity exists within the unit to develop state-of-the-art clinical procedures utilizing a high-speed treadmill, computerized gait analysis, nuclear scintigraphy, and computed axial tomography. Highly qualified, basic scientists with well-established research programs involving equine lameness, or musculoskeletal or neuromuscular diseases of horses, are also strongly encouraged to apply. Candidates must be qualified at the academic level of Professor.

Interested individuals are invited to send a letter of intent, curriculum vitae, and the names of three (3) referees to: **Dr. David A. Wilson, A366 Clydesdale Hall, 379 E. Campus Drive, University of Missouri, Columbia, MO 65211 (Phone: 573-882-7821).** Review of applications will begin January 1, 1998, and continue until the position is filled.

The University of Missouri-Columbia is an Equal Opportunity Institution and complies with the guidelines of the Americans with Disabilities Act of 1990.



Washington
WASHINGTON UNIVERSITY IN ST. LOUIS

Academic/Business Administrator

The Department of Physics of Washington University in St. Louis seeks an experienced and talented individual to administer the academic and business affairs of the department. The individual will work with the chair and the faculty to formulate and execute the department's academic programs, manage the financial, human, and physical resources of the department, and assist principal investigators to advance their research programs.

Primary duties will include coordination of undergraduate and graduate curriculum, teaching space, and teaching assistants; monitoring of student progress toward degrees; preparation of departmental budget and management of its financial resources; supervision of non-academic personnel; coordination of departmental reports, newsletters, and outreach activities; management of physical plant and planning of research space needs.

The candidate must demonstrate strong interpersonal, organizational, management, and administrative computer skills. Prior experience in academic organization and student services, and contract and grants administration, is preferred. A graduate degree in Physics or related science/mathematics field is required.

Please send curriculum vitae/résumé, together with names, addresses, phone/fax numbers, and e-mail addresses of at least three references to:

Clifford M. Will, Chair
Department of Physics, CB 1105
Washington University
One Brookings Drive
St. Louis, Missouri 63130
Fax: 314-935-6219

E-mail: cmw@wuphys.wustl.edu

Affirmative Action/Equal Opportunity Employer. Employment Eligibility Verification Requested Upon Hire. Applications received by January 15, 1998, will be assured of full consideration. For information about the department and its programs, point your browser to www.physics.wustl.edu.



Department of Molecular and Cell Biology University of Connecticut

Web site: http://www.lib.uconn.edu/mcb/mcb_dept/

Our diverse and dynamic faculty is dedicated to excellence in both teaching and research. We integrate the study of biological structure with function through interdisciplinary research collaborations. As part of an ongoing expansion in concert with a move to a new facility, we are seeking to fill two tenure-track Assistant Professor positions beginning August 1998. The successful candidates should have appropriate post-doctoral experience to develop a productive research program and to contribute to the important teaching mission of the department. Submit applications which include curriculum vitae, a brief statement of research and teaching interests and arrange to have three letters of recommendation sent. Applicants will be reviewed upon arrival and will be accepted until the positions are filled.

Eukaryotic Genetics: Individuals using genetic approaches to the issues of chromosome transmission, structure and function are of greatest interest. Send application to: **Dr. Hal Krider, Eukaryotic Genetics Search Committee, Department of Molecular and Cell Biology, U-131, University of Connecticut, Storrs, CT 06269.** [Search #98A175].

Cell Biology: This individual would interact with an existing group with general interests in cell signalling, cytoskeletal dynamics, autoimmune dysfunction, cellular stress proteins and regulation of gene expression. We are especially interested in candidates with research strengths in chemokines and receptor function, cell trafficking and motility, signal transduction, or immune cell-endothelial interactions. Send application to: **Dr. David Knecht, Cell Biology Search Committee, U-125, University of Connecticut, Storrs, CT 06269.** [Search #98A174].

The University of Connecticut encourages applications from under-represented groups including minorities, women and people with disabilities.

UNIVERSITY OF
CONNECTICUT

MANAGER MACROMOLECULAR CRYSTALLOGRAPHY FACILITY

MSKCC seeks a professional to manage the Macromolecular Crystallography Facility, as part of the research programs of Drs. Jonathan Goldberg, Dimitar B. Nikolov, and Nikola P. Pavletich. Responsibilities include: maintaining the crystallographic and computational hardware, implementing new software packages, training/assisting other personnel, and participating in the establishment of a MAD beamline at the Brookhaven NSLS. This position offers the selected candidate the opportunity for independent research and collaborations with other faculty. A PhD is required as well as previous experience with the application of crystallographic and computational methods to structural biology. We offer a competitive salary and a comprehensive benefits package. Please forward a complete CV including summary of past experience and achievements and three letters of recommendation to: **Dr. Nikola P. Pavletich, Memorial Sloan-Kettering Cancer Center, Box 576, 1275 York Avenue, New York, NY 10021. EOE/AA.**



Memorial
Sloan-Kettering
Cancer Center

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Staff Officer Environmental Sciences & Engineering

The National Research Council is seeking a staff officer to direct science-policy studies for its Environmental Sciences and Engineering Program. Candidates should have a masters degree related to environmental engineering or physical sciences, including environmental chemistry or environmental modeling, and at least 4-5 years of related professional experience, preferably in the science policy area. Position requires demonstrated abilities to perform analyses and develop objective information in scientific reports. Experience in managing scientific projects is also required. Salary range \$45,500 - 70,000. For consideration, please send resume in confidence to: **National Research Council, HA 354 (RW), 2101 Constitution Avenue, NW, Washington, DC 20418. EOE. Visit us at <http://www.nas.edu>.**

NATIONAL CANCER INSTITUTE DIVISION OF BASIC SCIENCES FREDERICK, MD

Opening Date: November 17, 1997

Closing Date: December 17, 1997

Announcement Number: CA-97-1110

SENIOR SCIENTIST, LABORATORY OF GENOMIC DIVERSITY

The Division of Basic Sciences (DBS), National Cancer Institute (NCI), National Institutes of Health (NIH) is seeking an outstanding individual to fill a Senior Scientist position and to head a research program in the Laboratory of Genomic Diversity; under the direction of **Stephen J. O'Brien, Ph.D.**, located at the NCI-Frederick Cancer Research and Development Center (NCI-FCRDC), Frederick, MD. Candidates should be internationally recognized for their scientific and technological leadership, expertise, and collaborative capabilities in the area of genomic studies and diagnostic cytogenetics.

The goal of his/her research program will be to investigate topics including molecular cytogenetics and chromosome mapping, comparative genomics of mammalian species and of tumor and normal cells, and genomic evolution by employing advanced technologies including chromosome painting, multi-color chromosome fluorescent *in situ* hybridization, and chromosome dissection. Emphasis will be placed on the application of genomic illustration and the study of genomic architecture in the development and diagnosis of cancer.

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

Candidates must possess a medical and/or other doctoral-level degree in a biomedical or related field *and must be either a U.S. citizen, a citizen of a treaty-allied country, or a nonresident alien with a valid work visa.* Total annual compensation will be commensurate with education and experience and ranges up to \$148,000.

Applicants should send a cover letter of interest in the position; a statement of research interests; curriculum vitae; bibliography; and the names and addresses of five individuals who have been contacted by the applicant to provide references (directly to **Ms. McKeown**). Letters of reference should not be submitted by the applicant. This material should be sent to: **Ms. Toni McKeown (1110), National Cancer Institute, Human Resources Management and Consulting Branch, 6120 Executive Boulevard, Room 537, EPS, Rockville, MD 20852**

Applications may also be faxed to: (301) 402-9333. If you need additional information, please call: **Ms. Toni McKeown, NCI Human Resources Management and Consulting Branch on (301) 402-2812.** Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

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Procter & Gamble

PRODUCT DEVELOPMENT DIVISION

Consider an exciting career with a leading consumer company committed to health care research and product development. We have an immediate opening for an Associate Scientist in our Pharmaceuticals Product Development Division located in suburban Cincinnati, Ohio.



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• Associate Scientist, Pharmacokinetics

The successful candidate will have a BS/MS in a biological related discipline with 5-10 years experience. A strong background in preclinical pharmacokinetics and/or toxicology is required, including experience in study coordination, data analysis and interpretation, and working knowledge of good laboratory practices (GLPs). Previous supervisory experience of technical staff is desired.

Procter & Gamble is a world leader in the research, development, manufacture and marketing of a wide variety of consumer products including beauty care, cosmetics & fragrances, health care, laundry & cleaning, paper, and pharmaceutical products. Annual sales exceed \$35 billion and our annual R&D investment is more than \$1 billion. P&G offers a stimulating environment for personal and professional growth, highly competitive salaries and excellent benefits package which place us among the top 5% of U.S. firms.

To learn more about Procter & Gamble, visit our website at: <http://www.pg.com>. Qualified applicants may send a resume and cover letter to:

**The Procter & Gamble Company
J. Joly - ON160**

**Miami Valley Laboratories, Dept. JSM9804
11810 E. Miami River Rd. • Ross, OH 45061**

No agency referrals, please.

The Science of Agricultural Genetics

RESEARCH MANAGER (Job # AB - 811)

Analytical Biochemistry — Corn Marker Technologies

An individual is needed to manage the Corn Marker Technologies Lab in our Analytical Biochemistry Department. This person will play an integral role implementing and applying molecular marker technologies in corn to meet the needs of researchers across both research and product development at Pioneer. The responsibilities of this position include: (i) day-to-day operation of the lab, (ii) working closely with other researchers (both lab- and field-based) to plan and carry out projects, (iii) implementing technologies and/or approaches which could enhance the efficiency and/or utility of information generated in molecular marker projects, and (iv) working closely with other scientists developing novel technologies helping to develop further and implement those technologies which might have applications in this lab. A Ph.D. in molecular biology, genetics, or other related discipline and 7 years related experience are required. Experience managing a molecular marker laboratory, preferably in an industrial setting, and expertise with PCR-based marker technologies are essential. The ideal candidate will have experience in the area of maize genetics and will possess: a demonstrated ability to manage multiple deadline-driven projects, the ability to communicate effectively and collaborate with researchers having a wide range of backgrounds, experience designing and implementing laboratory automation, and the ability to manipulate and utilize databases. Application deadline: December 12, 1997.

POST DOCTORAL ASSOCIATE (Job # QT - 806)

Discovery Research

A highly motivated individual is sought to work on the biochemistry and molecular biology of plant polysaccharide biosynthetic enzymes. The candidate must have experience in the standard state-of-the-art techniques of biochemistry and molecular biology and must be able to conduct research independently. Experience in cell biology and cell fractionation, although not required, will be a plus. The successful candidate will have a Ph.D. degree in biochemistry or related field, good writing and communication skills, and will be expected to write up research results in a timely manner. The position is for two years. Application deadline: December 19, 1997.

BIOCHEMISTRY AND MOLECULAR BIOLOGY OF METABOLIC ENGINEERING

As part of the continuing commitment of Pioneer Hi-Bred International to the development of value added seed products, we have two positions open in the area of novel polymer production in seeds.

RESEARCH MANAGER (Job # QT - 807)

Quality Traits, Biochemistry

We seek a biochemist to develop a research program devoted to the optimization of accumulation of novel polymers in plant seeds. The incumbent will participate in an existing multidisciplinary research and product development team focused on the alteration of flux through metabolic pathways. The approaches taken will be biochemical and will focus on metabolite partitioning, modulation of extant enzymatic activities by altering kinetic parameters, and the introduction of new activities or pathways. The position requires a thorough knowledge of enzyme kinetics, control of flux through pathways and metabolism that will be demonstrated by your current research pursuits. Practical familiarity with the tools of molecular biology is also necessary. This position is within a team; experience and demonstration of your success in collaborative research is imperative.

RESEARCH MANAGER (Job # QT - 808)

Quality Traits, Molecular Biology

The second position is for a molecular biologist who will spend half time on optimizing the accumulation of novel polymers in seeds and half time supporting the molecular biology needs of other team members. For the former, you will develop and implement a program whose goals are the optimization of gene expression in transgenic plants for enzymes involved in novel polymer biosynthesis. Demonstrated ability in eucaryotic gene expression research is required and knowledge of metabolism is distinctly advantageous. The support functions include vector construction for *E. coli* and yeast protein over expression systems, transgenic plant nucleic acid analysis and isolation of full length cDNAs as part of our maize genome project. As with the above job, this position requires demonstration of previous success in collaborative research projects.

Both of the above positions are open immediately and applications are due December 19, 1997. Minimum requirements are Ph.D. in a relevant discipline and three years of directly related post-doctoral research.

Pioneer offers an opportunity to interact among hundreds of scientists with diverse backgrounds. We offer competitive salaries and excellent, comprehensive benefits. Des Moines is a prospering heartland city that ranks well above the national averages in affordability and education. Our location provides a mix of beautiful open spaces and city life advantages. For confidential consideration send 3 copies of your resume and cover letter indicating job number to: Pioneer Hi-Bred International, Inc., Attn: PERSONNEL (Job #xx-xxx), P.O. Box 1004, Johnston, IA 50131-1004.

Pioneer Hi-Bred

International, Inc., is

the world leader in

agricultural genetics

Founded in 1926, we

are a publicly held

company that invests

more than \$115 million

in research and product

development. Pioneer®

brand products are

grown in almost every

crop-producing

continent in the world.

At our headquarters

in Des Moines, Iowa,

we're adding to our

Research team.



PIONEER HI-BRED
INTERNATIONAL, INC.
An Equal Opportunity
Employer

HARVARD MEDICAL SCHOOL

Faculty Position in the Department of Cancer Immunology & AIDS at the Dana Farber Cancer Institute

Dana Farber Cancer Institute is undergoing expansion of its basic research facilities on the occasion of its 50th anniversary, and newly recruited faculty will be housed in the Smith Research Building. Together with the Department of Pathology at Harvard Medical School, the Department of Cancer Immunology & AIDS seeks well-qualified (Ph.D., M.D./Ph.D., or M.D.) applicants for tenure-track positions at the Assistant or Associate Professor level. Applicants must have at least 3–5 years postdoctoral experience, high quality peer-reviewed publications, evidence of independent research and competitive funding potential. The Departments seek individuals who have the capability of directing innovative independent research in immunology using molecular and/or cellular approaches.

The positions offer significant scientific resources in a stimulating environment as well as an attractive start-up support package. Candidates are expected to participate in the teaching activities of the Harvard Medical School, Department of Pathology for medical students, graduate students, and postdoctoral fellows. Applicants should submit, as soon as possible, curriculum vitae, bibliography, a brief statement of research interests and the name, address, and phone number of four referees to: **Dr. Harvey Cantor, Department of Cancer Immunology & AIDS, Dana Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.**

DFCI and HMS are Equal Opportunity/Affirmative Action Employers. Women and minorities are strongly encouraged to apply.

SCIENTISTS

Ph.D. Scientist *Molecular Mechanisms*

A Scientist position is available in the Molecular Mechanisms Group in our Research department. The successful candidate will perform characterizations of lipid assemblies and define lipid-lipid and lipid-drug interactions in those assemblies. The use of such techniques as DSC, NMR, cryo-EM, fluorescence spectroscopy, etc. is desirable and an understanding of the physical properties of liposomes and other lipid assemblies is required. The qualified candidate will possess a Ph.D. in biophysics, chemistry, biochemistry, bioengineering or a related discipline. Prior experience in physical and chemical techniques is desired. **Dept.: WP**

Scientist/Senior Scientist

A Scientist/Sr. Scientist position for Ph.D. involving lipid-based drug delivery systems is also currently available. Position involves short-term, product-related, applied research. Expertise in lipid biophysical techniques and chemical analysis is required. Candidates with post-doctoral and/or pharmaceutical experience will be given preference. **Dept.: CF**

Research Scientist

The Liposome Company, Inc. is currently seeking a scientist to be a key member in a group discovering new drugs for the treatment of Cancer and other diseases. Laboratory experience in mammalian cell culture, molecular biology and signal transduction research is essential. The candidate will devise and use in-vitro assays to evaluate potential therapeutics and interact closely with other members of the group. The candidate will have a Ph.D. in the Biological Sciences and at least 2 years' academic or pharmaceutical industry laboratory experience. Strong writing and oral communication skills are essential. **Dept.: EM**

Liposome offers excellent benefits and a competitive salary. Please forward resume, indicating department, to:

**The Liposome Company, Inc.,
Human Resources,
One Research Way,
Princeton, NJ 08540.
EOE.**



THE
LIPOSOME
COMPANY, INC.

CHIEF, LABORATORY OF PULMONARY PATHOBIOLOGY (LPP)
National Institute of Environmental Health Sciences
National Institutes of Health

The National Institute of Environmental Health Sciences (<http://www.niehs.nih.gov/>) in Research Triangle Park, North Carolina is recruiting a senior tenured investigator to run the Laboratory of Pulmonary Pathobiology. We are looking for a senior investigator with an international reputation in a specific area within the broad context of pulmonary pathobiology and its relationship to environmental influences. Investigators with clinical expertise and experience are particularly encouraged to apply. Possible specialized research areas include, but are not limited to, signal transduction mechanisms, receptor biology, immunology-hypersensitivity, inflammatory cell biology, extracellular matrix signaling, and developmental biology. The successful candidate will have an outstanding publication record and a proven history of research leadership, and will be expected to develop new initiatives in pulmonary research.

The LPP has existing research groups in the areas of airway cell biology and airway inflammation, and is beginning new studies on environmental influences leading to asthma development. The new recruit would be expected to provide leadership for the scientists within the LPP, and to provide a focus for collaborative efforts within the NIEHS. Level of appointment and salary will be commensurate with the experience and qualifications of the candidate. Excellent space and research support are available. The level of support will be commensurate with the rank at which the successful candidate is hired.

Applicants will require a Ph.D. and/or M.D. degree. Applications from women or members of minority groups are particularly welcome. Applicants should submit a curriculum vitae, a list of publications, reprints of up to five representative publications, a summary of past research, a plan for future research, and arrange for three letters of reference to be mailed by February 18, 1998 to: **Ms. Dara Trupe, Human Resource Management Branch, (HNV97-27), National Institute of Environmental Health Sciences, National Institutes of Health, P. O. Box 12233, Maildrop EC-11, Research Triangle Park, NC 27709; (919) 541-7513.**

NIEHS/NIH is an Equal Opportunity Employer

NIDCD
POSTDOCTORAL POSITION

Section on Murine Genetics • Laboratory of Molecular Genetics

The Section on Murine Genetics, Laboratory of Molecular Genetics (LMG), National Institute on Deafness and Other Communication Disorders (NIDCD) is seeking a postdoctoral fellow to join research projects aimed towards identifying and characterizing genes and genetic interactions that are thought to play crucial roles during development and functional organization of the mammalian inner ear. We recently identified and mapped a modifying locus (termed *mdfw*) in the CBy-*dfw*^{2J} strain conferring progressive hearing loss to *dfw*^{2J} heterozygotes (Noben-Trauth et al., Genomics 44, 266-272). Besides *mdfw*, we plan to identify and characterize other deafness mutations in the mouse. Our experimental approaches use auditory brainstem response analysis (ABR) immunohistochemistry, genetic mapping and positional cloning techniques.

The ideal Postdoctoral candidate would have a genuine interest in studying the genetics and molecular mechanisms of hearing using the mouse system with experience in molecular biology, audiology or immunohistochemistry. Research projects would include, but are not necessarily restricted to, the identification and characterization of the hearing susceptibility gene *mdfw*.

NIDCD provides an outstanding intellectual environment, state of the art audiology and sequencing equipment, a large animal facility and competitive salaries and health benefit packages. Ph.D. and/or M.D. applicants should have experience in molecular biology, audiology, or immunohistochemistry with no more than five years of post-doctoral expertise.

Please send a curriculum vitae, including bibliography, description of research interests and the names and addresses of three references to: **Dr. Konrad Noben-Trauth, National Institute on Deafness and Other Communication Disorders, 5 Research Court, Rockville, MD 20850; email: kntrauth@pop.nidcd.nih.gov**

Information may also be obtained by contacting Ms. Mirene Boerner, NIDCD, phone (301) 402-2829, email: mboerner@pop.nidcd.nih.gov

NIH is an Equal Opportunity Employer



*Working on the molecular level
to conquer, treat, or prevent
debilitating diseases.*

**INFECTIOUS DISEASES
DISCOVERY RESEARCH**

AT SCHERING-PLOUGH

At the Schering-Plough Research Institute, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of exploratory pharmaceutical discovery, become part of an advanced multidisciplinary research group focused on infectious diseases.

ASSOCIATE SCIENTISTS/SCIENTISTS

Excellent opportunities are available for innovative, organized and highly motivated scientists to join a multidisciplinary team involved in HCV/HIV antiviral research. To qualify, you will need a BS degree in Molecular Biology or a related discipline and 4-7 years of experience or an MS degree and 2-4 years of experience. Background must include expertise in cloning and expression using various systems, protein purification and characterization. Familiarity with enzymology, virology and cell culture techniques is a plus. Demonstrated ability to work both independently and as a team member is critical.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at <http://www.sp-research.com> or send a scannable resume and cover letter, original copy only, referencing Dept. ZH-PC, to: Human Resources-PC, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. *We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.*



**Schering-Plough
Research Institute**

Using Science for Human Advantage

POSITIONS OPEN

DEPARTMENT HEAD OF BIOLOGICAL SCIENCES SOUTHEASTERN LOUISIANA UNIVERSITY

Southeastern Louisiana University is seeking applicants for the position of Head of the Department of Biological Sciences available August 1998. The Department of Biological Sciences is housed in the College of Arts and Sciences and offers a B.S. degree in biological sciences with concentrations in general biology, botany, environmental studies, microbiology, and zoology (applied or pre-professional), an M.S. degree in biological science and a B.S. in horticulture. A curriculum in biology education is offered through the College of Education. The Department has over 40 full- and part-time faculty and staff, approximately 30 graduate students, and is housed in four buildings. The College also operates an Environmental Research Station in the Lake Pontchartrain Basin. Southeastern Louisiana University is a comprehensive state university located in Hammond, a city of about 30,000 situated an equal distance between New Orleans and Baton Rouge. The campus has over 15,000 students and has been one of the fastest growing in the nation. Visit our website: www.selu.edu for additional information. Qualifications: Ph.D. in an area of biological science, substantial teaching experience, administrative experience, an established research program, and a strong record of extramural funding and refereed publications. Excellent interpersonal, leadership, and management skills. Salary and applications: Salary is commensurate with experience and qualifications. Application packet should include a letter of interest and statement of administrative philosophy, a full curriculum vitae, three letters of recommendation, and the name, addresses, telephone numbers, and e-mail addresses of at least three references. All materials should be sent to: Dr. Edward T. Nelson, Chair, Search Committee, Department of Biological Sciences, Southeastern Louisiana University, SLU 736, Hammond, LA 70402-0736. Telephone: 504-549-3502; FAX: 504-549-3851; e-mail: enelson@selu.edu. Biology website: <http://www.selu.edu/Academics/Depts/Biology/pages/biology/main.htm>. SLU is an Affirmative Action/Equal Employment Opportunity/ADA Employer.

TENURE-TRACK MICROBIOLOGIST/ IMMUNOLOGIST

The Biology Department of Albion College requires a full-time, tenure-track Microbiologist/Immunologist to begin in August, 1998. A Ph.D. is required, and teaching experience is preferred. The successful candidate will be expected to teach upper-level undergraduate courses in general microbiology with lab and immunology with lab. The candidate will also share responsibilities in introductory biology courses. Opportunities exist to teach environmentally related topics. A research program incorporating undergraduate students is expected. Facilities include standard molecular biology equipment (including thermal cycler, DNA sequencing apparatus, and ultra-low freezer), TEM and SEM, and a 135-acre nature center. Further information is available at website: <http://www.albion.edu/fac/biol>. Send letter of application, including teaching philosophy and research interests, curriculum vitae, graduate and undergraduate transcripts, and three letters of reference to: Dr. Ruth E. Schmitter, Chair, Biology Department, Albion College, Albion, MI 49224. Deadline for applications is December 15, 1997. Albion College is an Equal Opportunity Employer. Albion College encourages applications from women and minority candidates.

ENDOWED CHAIR FOR THE STUDY OF RETINAL DISEASE

Applications and nominations are invited for an occupant for the Prince Abdulaziz Bin Ahmad Bin Abdulaziz Al-Saud Chair for the Study of Retinal Disease to become part of the Louisiana State University Medical Center Department of Ophthalmology and Louisiana State University Eye Center. Qualifications include an outstanding record as an educator, clinician, surgeon, and research scientist in the area of retinal disease. Send curriculum vitae along with the names of three references to:

Nicolas G. Bazan, M.D., Ph.D.
Chair, Search Committee
Louisiana State University Medical Center
Neuroscience Center of Excellence
2020 Gravier Street, Suite D
New Orleans, LA 70112

Applications must be postmarked by January 15, 1998. Women and minorities are encouraged to apply.

POSITIONS OPEN

PIMA COMMUNITY COLLEGE INSTRUCTIONAL FACULTY BIOLOGY AND CHEMISTRY Academic Year 1998-99

Pima Community College is the fifth-largest multicampus community college in the nation and opens its doors to more than 53,000 credit and non-credit students each year. Tucson is located in a lush desert valley surrounded by four mountain ranges. A multicultural, southwestern metropolitan area with more than 750,000 people, it is renowned for its rich heritage and superb weather.

The Instructional Faculty position in biology is responsible for teaching biology courses for biology majors, non-majors, and allied health students.

The Instructional Faculty position in chemistry is responsible for teaching chemistry courses at all levels including second-year college-based courses such as organic chemistry and materials science.

Applicants must be certified or eligible for certification by the State Board of Directors for Community Colleges of Arizona in the discipline to be taught. Minimum certification requirement is a Master's degree with 24 semester hours of upper-division and/or graduate credits in the discipline to be taught.

Closing date: January 14, 1998.

If interested, please contact our Human Resources Department for position information and application materials:

Pima Community College
Human Resources, Employment Office
4905D East Broadway, Suite 102
Tucson, AZ 85709-1190
Telephone: 520-206-4624
TTY: 520-206-4852
FAX: 520-206-4662

Website: <http://pimacc.pima.edu/bull/hr.html>

Equal Opportunity/Affirmative Action Employer. Women, minorities, and other protected classes are encouraged to apply. ADA accommodations available.

NEUROBIOLOGY

A search is underway to identify a tenure-track faculty member at the rank of ASSISTANT or ASSOCIATE PROFESSOR with research interests relevant to neural-immune interaction. We are looking for an individual to complement existing research strengths in sensory neurobiology and immunology. Appropriate areas would include central visceral and autonomic systems, neuroendocrinology, cytokine-CNS signaling, or the neural substrates of stress. Opportunities exist for campus-wide interdisciplinary interactions through the neuroscience or psychoneuroimmunology programs. Applicants should have a Ph.D. and/or professional doctorate, appropriate postdoctoral experience, and a strong record of scholarship. The successful candidate will be expected to develop a competitive, independent research program and excel in graduate and professional instruction. Send curriculum vitae, a brief statement of research interests, and the names and addresses of three references to the search committee chair:

Dr. Susan P. Travers
Section of Oral Biology
College of Dentistry
Ohio State University
305 West Twelfth Avenue
Columbus, OH 43210

Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to apply. Review of applications will begin January 5, 1998, and continue until the position is filled.

VERTEBRATE BIOLOGIST

The Department of Biology, Sonoma State University, invites applications from broadly trained Vertebrate Evolutionary Biologists for a tenure-track, ASSISTANT or ASSOCIATE PROFESSOR position beginning fall 1998. See full announcement on our Web page (website: www.sonoma.edu/biology) for application requirements or request them from: Dr. Philip T. Northern, Chair, by FAX: 707-664-3012; e-mail: phil.northern@sonoma.edu. Applications postmarked by January 2, 1998, will receive priority consideration. Applications will be accepted until a final postmark date of January 30, 1998. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION IN PATHOLOGY/ IMMUNOLOGY

Building on strength in immunology, the Department of Pathology at the University of Iowa College of Medicine invites applications for a tenure-track faculty position. Applicants should have an M.D. or M.D.-Ph.D., completed a residency program in pathology, and have strong postdoctoral training in immunology as evidenced by a record of productivity. The successful applicant will be expected to implement a strong extramurally funded research program focused on immunologic mechanisms of disease. The selected candidate will receive a primary appointment in the Department of Pathology, with appropriate secondary appointments in other departments and programs including the Interdisciplinary Immunology Program. Contributions to the service activities and teaching duties of the Department of Pathology and the Immunology Program are expected. These contributions can be designed to accommodate the interests and experience of the candidate. The Immunology community at the University of Iowa is composed of more than thirty basic and clinical scientists working in a collaborative and supportive environment. The Interdisciplinary Immunology Program is active in graduate and postgraduate training, and presently oversees both predoctoral and postdoctoral NIH training grants. Applications for any rank are welcome. Salary will be commensurate with qualifications and experience. Applicants should submit a curriculum vitae, research plans, and the names of three references to:

Dr. Thomas Waldschmidt
Chair, Search Committee
Department of Pathology, 127 ML
University of Iowa College of Medicine
Iowa City, IA 52242

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

FACULTY POSITION FUNGAL OR PLANT GENETICIST

The Department of Botany at the University of Wyoming seeks applicants for a tenure-track position at the rank of ASSISTANT PROFESSOR in the area of molecular genetics. The successful applicant will have the potential for interacting with other Ph.D. programs in the department (mycology, plant systematics, plant physiology/cell biology, and ecology), and will participate in research, teaching (introductory genetics, general biology, and advanced courses) and student advising. Development of an externally funded research program is expected. Candidates must have a Ph.D. degree; postdoctoral experience is desired. The department has 11 faculty members and 30 graduate students. For more information, see website: www.uwyo.edu/a&s/bot/index.htm. Screening of applications will begin on January 12, 1998. Applicants should submit a letter of application, curriculum vitae, transcripts, statements of teaching and research interests, and the addresses and telephone numbers of three references to: Dr. Gregory K. Brown, Genetics Search Committee, Department of Botany, University of Wyoming, Laramie, WY 82071-3165. Persons seeking admission, employment, or access to programs of the University of Wyoming shall be considered without regard to race, color, national origin, sex, age, religion, political beliefs, disability, or veteran status.

The Department of Natural Sciences at the University of North Florida invites applications for a TENURE-TRACK POSITION beginning August 1998. A Ph.D. in the area of vertebrate physiology is required. Applicants must demonstrate a strong commitment to undergraduate teaching and the ability to conduct meaningful research involving undergraduates. The successful candidate will be qualified to teach a major's course in physiology, anatomy and physiology, and an introductory biology course. Postdoctoral experience and the ability to procure external funding are valued assets. A letter of application, curriculum vitae, concise statements of teaching and research interests, undergraduate and graduate transcripts, and three letters of reference should be sent to: Michael R. Lentz, Biology Search Committee, Department of Natural Sciences, University of North Florida, Jacksonville, FL 32224-2645 by postmark deadline January 5, 1998. University of North Florida is an Equal Opportunity/Equal Access/Affirmative Action Institution. Individuals who need reasonable accommodations to participate in the application/selection process must notify the search committee at the address listed above (or Telephone: 904-620-2830) a minimum of five (5) working days in advance.

MYCOLOGIST

The University of Wisconsin, Department of Botany, seeks a mycologist with a broad knowledge of fungi for a tenure-track Assistant Professor position, beginning Fall, 1998. Primary duties include establishing a research program in the appointee's area of specialization, and teaching mycology. All areas of fungal research specialization will be considered, including ecology, systematics, physiology, molecular biology, genetics, lichenology, medical mycology, and fungal plant pathology. Applicants should know the diversity of fungi so as to be capable of teaching a general mycology course with both field and laboratory components. Additional teaching responsibilities are an advanced course in the candidate's mycological specialty, and contributing to the Department's general teaching mission as needed. Applicants should have a commitment to teaching. The Campus has mycological expertise in Forestry, Forest Products, Plant Pathology, and Health Sciences. The successful candidate will be expected to contribute to the development of mycology across the Campus, providing leadership through an active program of research and instruction.

Applicants should send a curriculum vitae, a statement of research and teaching interests and goals, and three letters of recommendation. The review of materials will commence on Jan. 10, 1998. To ensure full consideration, applicants should have materials in by that date. Send applications to **Professor Timothy Allen, Chair of Search Committee, 430 Lincoln Drive, University of Wisconsin, Madison WI 53706-1381**. Unless confidentiality is requested in writing, information regarding applicants must be released on request. Finalists cannot be guaranteed confidentiality. *The University of Wisconsin-Madison is an Affirmative Action, Equal Opportunity Employer committed to excellence through diversity.*



Fellowships at the Smithsonian Tropical Research Institute

The Smithsonian Tropical Research Institute (STRI) in the Republic of Panama offers fellowships in tropical biology for research based at its facilities.

Annual 3-year Tupper postdoctoral fellowship. Annual stipend is \$28,000 with yearly travel and research allotments (deadline: Jan 15).

Three-month fellowships. For graduate students (deadline: Feb 15, May 15, Aug 15, and Nov 15). Both offered directly by STRI; for information: <http://www.stri.org> or fellows@tivoli.si.edu.

Predocctoral, postdoctoral, senior postdoctoral (1-year), and 10-week fellowships. Molecular Postdoctoral 2-Year Fellowship (deadline: Jan 15). For information contact Office of Fellowships & Grants at **955 L'Enfant Plaza, Suite 7000, Washington DC 20560** or see e-mail: siofg@ofg.si.edu or <http://www.si.edu/research+study>.

Executive Director POLICY DIVISION

The National Research Council (NRC), the principal operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, a national non-profit, non-government organization located in Washington, D.C., invites applicants for the position of Executive Director of the Policy Division (PD). A staff of approximately 15 members supports the division's work which includes programs that analyze relevant science and technology policy issues.

The Executive Director, in cooperation with the NRC Chairman and Executive Officer, manages PD as one of eleven major program units of the NRC, including all scientific, financial, and administrative operations of the unit, subject to the policy directives of the Chairman, Governing Board, and Executive Officer of the NRC. The incumbent plans and oversees the ongoing program of technical activities and studies, supervises staff, and is expected to stay abreast of major developments in the fields of US science policy, US policy and performance in technology and innovation, sustainable development, and health of the US research enterprise. The PD Executive Director identifies emerging problems and opportunities for NRC studies and responds to public and private requests for studies and information. The Executive Director serves as a senior member of the leadership team of the NRC and, in addition to other duties, supports the overall vitality and effectiveness of the institution. These activities include joint projects across a range of disciplines, reviews of overall program and managerial effectiveness, and strategic positioning for the future of the organization.

Applicants should have the following qualifications: Ph.D. or equivalent related to science and technology policy, and at least ten years experience related to the analysis of policy issues. Substantial leadership experience in program development, policy analysis, and project quality assurance is required. Familiarity with the role of the U.S. government in supporting, contracting for, and using research in areas of science and technology policy, as well as with institutions of higher education and industry, is required. Candidates must demonstrate excellence in teambuilding, human resource management and financial management, and have very effective oral and written communication skills.

Please send resume in confidence to:
**National Research Council Human Resources, GR 146 (PD-RL)
2101 Constitution Avenue, NW
Washington, D.C. 20418**

For more information about the NRC, visit us at www.nas.edu
An Equal Opportunity Employer

Head, Personnel Optimization & Biomolecular Science and Technology Department

The Office of Naval Research (ONR) is seeking an outstanding individual to service in this Civil Service position in the Senior Executive Service (SES). Salary range is \$97,000 to \$115,700 (plus locality pay) per year, depending on qualifications. In addition to salary, career SES appointees are eligible to compete for performance awards and bonuses. Filing of this position is subject to position allocation availability.

The Director, Personnel Optimization and Biomolecular S&T Department is a key position in science and technology management in the Department of the Navy (DON) and the Department of Defense (DOD). The incumbent is responsible for managing and directing extensive activities in fostering, developing, administering and executing an integrated program of basic research, applied research and advanced technology development in such fields as computational neuroscience, cognitive science, manpower, personnel, training, human factors, occupational and environmental health, medicine of naval operations (undersea, Marine Corps, surface, aerospace) and combat/contingency medicine. Significant portions of the incumbent's efforts involve acting as an expert consultant and advisor to top management in ONR and other top professional and military personnel. The incumbent recommends program policy and provides leadership to the broad direction of the programs under his/her cognizance. He/she establishes the objectives, policies, and priorities pertinent to the department and oversees through subordinate managers the effective accomplishment of the departments activities. His/her direction of the Department's programs involves the outlay of DON financial and human resources for science and technology and directly influences the character and capabilities of the Navy and the Marine Corps of the future and the state of national science and technology knowledge and capabilities in the fields of science and technology which are under the cognizance of the Department.

Candidates must have progressive responsible and substantial experience (preferably with professional education at the doctoral level) in the performance and management of research, technology and/or developmental programs in biological sciences. This experience must be evidenced by such factors as recent publications, presented papers, invited talks, leadership roles in professional organizations, substantial growth in programmatic responsibility, etc. Candidates must also have recent experience in the direct management and coordination of large integrated science and/or technology projects. Progressive and responsible experience in the performance or management of programs relating to human factors, medical, manpower, personnel and/or training issues of relevance to the Naval Forces is desirable.

Applicants may download a copy of the vacancy announcement from ONR's web site (<http://www.onr.navy.mil>). Those applicants who do not have access to the Internet, may request a copy of the vacancy announcement from ONR's Vacancy Hotline 703-696-0972. Hearing impaired applicants may use our TDD (Telecommunication Device for the Deaf) number on 703-696-6357. For additional information on applying for this position, please contact Sandra Weston on 703-696-0383. For technical information concerning this position, applicants may contact Captain Robert Carter on 703-696-4058.

Applicants will be accepted through December 31, 1997, and must be received by that date. Interested persons should submit their application to:

**Office of Naval Research
Satellite Human Resources Office
Attn: Announcement #97-37(SCI)
800 North Quincy Street
Arlington, Virginia, 22217-5660.**

ONR IS AN EQUAL OPPORTUNITY EMPLOYER AND PROMOTES DIVERSITY IN THE WORKPLACE. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.

POSITIONS OPEN

CHAIR DEPARTMENT OF MICROBIOLOGY AND MOLECULAR CELL SCIENCES

The University of Memphis invites applications and nominations for the position of Chair of the Department of Microbiology and Molecular Cell Sciences. Minimum qualifications include the Ph.D. degree and academic qualifications commensurate with the academic rank of Professor of microbiology and molecular cell sciences. The candidate's area of research specialization may be in biochemistry, cell biology, developmental biology, microbiology, or molecular biology. We seek an individual with a distinguished record of performance in research, grantsmanship, and teaching with potential or demonstrated abilities to lead and manage a newly formed academic department. The candidate will be expected to participate in undergraduate and graduate education and therefore must be committed to excellence in teaching. The applicant should also possess interpersonal and leadership skills in mentoring faculty, directing students, and performing administrative duties. The department offers a B.S. degree in microbiology and molecular cell sciences, and M.S. and Ph.D. degrees in biology with concentrations in microbiology or molecular cell sciences. The department's website address is <http://www.people.memphis.edu/~microcell/mmcs.html>.

Review of applications will begin January 7, 1998, and continue until the position is filled. Applicants should submit their curriculum vitae, a statement addressing administrative philosophy and research interests, and at least three letters of recommendation to: Search Committee Chair, Department of Microbiology and Molecular Cell Sciences, Campus Box 526041, The University of Memphis, 201 Life Sciences Building, Memphis, TN 38152-6041. E-mail: bjtaller@memphis.edu.

The University of Memphis is an Equal Opportunity/Affirmative Action University.

DEAN, COLLEGE OF ARTS AND SCIENCES LOYOLA UNIVERSITY NEW ORLEANS

Loyola University New Orleans, a Jesuit institution, invites nominations and applications for the position of Dean of the College of Arts and Sciences. The Dean is the chief academic and administrative officer of the college and reports directly to the Provost. Salary and benefits are competitive. The appointment will be effective July 1, 1998. The College of Arts and Sciences, the largest college in the University, has 151 full-time faculty members, who support 17 departments and an honors program. The College offers baccalaureate and Master's degree programs in the humanities, social and behavioral sciences, and natural sciences. The Dean must foster a rigorous critical education and faculty excellence in teaching, scholarship, and service. The successful candidate will have an earned doctorate or appropriate terminal degree; academic credentials appropriate for appointment as Professor within the College; possess outstanding leadership qualities; appropriate administrative experience; exemplary interpersonal and communications skill; the ability to formulate and enact a strategic plan for the College's continued development; effectively articulate the value of the liberal arts education; serve as the chief spokesperson and advocate for the College. For more information, visit our website: <http://www.loyno.edu>. To ensure full consideration, submit a letter of interest; curriculum vitae; and a list of five references who may be contacted by December 12, 1997, to: Dr. Kenneth C. Messa, Chair, Dean Search Committee, c/o Office of the Provost, Loyola University New Orleans, 6363 St. Charles Avenue, Campus Box 7, New Orleans, LA 70118. *Loyola University New Orleans is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT or ASSOCIATE PROFESSOR opening in psychobiology, all research areas, but especially in cortical sensory physiology, psychopharmacology, or neuroplasticity associated with behavior. Ph.D. and postdoctoral experience required. Associate-level applicants should have external funding. All are expected to teach undergraduate and graduate courses, contribute to our behavioral neuroscience undergraduate program, and conduct independent research.

Send a cover letter, curriculum vitae, selected reprints/reprints, and at least three letters of recommendation by January 15, 1998, to: Psychobiology Search Committee, Department of Psychology, 125 NI, Northeastern University, Boston, MA 02115. *Northeastern University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION IN TOXICOLOGY/ DRUG METABOLISM

The Department of Pharmaceutical and Biomedical Sciences at the University of Georgia College of Pharmacy is seeking applicants for a tenure-track faculty position at the rank of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR**. Outstanding scientists with expertise in molecular toxicology, drug metabolism, carcinogenesis, or related area are encouraged to apply. Applicants should possess the Ph.D. degree in an appropriate field. Associate and Full Professors will be expected to have an active, extramurally funded research program. The successful applicant is expected to establish/maintain an independent research program as well as develop interdisciplinary research collaborations. A commitment to professional and graduate education is essential. The successful candidate will also be an active member of the University of Georgia Interdisciplinary Toxicology Program. Review of candidates will begin February 1, 1998, and will continue until the position is filled. Send curriculum vitae, research plans, and names of at least three references to:

James V. Bruckner, Ph.D.
Chair, Search Committee
Attn: Ms. Joy Wilson
Department of Pharmaceutical and
Biomedical Sciences
College of Pharmacy
The University of Georgia
Athens, GA 30602-2353
Telephone: 706-542-5405
E-mail: bruckner@rx.uga.edu

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

FACULTY POSITION UNIVERSITY OF PITTSBURGH CANCER INSTITUTE

The University of Pittsburgh Cancer Institute (UPCI) is seeking an **ASSISTANT or ASSOCIATE PROFESSOR** to join the Lung Cancer Center Basic Science Program. The successful candidate will become a member of the UPCI and receive a tenure-track position in an appropriate department in the University of Pittsburgh School of Medicine. The candidate will be expected to establish an externally funded research program and to help develop a translational research program in lung cancer in collaboration with other members of the UPCI Lung Cancer Center. The position is available immediately and will remain open until filled. Research areas of particular interest are lung cancer genetics, biomarkers, and early detection of lung cancer.

Applicants should have a Ph.D. and/or M.D. degree and postdoctoral training. Send curriculum vitae, summary of research interests, and names of three references to:

Jill M. Siegfried, Ph.D.
Director, UPCI Lung Cancer Center
Basic Science Program
Department of Pharmacology
University of Pittsburgh School of Medicine
E1340 Biomedical Science Tower
3500 Terrace Street
Pittsburgh, PA 15261

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

FACULTY POSITION IN BIOMEDICAL ENGINEERING CELLULAR CARDIAC BIOELECTRICITY

The Department of Biomedical Engineering at Case Western Reserve University invites applications for a tenure-track faculty position with a research emphasis in cardiac cell electrical measurements and quantitative analysis. Research expertise should include patch-clamp and voltage-clamp techniques for the single (especially calcium) channel and whole cell, cell isolation and tissue culture, and imaging and quantitative analysis of intracellular calcium. Teaching of related quantitative physiology/biophysics and biomedical engineering at the undergraduate and graduate levels is expected. Candidates must have appropriate Ph.D. and postdoctoral research experience. Applicants should send a statement of research and teaching interests, curriculum vitae, and the names of at least three references to: Prof. Yoram Rudy, Search Committee Chairman, Department of Biomedical Engineering, Wickenden 505, Case Western Reserve University, Cleveland, OH 44106-7207. *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer, which particularly encourages applications from women and minorities.*

POSITIONS OPEN

The Department of Biological Sciences of Towson University has two **ASSISTANT PROFESSOR** entry-level tenure-track positions to begin fall semester, 1998.

NEUROBIOLOGIST. Ph.D. in neuroanatomy or neurophysiology. Training in human gross anatomy desirable. Teaching responsibilities will include introductory biology, human anatomy and physiology, and neurobiology. Participation in the graduate program expected.

VERTEBRATE PHYSIOLOGIST. Ph.D. required. Preference given to candidates with a vertebrate endocrinology background and/or a research interest in the physiology of aging. Teaching responsibilities will include introductory biology, animal physiology, endocrinology, and human anatomy and physiology. Participation in the graduate program expected.

Postdoctoral experience is desirable. Successful candidates should show potential for superior teaching, service, and scholarship, including development of an active research program and securing external funding. Send curriculum vitae, transcripts, three letters of recommendation, and a statement of teaching philosophy and research goals to: Robert Smoes, Hiring Committee Chair, Department of Biological Sciences, Towson University, Towson, MD 21252. Deadline for applications is 02 January 1998. Visit Towson University's website: www.towson.edu and the Department of Biological Science's website: www.towson.edu/~wubah/biology. *Towson University is an Equal Opportunity/Affirmative Action Employer and has a strong institutional commitment to diversity. Women, minorities, persons with disability, and veterans are encouraged to apply.*

FACULTY POSITION COMPUTATIONAL NEUROSCIENCE

The Computer Science Department at Carnegie Mellon University, in collaboration with the Center for the Neural Basis of Cognition (CNBC), is soliciting applications for a **TENURE-TRACK** position in computational neuroscience. The successful applicant will be expected to carry out a research program in the theoretical analysis of computational properties of real neural systems, and how these properties contribute to aspects of cognition such as perception, memory, language, or the planning and coordination of action. Theoretically oriented CNBC faculty have many opportunities to collaborate with experimentalists using a variety of techniques, including primate and rat electrophysiology and MRI and PET functional brain imaging. Researchers with a strong background in mathematical analysis, dynamical systems theory, probabilistic and statistical approaches, or other analytical techniques are especially encouraged to apply.

The deadline for initial review of applications is February 1, 1998, but later applications will be considered until the position is filled. Send a curriculum vitae, a statement of research interests, copies of relevant publications, and three letters of reference to: Dr. David S. Touretzky, Computer Science Department, Carnegie Mellon University, Pittsburgh, PA 15213-3891.

Additional information about the CNBC may be found at website: <http://www.cnbc.cmu.edu>. *Carnegie Mellon is an Equal Opportunity Employer.*

TENURE-TRACK FACULTY POSITION DEPARTMENT OF PHARMACOLOGY COLLEGE OF MEDICINE University of Illinois at Chicago

The Department of Pharmacology invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or PROFESSOR** level. Applicants must have a Ph.D. and/or M.D. degree. Associate Professor and Professor applicants are expected to have a strong ongoing extramurally funded research program, and Assistant Professor applicants should have demonstrated the ability to develop an independent research program and be competitive for NIH support. Priority research areas include cardiovascular biology, signal transduction, ion channel regulation, cell growth/differentiation/apoptosis, and structural biology. UIC offers a highly competitive compensation package, significant start-up funds, and laboratory space with state-of-the-art research facility. Please send a complete curriculum vitae, a brief statement of research interest, and the names of three references to: Dr. Stephen Lam, Chair, Faculty Search Committee, Department of Pharmacology (m/c 868), University of Illinois at Chicago, 835 South Wolcott Avenue, Chicago, IL 60612. For fullest consideration, please submit applications by January 15, 1998. *University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.*



UCLA NEUROSCIENCE

As part of a major initiative in connection with the new Gonda (Goldschmied) Neuroscience and Genetics Research Center, the UCLA School of Medicine and the UCLA College of Letters and Science are seeking to recruit tenure-track junior faculty in the Departments of Neurobiology, Neurology, Physiological Science, Physiology, the Division of Neurosurgery, the Jules Stein Eye Institute-Department of Ophthalmology, and the Neuropsychiatric Institute. (Appointments may be made in a single department or as a joint appointment in more than one department.) We are particularly interested in candidates who work in the following areas: Neurobiology of Aging, Molecular Neuropharmacology, Developmental Neurobiology, Neural Repair, Behavioral Genetics, and Neural Communication.

For all positions, submit a CV, reprints, preprints, and a statement of research interests and goals, and please arrange for three letters of recommendation to be sent to the search committee. The application deadline is January 1, 1998. Send application materials to:

Neuroscience Search Committee
Brain Research Institute
UCLA
Box 951761
Los Angeles, CA 90095-1761

The University of California is an Equal Opportunity Employer.



OREGON HEALTH SCIENCES UNIVERSITY BIOCHEMISTRY & MOLECULAR BIOLOGY

TWO SENIOR FACULTY

The Department of Biochemistry and Molecular Biology at OHSU, School of Medicine, is undergoing a period of expansion. We are interested in recruiting two senior faculty members who will supply leadership to our developing programs. Areas of particular interest include: structure, function, and regulation of membrane proteins, protein trafficking, physical biochemistry of macromolecules, enzyme mechanisms, and molecular biophysics. We are interested in scientists who are using modern techniques of biochemistry and biophysics to investigate cellular events at the molecular level. This opportunity may appeal to two senior scientists who would like to relocate together.

We will offer attractive salary and start-up packages and the opportunity to play a key role in the development of an interactive department in a stimulating scientific environment set in one of the most desirable areas in the country. Applications should be received by January 15, 1998. Informal inquiries can be made via e-mail, kaplanj@ohsu.edu.

Interested candidates should have a sustained record of externally funded research. Send a copy of your curriculum vitae, a description of research interests, and the names of three references to:

Professor Jack H. Kaplan, Ph.D., F.R.S.
Faculty Search (S)
Department of Biochemistry and Molecular Biology
Oregon Health Sciences University
3181 S.W. Sam Jackson Park Road
Portland, OR 97201-3098

OHSU is an Affirmative Action/Equal Opportunity Employer.

The University of Memphis Chair, Department of Biology



Applications and nominations are invited for the position of Chair of the Department of Biology at The University of Memphis (formerly Memphis State University). Applicants must have a Ph.D., an established research program and record, a commitment to academic excellence, and strong interpersonal and administrative skills. The department is seeking candidates possessing a successful history of research and grant activity in ecology, environmental biology, physiology, genetics, or other related areas, and whose interests complement existing research programs within the department. The position will begin on or after August 1998.

The University of Memphis is a comprehensive state university with an enrollment of approximately 20,000 students. The Department of Biology offers B.S., M.S., and Ph.D. degrees in Biology. There are approximately 15 faculty, 8 staff, 30 full-time graduate students, and 600 majors in the department. The department administers the Meeman Biological Station situated on approximately 1,000 acres near the Mississippi River and adjacent to the Meeman/Shelby Forest State Park.

Additional information: University information (<http://www.memphis.edu>), Departmental information (<http://www.people.memphis.edu/~biology>), or contact: Dr. Melvin Beck at (901) 678-2581 or mbeck@memphis.edu.

Applicants should submit a letter of application and a full curriculum vitae including a list of five references to: Chair Search Committee, Department of Biology, The University of Memphis, Memphis, TN 38152. Review of the applications will begin February 1, 1998, and continue until the position is filled. Women and minority candidates are encouraged to apply. The University of Memphis is an Affirmative Action/Equal Opportunity Employer.

Postdoctoral Training in GENE THERAPY

Comprehensive Cancer Center The University of Alabama at Birmingham

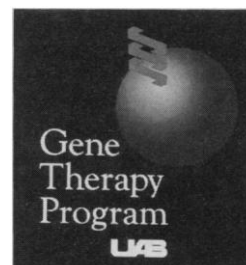
The Gene Therapy Program of the University of Alabama at Birmingham invites applications for its NCI-supported training program in Gene Therapy for Cancer. Areas of study include: mechanisms of viral gene transfer; gene delivery: targeting, amplification, and novel vector systems; molecular ablation of oncogene expression; and targeted immunotherapy.

Participating Faculty: Ronald D. Alvarez, M.D., Thomas R. Broker, Ph.D., Donald J. Buchsbaum, Ph.D., Louise T. Chow, Ph.D., David T. Curiel, M.D., Robert I. Garver, M.D., Beatrice H. Hahn, M.D., Albert F. LoBuglio, M.D., Donald M. Miller, M.D., Ph.D., Casey D. Morrow, Ph.D., John D. Mountz, M.D., Ph.D., Theresa V. Strong, Ph.D., De-chu Tang, Ph.D., and Richard J. Whitley, M.D.

Candidates must be U.S. citizens or permanent residents. Please send a brief cover letter, curriculum vitae, and a list of references to:

David T. Curiel M.D. and
Theresa V. Strong, Ph.D.
WTI 620
1824 6th Avenue South
Birmingham, AL 35294-3300
E-mail: theresa.strong@ccc.uab.edu

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



POSITIONS OPEN

ASSISTANT PROFESSOR FOREST ENTOMOLOGY UNIVERSITY OF MINNESOTA

Applications are sought for full-time, tenure-track position with responsibilities for teaching, advising, research, and service. Appointment will be 70 percent research in Minnesota Agricultural Experiment Station and 30 percent teaching. The position will be funded jointly by the Department of Entomology, College of Agricultural, Food, and Environmental Sciences (60 percent) and the Department of Forest Resources, College of Natural Resources (40 percent). Appointee will be administratively responsible to the Head, Department of Entomology in close consultation with the Head, Department of Forest Resources. The position is located on the St. Paul Campus. Applicants must have a Ph.D. or equivalent degree at the time of appointment, with relevant course work and research experience. Expertise in forest insect management, forest ecology, and silvicultural practices are preferred as well as an exceptional ability to identify critical information needs and issues in forest entomology and effectively communicate these to forestry practitioners and researchers. Desire and ability to work with graduate and undergraduate students is essential.

Applications will be accepted until February 6, 1998, or until the position is filled. Send detailed professional résumé, statement of research interests and future goals, statement of teaching interests and philosophy, copies of up to three papers published in peer-reviewed primary literature, names and full addresses of three to five persons familiar with your work whom we can contact for letters of reference, and graduate school transcripts to: **Dr. Edward B. Radcliffe, Department of Entomology, University of Minnesota, St. Paul, MN 55108-6125.** Visit our website: <http://www.cnt.agri.umn.edu/forest.htm>.

U.S. citizenship or permanent residency required. Members of underrepresented minority groups are particularly encouraged to apply. The University of Minnesota is an Equal Opportunity Educator and Employer.

SENIOR FACULTY POSITION BIOCHEMISTRY AND MOLECULAR BIOLOGY

An opening for a **FULL PROFESSOR** is now available as part of our Program of Eminence in Molecular Recognition in Biological Systems. Applicants must have a national reputation, a proven ability to attract extramural funds, and a vigorous, productive research program, preferably in the areas of structural biology or eukaryotic molecular genetics. Other areas, particularly those involving multidisciplinary research, will also be considered. Applicants should be willing to participate in graduate and undergraduate teaching, have appropriate experience in an academic setting, and be eager to assume a leadership role commensurate with this rank. Generous start-up package and lab space are available. Review of applications will begin as soon as complete materials are received and will continue until the position is filled. Interested applicants should send a complete curriculum vitae, research prospectus, three representative publications, and the names and addresses (including e-mail) of four references to: **Dr. Gerald M. Carlson, Head, Division of Molecular Biology and Biochemistry, Search Committee 2, School of Biological Sciences, University of Missouri-Kansas City, Kansas City, MO 64110-2499.** An Affirmative Action/Equal Opportunity Employer.

NUTRITIONAL BIOCHEMISTRY

The Department of Nutrition of Case Western Reserve University School of Medicine ([website: http://www.cwru.edu/med/nutrition/home.html](http://www.cwru.edu/med/nutrition/home.html)) has an opening for an **ASSISTANT** or **ASSOCIATE PROFESSOR** in nutritional biochemistry and metabolism. This faculty member will (i) develop an independent, NIH-supported research program on the metabolism of macronutrients in animals and/or humans, preferably using stable isotope technology, (ii) train graduate students and postdoctorates, and (iii) teach at the graduate level. Research space, including a gas chromatography-mass spectrometry unit, is located at the Cleveland Mt. Sinai Medical Center on University Circle. Please send curriculum vitae, detailed outline of research program, and names of three references to: **Dr. Henri Brunengraber, Chair, Department of Nutrition, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4906.** Case Western Reserve University is an Equal Opportunity Employer and encourages applications from minorities and women.

POSITIONS OPEN

PENNSTATE



ASSISTANT/ASSOCIATE/ FULL PROFESSOR PLANT BIOLOGY

The Pennsylvania State University

The Department of Biology invites applications for a faculty position (any level) in plant developmental biology. The Pennsylvania State University has made a commitment to expanding research and education in the biological sciences through a new, university-wide Life Sciences Consortium (see [website: http://www.lsc.psu.edu](http://www.lsc.psu.edu)), which is co-funding the position. Penn State currently has three NSF-funded training grants in plant biology. We are seeking an imaginative and interactive colleague who uses molecular, genetic, and/or biochemical techniques to research fundamental problems in plant physiology and development.

The applicant should submit a curriculum vitae including publications, grant support, and teaching experience, and a brief statement of research and teaching interests (four pages or less). Materials should be sent to: **Plant Developmental Biology Search Committee, Department of Biology, Box S, 208 Mueller Laboratory, The Pennsylvania State University, University Park, PA 16802.**

Review of applications will commence December 15, 1997. For additional information, contact: **Dr. Sarah M. Assmann, Search Committee Chair, e-mail: sma3@psu.edu.**

Affirmative Action/Equal Opportunity Employer.

Michigan, East Lansing 48824. Michigan State University (MSU). **ASSISTANT PROFESSOR.** Two positions begin 16 August 1998.

The Department of Geography at Michigan State University is continuing a major expansion of personnel and resources for a Basic Science and Remote Sensing Initiative, which will focus on the use of earth observation satellites, geographic information systems, field studies, and models for global change research. Strong emphasis is being placed on the study of land use and cover change, including its global and regional aspects, with a focus on using satellite observations from existing and planned earth observing systems.

The Department and University have invested considerable resources to build this new initiative, including laboratory and office space and new tenure-track positions. The Initiative is an integral part of MSU's overall emphasis on increasing research capacity, and meshes with existing departmental programs in cartography/GIS, land use and cover change, human-environment interaction, economic geography, geomorphology, and climatology.

The Initiative is seeking applicants for two tenure-track positions at the level of Assistant Professor. Successful candidates will be expected to conduct and manage externally funded research, and will have demonstrated expertise in some combination of the following: application of earth observation satellites to global change research; GIS technology applied to environmental problems; and land use and cover change models. Expertise with microwave sensors will be required for one position.

All candidates should have experience and expertise in the basic science of global environmental change, and have a Ph.D. in geography or a related field. Successful candidates for both positions will be expected to teach introductory, advanced, and graduate courses. Interdepartmental and intercollege collaborative research and grant activities are expected.

Salary will be competitive and commensurate with qualifications and experience. Review of applications begins 15 January 1997 and continues until appointment is made. Please send letters of application discussing research and teaching interests, curriculum vitae, pertinent publications, and three letters of reference to: **Professor Richard Groop or Professor David Skole, Department of Geography, Telephone: 517-355-4649; e-mail: groop@pilot.msu.edu or skole@pilot.msu.edu.**

MSU is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

MARINE INVERTEBRATE ZOOLOGIST MOSS LANDING MARINE LABORATORIES (#SCI 98-044)

A tenure-track position at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** level for a field-oriented scientist with broad interests in marine invertebrate zoology and secondary interests in population ecology, toxicology, or molecular systematics. The successful applicant will have a strong commitment to quality undergraduate and graduate instruction and will pursue a vigorous research program involving graduate students. A Ph.D. is required. Instructional responsibilities will include invertebrate zoology, marine ecology (team-taught), and courses in the applicant's area of expertise. Position appointment effective beginning fall 1998 semester.

The salary range for the position is: Assistant \$36,000 to \$45,756; Associate \$41,676 to \$57,840; Professor \$52,668 to \$63,540.

Review of applications will begin November 30, 1997. Submit applications consisting of a letter stating teaching and research interests, goals and accomplishments, a curriculum vitae, and the names of three references to: **Dr. H. Gary Greene, Director, Moss Landing Marine Laboratories, P.O. Box 450, Moss Landing, CA 95039.**

For more information, visit Moss Landing Marine Laboratories' website: <http://color.mlml.calstate.edu/www/>.

An Equal Employment Opportunity/Affirmative Action/Title IX Employer.

The Department of Biology, College of Staten Island, The City University of New York announces two tenure-track positions:

THEORETICIAN/MODELER: ASSISTANT PROFESSOR rank. Applicants should utilize simulation and analytical models to study the dynamics of biological systems. Ability to collaborate with department members interested in spatial models in ecology, neurobiology, ecosystems dynamics, and epidemiology a plus. Must be able to develop extramurally funded research program. Teaching duties include mathematical biology, modeling, and general biology.

PHYSIOLOGIST: ASSISTANT or ASSOCIATE PROFESSOR rank. Applicants should be experienced in and have a strong commitment to teaching correlated undergraduate physiology/anatomy courses for students majoring in health science curricula. Postdoctoral experience and grant activity preferred. To qualify for the Associate rank, the applicant must have a substantial research record and a major extramural funding.

For both appointments: Ph.D., college instruction, curriculum development, and record sufficient for appointment to CUNY graduate faculty required. Appointments will be effective September 1998. Closing date: January 15, 1998. Send curriculum vitae, research plans, and names and addresses of three references to: **Professor Jacqueline LeBlanc, Search Committee Chair, Department of Biology, College of Staten Island/CUNY, 2800 Victory Boulevard, Staten Island, NY 10314.**

Equal Employment Opportunity/Affirmative Action/ADA Employer.

UNIVERSITY OF TEXAS AT DALLAS

The Cognition and Neuroscience Program of the School of Human Development at the University of Texas at Dallas seeks applicants in the area of developmental neurobiology, neurophysiology, or behavioral neuroscience. Preference will be given to applicants with interests in behavioral phenomena. Appointment is at the **ASSISTANT PROFESSOR** level, although consideration will be given to exceptional candidates at the **ASSOCIATE PROFESSOR** level. Appointment begins in the 1998-99 academic year. The Cognition and Neuroscience Program has an interdisciplinary emphasis and brings together basic scientists utilizing neural, computational, and behavioral models. Please send a curriculum vitae and list of five references to: **Academic Search #563, The University of Texas at Dallas, P.O. Box 830688—M.P. 1.2, Richardson, TX 75083-0688.** Review of applicants begins the end of November and continues until the position is filled or the search is closed. The University of Texas at Dallas is an Affirmative Action/Equal Opportunity Employer and encourages applications from candidates who would enhance the diversity of the University's faculty and administration. Indication of sex and ethnicity for Affirmative Action statistical purposes is requested, but not required.

Acorda Therapeutics, a young biotechnology company, located in the New York Metropolitan area, offers exciting opportunities to engage in research dedicated to the discovery and clinical development of treatments for spinal cord injury and related neurological conditions. Successful candidates are likely to have a related Ph.D. and experience with mammalian central nervous system. Must also appreciate a team approach to goal-oriented scientific discovery and will be engaged in active collaboration with many of the foremost academic laboratories in the field. Several positions are available, and responsibilities may be modified or combined, depending upon the skills and interests of those appointed:

**Research Scientist
(cell biology):**

Implement and develop in vitro models of glial/neuronal interaction and neurite extension. Collaborate on experiments of nerve fiber regeneration in the central nervous system. **REF# CB**

**Research Scientist
(animal models):**

Implement and develop animal models of central nervous system injury and therapeutic intervention, including surgical approaches and quantitative behavioral assays. Position will include relevant supervision of animal facility staff. **REF# AM**

**Research Scientist
(histology/immunocytochemistry):**

Implement and refine techniques for microscopic analysis of central nervous system preparations. **REF# HI**

Opportunities also exist for technical positions in histology, tissue culture and animal care. Please fax or mail applications, indicating REF# of position desired to, **Acorda Therapeutics**, 145 West 58th Street, Suite 8J, New York, NY 10019. FAX: (212) 765-8637. EOE

ACORDA
THERAPEUTICS

RESEARCH AWARD

The Boehringer Ingelheim Fonds

invites applications for the

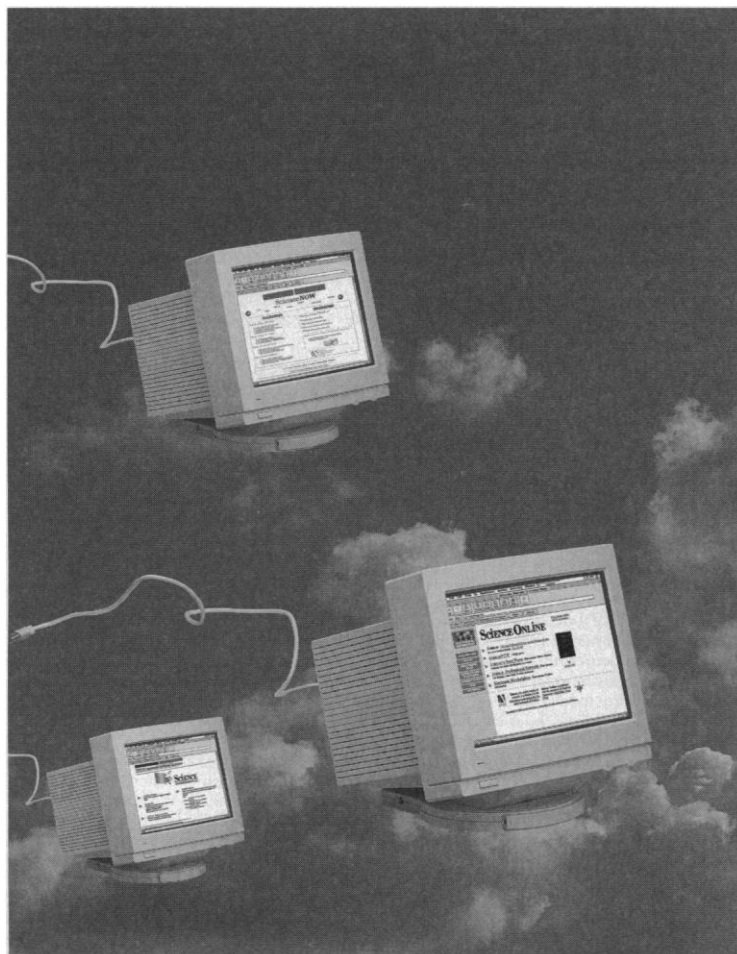
1998 Research Award for Postdoctoral Fellows

to be submitted by February 15, 1998. The Foundation supports activities concerned with basic research in biomedicine and aimed at acquiring new scientific knowledge.

The award is intended for postdoctoral researchers, who, having spent two to three years working overseas, plan to move to Europe with the intention of establishing his/her own research group. The scientific achievements of applications must be of outstanding quality having resulted in papers published in or accepted by leading international journals. Applicants should not be older than 31 years. Nationality is irrelevant.

The award consists of a three-year fellowship. After a period of two and a half years, the results attained by the Fellow and his/her further intentions will be evaluated in order to decide whether the fellowship is to be extended for a further three-year term. The first year of the scholarship may be availed of in order to bring projects in progress at the overseas laboratory to a conclusion. Once a Fellow takes up his work in Europe he/she will receive a one-off project-related grant of DM 100.000.00.

Detailed instructions are available on request from: Boehringer Ingelheim Fonds, Foundation for Basic Research in Biomedicine, Staffenbergstrasse 32, D-70184 Stuttgart, Tel: 49/711/24 73 97; Fax: 49/711/24 81 40; E-mail: brigitte@bifonds.de



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e-mail: european_ads@science-int.co.uk

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Keith Sandell
Tel: (+61) 02 922-2977
Fax: (+61) 02 922-1100

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POSITIONS OPEN

ASSISTANT PROFESSOR OF PHARMACOLOGY DEPARTMENT OF PHARMACEUTICAL SCIENCES University of Connecticut

The Department of Pharmaceutical Sciences of the School of Pharmacy at the University of Connecticut invites applications for a tenure-track position at the Assistant Professor level in its pharmacology/toxicology discipline to begin August 23, 1998. Candidates must have a Ph.D. in a biomedical science with an emphasis in cellular/molecular physiology, postdoctoral experience, and will be expected to develop and maintain innovative, independent, and externally funded research programs which emphasize mammalian cellular and molecular physiologic responses to xenobiotics. Preferred research interests include, but are not limited to, cell cycling, apoptosis, and signal transduction pathways. Responsibilities also include teaching organ systems and cellular physiology at both the undergraduate and graduate levels. The successful candidate will have the opportunity to interact with faculty in an NIH pre- and postdoctoral training program in toxicology. Applicants should send curriculum vitae and arrange for three letters of recommendation to be sent directly to: **Dr. Andrea K. Hubbard, Chair, Pharmacology/Toxicology Search Committee, Department of Pharmaceutical Sciences, University of Connecticut, School of Pharmacy, U-92, Storrs, CT 06269.** Applications will be received until the position is filled. Initial review of applications will begin January 15, 1998. We encourage applications from underrepresented groups including minorities, women, and people with disability. (Search# 98A189)

INVERTEBRATE BIOLOGIST

The Biology Department at Oberlin College invites applications for a tenure-track faculty appointment to begin fall, 1998. We seek a broadly-trained Invertebrate Biologist who uses modern experimental methods including field studies. Candidates with research interests in physiological ecology, systematics, and evolution are encouraged to apply. Although preference will be given to candidates at the rank of **ASSISTANT PROFESSOR**, outstanding applicants at the **ASSOCIATE PROFESSOR** level will also be considered.

The successful candidate will be expected to teach two upper-level courses in alternate years; share the responsibility for teaching our introductory course in genetics, evolution, and ecology; and supervise individual undergraduate student research projects. One of the upper-division courses should have a major field emphasis, while the other will be taught with a laboratory component. He or she will also be expected to participate in the full range of faculty responsibilities including academic advising of undergraduates, serving on committees, and sustaining an active research program. A strong interest and potential excellence in teaching at the undergraduate level are essential. Postdoctoral experience is desirable.

Send curriculum vitae, graduate transcript, and three letters of recommendation to: **Dr. Dennis N. Luck, Chair, Department of Biology, Oberlin College, OH 44074.** Review of applications will begin January 1, 1998, and continue until the position is filled.

Affirmative Action/Equal Opportunity Employer. Oberlin College admitted women since its beginning in 1833, and has been historically a leader in the education of African-Americans.

Faculty position in psychobiology with emphasis on behavioral neuroscience. The Department of Psychology at Franklin & Marshall College announces a tenure-track position as **ASSISTANT PROFESSOR** in our research-oriented undergraduate department. Teaching load of five course involvements per year includes introductory psychology lab, team-taught core course in the physiological bases of mind and behavior, team-taught course in neuroscience, lecture course in area of specialty, and advanced research seminar. Some of these courses are included in the Biological Foundations of Behavior Program. The successful candidate will hold a Ph.D., present evidence of excellence in teaching and research, and have a strong interest in initiating and guiding student research. Deadline for receipt of applications is February 1, 1998. Send letter of application, curriculum vitae, graduate transcript, three letters of recommendation, and reprints/preprints to: **Terry R. Greene, Chair, Department of Psychology, Franklin & Marshall College, P.O. Box 3003, Lancaster, PA 17604-3003.** Franklin & Marshall College is an Affirmative Action/Equal Employment Opportunity Employer.

POSITIONS OPEN



The Department of Occupational and Environmental Health Sciences at Wayne State University seeks applications for a tenure-track faculty position in toxicology at the rank of **ASSISTANT, ASSOCIATE, or FULL PROFESSOR**. The applicant should have a Ph.D. and/or M.D. degree in biomedical sciences. All outstanding candidates will be given serious consideration, but applicants with previous teaching experience and a record of excellence in research will be given preference. An ability to sustain extramurally funded research is expected. Adequate laboratory space and competitive start-up funds will be available to the appointee. Salary and rank are commensurate with experience. Qualified candidates should send curriculum vitae, a concise description of research interests, teaching experience, and names, addresses, and telephone numbers of three references to: **Deepak K. Bhalla, Ph.D., Chair, Search Committee, Department of Occupational and Environmental Health Sciences, 628 Shaper Hall, Wayne State University, Detroit, MI 48202.** E-mail: dbhalla@wizard.pharm.wayne.edu.

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

The Department of Pharmaceutical Sciences at Mercer University Southern School of Pharmacy invites applications for a 12-month tenure-track faculty position at the rank of **ASSISTANT PROFESSOR**. Qualified candidates will have an earned doctorate in pharmacology, toxicology, chemical engineering, or a related field. A degree in pharmacy and postdoctoral experience are desirable but not essential. Preference will be given to candidates whose research interests lie in *in vitro* pharmacology/toxicology, biotechnology, transport phenomena, mathematical modeling, or risk analysis, but fair consideration will be given to all applicants.

The successful candidate will be expected to establish an extramurally funded independent research program, teach and mentor graduate students, and participate in collaboratively taught pathophysiology/pharmacology courses offered in the Doctor of Pharmacy curriculum. A strong commitment to excellence in teaching, research, and service is essential.

Review of applications will begin January 15, 1998. Applicants should provide a curriculum vitae, a statement of research interests and professional goals, and the names and addresses of three references. Please send applications to:

**J. G. Strom, Jr., Ph.D.
Department of Pharmaceutical Sciences
Mercer University
3001 Mercer University Drive
Atlanta, GA 30341-4155**

Equal Opportunity Employer/Affirmative Action/ADA.

PLANT ECOLOGIST

The Department of Biological Sciences at The University of Alabama invites applications for a tenure-track **ASSISTANT PROFESSOR** position in community/ecosystem ecology, available August 1998. Requirements include Ph.D., strong background in botany, ecology, and quantitative skills; and research experience in terrestrial or aquatic landscape/watershed scale problems. The individual will teach at the undergraduate and graduate levels, including courses in non-majors biology, botany, and ecology; develop an externally funded research program; direct undergraduate, M.S., and Ph.D. students in research; and collaborate in interdisciplinary research in the Aquatic Biology Program and the Center for Freshwater Studies. Experiences in teaching, instructional technology, GIS, remote sensing, and postdoctoral research preferred. Applications must be received by January 15, 1998, to assure full consideration. Curriculum vitae, statements of research and teaching interests/philosophies, reprints, and three letters of reference should be mailed to: **Dr. Arthur C. Benke, Department of Biological Sciences, Box 870344, The University of Alabama, Tuscaloosa, AL 35487-0344.** For more details, see website: www.as.ua.edu/biology/bschome.htm. The University of Alabama is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

AQUATIC BIOLOGIST

The Department of Biological Sciences at DePaul University seeks an Aquatic Biologist with strong commitment to undergraduate education for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning September 1, 1998. Ph.D. is required; postdoctoral and previous teaching experience preferred. Teaching responsibilities include: introductory biology courses with lab for majors and non-majors; intermediate-level undergraduate course in aquatic biology; and graduate/advanced undergraduate course(s) in candidate's area of expertise. Ability to teach ecology and/or evolution is desirable. An active and productive research program in aquatic biology is required. All subdisciplines and approaches will be considered, including ecology, population biology, evolution, and systematics, using plant, animal, protist, or algal model systems. Use of molecular or cellular techniques in research program desirable. Applications will be accepted until position is filled; review will begin January 1, 1998. Please send curriculum vitae, three letters of reference, statement of teaching and research interests, statement of educational philosophy, and list of equipment/supply needs with cost estimates to: **Aquatic Biology Search Committee, Department of Biological Sciences, DePaul University, 1036 West Belden Avenue, Chicago, IL 60614.** Additional inquiries to above address, or FAX: 773-325-7596; e-mail: lmaginn@condor.depaul.edu. DePaul University, the employer of choice, is committed to diversity and equality in education and employment.

ORGANISMAL BIOLOGIST

Grinnell College invites applications for a tenure-track faculty position as an **ASSISTANT PROFESSOR** of biology to begin in August, 1998. We seek an Organismal Biologist committed to teaching and research in a liberal arts environment. Candidates should be well qualified to teach introductory courses such as "Structure and Function of Organisms" and "Evolution and Ecology," an advanced course in their area of specialty, and a non-majors course. Grinnell College is seeking candidates with postdoctoral research experience who will conduct an active research program involving undergraduates. Start-up funds, support for student-faculty research, and excellent facilities are available. In their letters of application, candidates should address their interest in undergraduate teaching in a liberal arts environment. Send curriculum vitae, three letters of recommendation, a statement of teaching and research interests, and copies of all transcripts to: **Clark A. Lindgren, Chair, Department of Biology, Grinnell College, Grinnell, IA 50112-0806.** E-mail: lindgren@ac.grin.edu; FAX: 515-269-4285. More information about the department and Grinnell College can be obtained at our website: <http://www.grin.edu>. To be assured of full consideration, applications must be received by December 19, 1997. Grinnell College is an Affirmative Action Employer, encourages applications from women and persons of color, and considers applications without regard to gender, race, color, creed, age, national or ethnic origin, disability, or sexual orientation.

ASSISTANT PROFESSOR OF BIOLOGY

The Marist College Division of Science invites applications for a tenure-track position at the level of Assistant Professor of Biology beginning in the fall of 1998. Qualified candidates must have completed a Ph.D. degree and have a strong interest in undergraduate education. Candidates are expected to have a commitment to excellence in teaching and to establish a program of research involving undergraduate students. Preference will be given to candidates with previous college-level teaching experience.

Primary teaching responsibilities will include genetics and general microbiology lectures and laboratories. In addition, teaching responsibilities could include courses for upper-level biology majors, introductory-level biology majors, and non-science majors.

Marist College is a four-year, independent, liberal arts institution centrally located in the scenic and historic Hudson River Valley, less than two hours north of New York City.

Please submit a résumé, a description of teaching goals and research plans, and three letters of recommendation. Review of credentials will begin December 31, 1997, and will continue to be accepted until the position is filled. Please address to: **Dr. Thomas Lynch, Division of Science, MPO-905/SCI, Marist College, Poughkeepsie, NY 12601.**

An Equal Opportunity/Affirmative Action Employer.

Postdoctoral Fellow/Research Associate Cancer Molecular Genetics

A Postdoctoral position is available to work in an NIH-funded program on Molecular Genetics and Cancer Epidemiology with the National Naval Dental Center, Bethesda, MD. The program will seek to identify, refine, and evaluate molecular, genetic, and cellular biomarkers for an epidemiologic study of pre-malignant and malignant oral lesions. The incumbent will be responsible for the development, evaluation, modification and use of molecular assays, such as loss of heterozygosity and mutation screening. Additional responsibilities will include standard quality control of all activities, inventory management of tissue specimens, documentation of laboratory procedures and results, and the writing of progress reports.

Candidates should have a Doctorate in a relevant discipline, such as human genetics or molecular biology, or a Master's degree in a related area with several years of relevant experience. A curriculum vitae and the names of three references should be sent in confidence to: **GEO-CENTERS, INC., 1801 Rockville Pike, Suite 405, Rockville, MD 20852, Attn: Code 3033S.**

An Equal Opportunity/Affirmative Action Employer.



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SENIOR SCIENTIST / Tumor Immunology

The successful candidate will plan and conduct experiments in the area of human cancer immunotherapy. A Ph.D. in Immunology (or related field) and 3-5 years experience in tumor biology and immunology are required. As a highly skilled professional, you must have a strong publication record and a team-oriented approach to science. Background in tumor-specific immunotherapy, cancer vaccines, antigen processing and animal tumor models, as well as experience with molecular and cellular immunology is desirable. (Dept 110DH)

SENIOR SCIENTIST / Immunology

Individual needed with a minimum of 2 years post-doctoral research experience in immunology and immunotherapeutics. A Ph.D. in immunology or equivalent and a strong background in monoclonal antibody development, cell biology and tumor model development are required. Experience in molecular immunology is strongly preferred. (Dept SS110DH)

POST-DOCTORAL / Angiogenesis

A postdoctoral position is available to study novel molecular mechanisms of blood vessel formation, particularly the role played by VE-cadherin in normal and pathogenic capillary tube formation. These studies will include the analysis of VE-cadherin homophilic binding, development of binding antagonists, and testing of antagonists *in vitro* and animal models. Recent Ph.D. graduates with a strong background in molecular biology and cell biology are encouraged to apply. Experience in monoclonal antibody development, assay development and animal models would be a plus. (Dept 110DHPD)



ImClone Systems offers excellent salaries with outstanding benefits including a tuition reimbursement program. For confidential consideration, please send or fax (212-645-2054) your CV and salary requirements, indicating position and (Dept code) to: **Human Resources Manager, ImClone Systems Incorporated, 180 Varick Street, 7th Floor, New York, NY 10014.**

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AWARD

1997-98 Weizmann Women & Science Award Call for Nominations

The American Committee for the Weizmann Institute of Science invites nominations for its 1998 Biennial Women & Science Award. Established in 1994, the Award was created to honor an outstanding woman who has made significant contributions to the scientific community. The objectives of the Award, which includes a \$25,000 research grant to the recipient, are to recognize distinguished achievement and to provide a strong role model to motivate and encourage the next generation of young women scientists, engineers, and mathematicians.

Nominees may represent any discipline in the natural sciences, and may be conducting research in either the public or private sector.

To request a nomination application, please call **Margot Steinberg, Director of National Programs, American Committee for the Weizmann Institute of Science at 212-779-2500**. The nomination application must include background documentation, i.e., curriculum vitae, as well as a supporting statement by the nominator. Additional letters of support may also be provided. Nominations must be postmarked by January 30, 1998, and sent to **ACWIS, 51 Madison Avenue, New York, NY 10010** or by fax **212.779.3209** or **margot@acwis.org**

Past recipients of the award are:

1994 - Dr. Joan Argetsinger Steitz, a Henry Ford II Professor of Molecular Biophysics and Biochemistry at Yale University and an Investigator of the Howard Hughes Medical Institute.

1996 - Dr. Vera Rubin, Observational Astronomer, Department of Terrestrial Magnetism, Carnegie Institution, Washington, D.C.

The Award Presentation will take place at the New York Academy of Sciences on Tuesday, June 2, 1998.

THE UNIVERSITY OF SOUTHERN CALIFORNIA OPENING FOR AN ENVIRONMENTAL MARINE BIOLOGIST

USC's Department of Biological Sciences announces an additional faculty position to be affiliated with the newly formed USC Wrigley Institute for Environmental Studies. The institute will take a leading role in conducting research and education in the marine and environmental sciences, building upon the existing strengths at USC, and creating novel programs for interdisciplinary research, education, and outreach. USC's existing laboratories and teaching facilities on Santa Catalina Island (20 miles offshore) have been renovated and were recently rededicated. Re-establishment of year-round academic, research, and outreach programs begins this summer.

Tenure-track Faculty position: The level of this faculty position, the fourth associated with the USC Wrigley Institute for Environmental Studies, can be at the assistant, associate, or full professor level as determined by the qualifications of the successful applicant. The specific area of research is open with respect to both scientific approaches and taxa studied, but we have special interest in the following areas: trophic interactions, biochemical and physiological adaptations, systems ecology, biodiversity studied with molecular biological approaches, biomechanics and functional morphology, and genetics (quantitative, population, or molecular). Teaching on both the USC University Park Campus and the Wrigley Institute's Catalina facility at the undergraduate and graduate levels is expected. For this position, as with other Wrigley-affiliated appointments, primary office and laboratory will be on the USC University Park Campus, with additional facilities on Catalina Island. Preference will be given to scholars who can take advantage of the special opportunities afforded by the Catalina laboratory and the new Wrigley Institute.

Applicants should send a résumé, a cover letter describing their teaching and research interests, up to three recent publications, and the names, addresses, telephone/FAX numbers, and e-mail addresses of at least 3 references to: **Dr. Russel Zimmer, Chair, Department of Biological Sciences, University of Southern California, Los Angeles, CA 90089-0371. E-mail: zimmer@usc.edu; Fax: (213)740-9417.**

Applications will be considered beginning December 10, 1997, and will be accepted until the position is filled. *USC is an Equal Opportunity / Affirmative Action Employer.* For more information see website: **http://wrigley.usc.edu.**

POSITIONS OPEN

UNIVERSITY OF ST. THOMAS PLANT BIOLOGIST

The University of St. Thomas Department of Biology in St. Paul, Minnesota invites applications for a limited-term **ASSISTANT PROFESSORSHIP** in plant biology to begin September 1, 1998. We especially encourage applications from persons with research experience in aquatic or applied ecology. Teaching responsibilities will include an introductory course in adaptation and diversity, an intermediate-level course in plant biology, and an advanced plant course.

Candidates must have a doctoral degree, postdoctoral teaching and/or research experience, and a strong commitment to undergraduate teaching in a liberal arts setting. Send letter of application, curriculum vitae, statement of teaching philosophy, a proposal for an advanced plant course, and three letters of recommendation by 2 January 1998 to: Ms. Carol Felton, Mail #OWS153, 2115 Summit Avenue, St. Paul, MN 55105-1080. The University of St. Thomas is a private, Catholic, comprehensive, liberal arts university with a student body in excess of 10,000. Of that number, 5,000 are in the undergraduate program and 5,000 in five graduate schools. The University is an Equal Opportunity Employer and is committed to a program of Affirmative Action. Women and persons of color are strongly encouraged to apply.

MICROBIOLOGY ASSISTANT PROFESSOR

Florida International University, the State University of Florida at Miami, seeks to fill a tenure-track position in microbiology to start August, 1998. We are especially interested in candidates with expertise in one or more of microbial pathogenicity, microbial biochemistry/physiology, environmental microbiology, or microbial diversity phylogenetics. The successful candidate will teach undergraduate general microbiology, as well as undergraduate and graduate courses in her/his specialty, and will establish a successful research program. More detailed information about the position can be found at website: <http://www.fiu.edu/orgs/biology/micro.html>. Ph.D. required, postdoctoral experience preferred. Expertise in molecular techniques or interest in tropical or marine ecosystems viewed favorably. To apply, send curriculum vitae, statements of research and teaching goals, and three letters of reference by December 11, 1997, to: John Makemson, Chair, Microbiology and Search and Screen Committee, Department of Biological Sciences, Florida International University, Miami, FL 33199. Florida International University is an Equal Access/Affirmative Action/Equal Opportunity Employer and a member of the State University System of Florida.

PROFESSOR/SCIENTIST IN DIABETES RESEARCH DEPARTMENT OF MEDICINE University of California, San Francisco

The University of California, San Francisco, Department of Medicine is recruiting for up to three scientists whose research involves diabetes. The primary appointment is in the School of Medicine and may be at a **JUNIOR** or **SENIOR PROFESSOR** level. Candidates must have an M.D. or Ph.D. degree and a strong publication record. Send curriculum vitae and three letters of recommendation by April 1, 1998, to: Dr. Regis B. Kelly, Ph.D., Chair, Search Committee, University of California, San Francisco, CA 94143-0534. UCSF is an Equal Opportunity/Affirmative Action Employer. The University undertakes Affirmative Action to assure Equal Employment Opportunity for underutilized minorities and women, for persons with disability, and for Vietnam-era veterans and special disabled veterans.

Comparative pathology. Candidates with documented disciplinary and research skills are sought for a tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** position. Persons with both D.V.M. and Ph.D. degrees, pathology training, and research and teaching credentials are preferred, but we are flexible. Duties are biomedical research (50 to 80 percent), teaching (10 to 20 percent), and hospital pathology service (0 to 25 percent) tailored to candidate strengths. Competitive salary and benefits package. Starting date July 1, 1998. Informal inquiries are encouraged. Send curriculum vitae and a statement of career goals to: Dr. Philip N. Bochsler, Pathology Search Committee Chair, Department of Pathology, College of Veterinary Medicine, University of Tennessee, Knoxville, TN 37901-1071. Telephone: 423-974-8234. The University of Tennessee is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR PHYSIOLOGY

The Department of Physiology at the University of Maryland School of Medicine is seeking a tenure-track Assistant Professor with research interests in molecular and cellular physiology. Individuals employing molecular techniques to investigate mechanisms of signal transduction are particularly encouraged to apply. Ph.D. or M.D., at least two years of postdoctoral experience, and the ability to develop an independent research program required. Research interests should complement one or more existing departmental strengths in cardiovascular, neural, renal, and reproductive physiology (see our website: <http://physiomed.ab.umd.edu>). The position offers competitive start-up funds, laboratory space, salary, and benefits. Send curriculum vitae, statement of research interests, and names of three referees to: R. J. Bloch, Ph.D., Physiology Search Committee, Department of Physiology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201. Submit by January 5, 1998, for full consideration; position available July, 1998. The University of Maryland, Baltimore is an Affirmative Action/Equal Opportunity Employer and has a strong institutional commitment to the principle of diversity in all areas.

ASSISTANT PROFESSOR, INSTRUCTOR POSTDOCTORAL FELLOW THE HENRY HOOD RESEARCH PROGRAM The Pennsylvania State University College of Medicine

Scientific research positions are available immediately to investigate the molecular control of cardiac cellular growth in the laboratory of Dr. Kenneth M. Baker, located in the Sigfried and Janet Weis Center for Research. The NIH- and AHA-funded research group has focused interests ranging from molecular signaling pathways to transcriptional regulation. Individuals should have a Ph.D. and/or M.D., and a strong background in molecular and cellular biology and biochemistry with commensurate experience. These are Fixed-Term I positions. Send a description of your research interests, curriculum vitae, and three references to: Mrs. Barbara A. Brown, Administrative Assistant, Henry Hood Research Program, Sigfried and Janet Weis Center for Research, 100 North Academy Avenue, Danville, PA 17822-2601. For your health, the Weis Center for Research is a smoke-free campus. Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY

Wingate University seeks an Assistant Professor to teach human anatomy and physiology, human biology (non-majors), and physiology electives in their area of expertise. Ph.D., a strong commitment to undergraduate teaching and working with students, and demonstrated potential for effective college teaching are required. Professional development and involvement with student research are expected. Applications from women and minorities are encouraged. Wingate University is a small, private, church-related liberal arts institution located 25 miles southeast of Charlotte, North Carolina. Send application, including a statement of teaching philosophy, curriculum vitae, and three letters of recommendation to: Dr. Lee Hadden, Chair, Department of Biology, Wingate University, Wingate, NC 28174. Deadline January 12, 1998. Wingate University does not discriminate on any basis other than objective qualifications and demonstrated merit.

ASSISTANT PROFESSOR/ ANIMAL PHYSIOLOGIST

The Department of Biology at the University of Nebraska at Omaha invites applications for an Animal Physiologist, a tenure-track position starting in August 1998. Applicants must have a Ph.D. with postdoctoral experience highly desired and demonstrate a commitment to excellence in research and undergraduate and graduate teaching. For details on the department and the application process, please visit our website: <http://www.unomaha.edu/~wwwbio>. Review of applications will begin January 5, 1998, and continue until the position is filled. University of Nebraska at Omaha is an Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOCHEMISTRY UNIVERSITY OF MISSOURI-COLUMBIA

The University of Missouri-Columbia Department of Biochemistry seeks applicants from any area of biochemistry for a tenure-track Assistant Professor position. Research strengths in the department include plant biochemistry and enzymology, gene expression in plants and animals, structural biochemistry, and biochemical genetics. The Biochemistry Department is part of a campus-wide life science enhancement, and our faculty actively participate in interdisciplinary research through the Molecular Biology Program, Interdisciplinary Plant Group, the Genetics Area Program, and the Nutrition Area Program. Faculty are expected to develop an outstanding, externally funded research program, and to teach enthusiastically at the undergraduate and graduate levels. Applications should include a curriculum vitae, and a description of research and teaching interests. In addition, three letters of reference should be sent by 21 January 1998 to: Faculty Search Committee, Department of Biochemistry, 117 Schweitzer Hall, Columbia, MO 65211 USA. For more information see website: www.biochem.missouri.edu.

MU is an Equal Opportunity/Affirmative Action Employer, complies with the Americans with Disabilities Act, and encourages applications from women and minorities.

BIOLOGY AQUATIC BIOLOGIST ASSISTANT PROFESSOR

Full-time, tenure-track, beginning August, 1998. Teach aquatic biology, entomology, invertebrate zoology, and introductory biology courses. Conduct field trips to natural habitats for class enhancement for above disciplines. Required: Ph.D. in biology; evidence of extensive field experience and quantitative skills as an Aquatic Biologist; evidence of commitment to undergraduate teaching; ability to teach aquatic biology, entomology, invertebrate zoology, and introductory biology; ability to lecture effectively and conduct field trips; record of professional publications; a summary of teaching and research goals; potential to establish active research program involving undergraduates; and a successful interview and teaching demonstration. For full consideration, submit letter of application, curriculum vitae, copies of all transcripts, and three current letters of recommendation by January 7, 1998, to: Dr. Syd Radinovsky, Chair, Aquatic Biologist Search Committee/SCI121, Millersville University, P.O. Box 1002, Millersville, PA 17551-0302. An Equal Opportunity/Affirmative Action Institution.

DEVELOPMENTAL BIOLOGIST

Applications for a tenure-track **ASSISTANT PROFESSORSHIP** are invited. An individual using molecular approaches to study contemporary problems in developmental biology is preferred. Candidates must have postdoctoral experience and will be expected to develop an extramurally funded research program. The successful candidate will teach undergraduate courses in two of the following areas: developmental biology, molecular biology, and genetics. The department has Master's/doctoral programs with active research in comparative biochemistry, physiology, and environmental biology. Review of applications will begin 5 January 1998 and continue until the position is filled. Desired starting date is 1 September 1998, but negotiable. Applicants should submit a curriculum vitae, statement of research interests, and names and addresses (including e-mail) of three references. Forward application materials to: Dr. Daniel D. Jones, Chair, University of Alabama at Birmingham, Department of Biology, 109 CH, 1300 University Boulevard, Birmingham, AL 35294-1170. The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer.

ENGINEER BIOMEDICAL OPTICS

Design, construction, and testing of near-infrared optical system for imaging. Requires three years of experience in laser diode radiofrequency modulation, fiber optic coupling networks, high-speed detectors, and computer-controlled attenuators. Ability to build circuits and mechanical assemblies, write software code in C and Visual Basic. Knowledge of photon diffusion in tissues. Master's degree required. \$28,000 per year. Send résumé to: University City Science Center, c/o NIM Suite 508, 3624 Market Street, Philadelphia, PA 19104.



McMaster University Tenure-Track Faculty Positions in Molecular Biology

McMaster University, a research-intensive institution and leading center for biomedical and biological research, is expanding its faculty complement in the area of molecular biology. Four tenure-track faculty positions are available at the assistant professor level commencing July 1, 1998. These positions are tenable in the Biochemistry and Biology Departments; new faculty will become members of the Institute for Molecular Biology and Biotechnology.

We request applications from individuals with research interests in molecular biology, who employ model organisms to study gene function. Their research areas should complement current strengths at McMaster University in the fields of: gene structure, expression and regulation; DNA replication and repair; signal transduction; oncogenesis; gene therapy; development and differentiation; and microbial genetics and pathogenesis.

Candidates must hold a Ph.D. degree in molecular biology or closely related field from an accredited university, possess at least 2 years of postdoctoral experience, and have an outstanding record of achievement as exemplified by publications in leading scientific journals.

Successful applicants will be expected to establish and maintain a vigorous, externally funded research program, contribute to the education of undergraduate and graduate students, and participate in the activities of the academic department in which they are appointed.

Applicants should submit a curriculum vitae, a statement of their research interests and future plans, and should arrange for 3 letters of recommendation to be sent to: **Dr. John A. Hassell, Chair, Molecular Biology Search Committee, Institute for Molecular Biology and Biotechnology, McMaster University, 1280 Main St. W., Hamilton, Ontario L8S 4K1 Canada.** Closing date for applications is January 31, 1998.

McMaster University encourages applications from qualified men and women, members of visible minorities, aboriginal peoples, and persons with disability. In accordance with Canadian immigration policies, this advertisement is directed to Canadian citizens and permanent residents of Canada.

EUROPEAN CAREER OPPORTUNITIES

FRENCH "ACADÉMIE DES SCIENCES" PROFESSORSHIPS

The French Académie des Sciences, the Centre National de la Recherche Scientifique and Elf Aquitaine will open a limited number of one-year professorships for the fall 1998 to fall 1999 period. The positions are to be held in France at an academic institution or at an Elf laboratory, or both, and are reserved for research professionals at all levels, from Associate to Full Professor. They may be held in conjunction with a sabbatical leave.

They include benefits such as medical insurance and travel expenses for the candidate and his/her family, and depend upon the candidate's experience. Selection criteria include the quality of research achievements and the relevance of the proposed program to Elf research activities, namely:

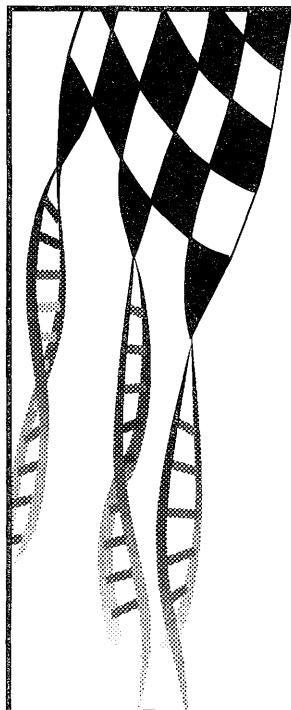
- Earth Sciences, with emphasis on oil and gas exploration: geophysics, sedimentology, organic and mineral geochemistry, physics of hydrocarbons, including their interactions with rocks, reservoir modeling.
- Chemical Sciences, with emphasis on polymer sciences, halogen and thiochemistry, catalysis, photochemistry, and process engineering research.
- Environmental Sciences, with emphasis on the methodology of biological indicators.
- Life Sciences, with emphasis on the biochemistry of receptors as applied to the central nervous system, and cardiovascular, thrombotic, and degenerative diseases.

Prearranged agreements with French academic laboratories are eligible for these professorships and will be appreciated although not mandatory. Some preference will also be given to candidates whose research programs include significant interaction with Elf R&D staff. There are no citizenship restrictions. Mastery of French is not required, although some familiarity with French culture is expected to be helpful.

There is no application form. The proposals should include a detailed résumé, with name, address, telephone and fax numbers; place, date of birth, and citizenship of the candidate and of his/her family who would accompany him/her; description of the research project and any contacts with Elf Aquitaine or academic labs in France; possible partial financial support by the candidate's university. They should be sent before February 16, 1998:

—For North America-based candidates, to: **J. BODELLE, V.P. R&D, Elf Aquitaine, Inc., 1899 L Street, N.W., Suite 500, Washington, D.C. 20036—Fax: 202-872-8201.**

—For other candidates, to: **C. JABLON, Chief Scientist, Elf Aquitaine, DRTE, Tour Elf, Cedex 45, 92078 Paris-La Défense, FRANCE—Fax: 1 47 44 44 94.** Some discussion with the candidates about the program may then be suggested by the selection committee before the final announcements scheduled for mid-May 1998 at the latest.



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POSITIONS OPEN

ENVIRONMENTAL BIOLOGIST

The Department of Biological Sciences at Old Dominion University, a state-assisted doctoral institution, invites applications for a tenure-track position in environmental biology at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Area of specialization is open, but we especially encourage applicants with expertise in conservation biology, marine ecology, physiological ecology, and pollution ecology. Special consideration will be given applicants who use molecular techniques within these disciplines. We seek an individual who will be active in both our M.S. and Ph.D. programs and will complement existing strengths within our Department and College. Applicants should have a Ph.D. and an established track record or strong potential for attracting extramural support. Postdoctoral experience is preferred. Please submit a curriculum vitae, statement of research and teaching interests, up to three representative publications, and the names, telephone numbers, and the addresses (postal and e-mail) of three references to: **Search Committee, Department of Biological Sciences, Old Dominion University, Norfolk, VA 23529-0266**. Applications should be received by January 9, 1998. *Old Dominion University is an Affirmative Action/Equal Opportunity Employer and requires compliance with the Immigration Reform and Control Act of 1986. We especially encourage applications from women and minorities.*

Conservation Science. Tenure-track position at **ASSISTANT** or **ASSOCIATE** level for a **CONSERVATION BIOLOGIST**, with interest in environmental studies, to refine, help launch (in fall 1998), administer, and teach in a recently approved interdisciplinary conservation science major. Program includes components at nearby Muskingum Technical College and the Wilds, North America's largest conservation research and education field facility. Successful applicant will develop and teach an orientation seminar, a course in conservation biology, and the associated capstone research courses. Will be expected to perform some administrative duties and to foster a productive working relationship among the three institutions. Ph.D. and teaching and research experience required. Send letter of application, curriculum vitae, transcripts, and names, addresses, and telephone numbers of three references to: **Dr. Paul Naour, Associate Academic Dean, Muskingum College, New Concord, OH 43762**. E-mail: naour@muskingum.edu. Review of applications will begin immediately and will continue until position is filled. Would be helpful to have person in place by mid-summer. *Equal Opportunity Employer.*

ASSISTANT PROFESSOR—RESEARCH (Ph.D. OR M.D.)

Division of Endocrinology,
Diabetes, and Metabolic Diseases
Department of Medicine
Thomas Jefferson University

We are seeking a candidate to develop a strong independent research program that interrelates with the interests of our current faculty: insulin resistance in diabetes and obesity, fuel and energy homeostasis, biosynthesis and clearance of lipoproteins, diabetic complications, vascular biology, and regulation of receptor signaling. A generous start-up package is available including a full-time Research Assistant. Send curriculum vitae with summary of research interests, current grant funding, and names of three references by FAX: 215-923-7932; e-mail: b_goldstein@lac.jci.tju.edu. Barry J. Goldstein, M.D., Ph.D., Room 349, 1020 Locust Street, Philadelphia, PA 19107. *Equal Opportunity Employer.*

ASSISTANT PROFESSOR of microbiology anticipated tenure-track opening, fall, 1998, at the University of Houston—Downtown. Ph.D. in microbiology with emphasis in immunology required. Candidate must have good communication skills and a demonstrated ability to teach science at the undergraduate level. Position requires teaching entry-level biology/microbiology and upper-level courses in immunology and pathogenic microbiology, advising microbiology majors, and conducting appropriate research projects with undergraduates. University of Houston—Downtown is located in the dynamic central business district of Houston and has affiliation agreements with laboratories in the Texas Medical Center. The 8,000 undergraduate student body has an ethnic mix matching that of the city. Application deadline: February 1, 1998. Send a curriculum vitae and names of three references to: **Chair, Microbiology Search Committee, Department of Natural Sciences, University of Houston—Downtown, One Main Street, 813N, Houston, TX 77002**. *UHD is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR BACTERIAL PATHOGENESIS

Applications are invited for a tenure-track faculty appointment as Assistant Professor in the Department of Microbiology and Immunology, School of Medicine, University of North Carolina at Chapel Hill, beginning summer 1998. We seek a candidate with the clear capability to establish and maintain an independent research program in the area of bacterial pathogenesis and/or immune responses to bacterial infection and who will participate in the teaching of graduate and medical students. A doctoral degree and relevant postdoctoral experience are required. Preference will be given to applicants who reply before December 31, 1997. Send curriculum vitae, statement of research interests and future plans, representative reprints, and arrange to have three letters of reference sent to: **Dr. Janne Cannon, Search Committee, Department of Microbiology and Immunology, CB# 7290, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599**. Additional information about the Department may be found through the website: <http://www.med.unc.edu/wrkunits/2depts/microimm/>. *Women and minorities are encouraged to apply and to identify themselves. The University of North Carolina at Chapel Hill is an Equal Opportunity/Affirmative Action Employer.*

BIOCHEMISTRY. Chemistry Department invites applications for tenure-track **ASSISTANT PROFESSOR** beginning August 1998. A successful candidate will possess a Ph.D. in biochemistry (or closely related discipline) and a strong interest in teaching and conducting research with undergraduates in a liberal arts environment. The Department also has a small but active M.S. program. Our curriculum has a multi-course biochemistry component and teaching would involve selections from these courses in addition to introductory chemistry courses. The area of research specialization is open, but the candidate is expected to use a modern biochemical/molecular protocols involving students in publishable investigations. Modern instrumentation and start-up funds are available. John Carroll University, the Jesuit University in Cleveland, is a coeducational university. Further information about the Department and University can be found at website: www.jcu.edu. Send résumé, graduate and undergraduate transcripts, three letters of recommendation, publication list, teaching philosophy, research plans, and start-up needs to: **Dr. David Ewing, Chairperson, Department of Chemistry, John Carroll University, University Heights, OH 44118**. Completed applications should be received by January 12, 1998. *Affirmative Action/Equal Opportunity Employer.*

X-RAY CRYSTALLOGRAPHY, ASSISTANT or ASSOCIATE PROFESSOR, tenure-track. The new Center for Pharmaceutical Biotechnology invites applications in protein X-ray crystallography. Ph.D. and postdoctoral experience required. Responsibilities include developing a strong, externally funded research program, and teaching in graduate and professional programs. Successful candidate will have appointments within the Center and a College basic science department, and extensive collaborative opportunities in a major health sciences center. Forward curriculum vitae, description of research interests, and three reference letters to: **Dr. M. Johnson, Director, Center for Pharmaceutical Biotechnology, College of Pharmacy, University of Illinois at Chicago, Molecular Biology Research Building, 900 South Ashland—m/c 870, Chicago, IL 60607-7173**. For fullest consideration, submit full application by December 15, 1997. *Affirmative Action/Equal Opportunity Employer.*

FRESHWATER BIOLOGIST

Position: Indiana University of Pennsylvania invites applications for a tenure-track **ASSISTANT PROFESSOR** position in freshwater biology to begin fall, 1998. Duties will include teaching lecture/lab in an undergraduate majors introductory course and participation in general/courses within the department. Other duties consist of developing an undergraduate and/or M.S. graduate course in area of expertise, research, student advisement, and service. Qualifications: Doctoral degree required. How to apply: Send curriculum vitae, statements of teaching philosophy and research interests, transcripts, and three letters of recommendation to: **Freshwater Biology Search Committee, Department of Biology, Indiana University of Pennsylvania, Indiana, PA 15705**. FAX: 412-357-6969; e-mail: ntcc@grove.iup.edu; website: www.iup.edu/bi/. *IUP is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity.*

POSITIONS OPEN

VERTEBRATE BIOLOGY/MARINE MAMMALS. Position responsibilities include: (1) teaching field-oriented courses in marine and general mammalogy and marine conservation biology; (2) team-teaching general biology courses; (3) facilitation of student involvement in regional field research projects, direct senior projects, and advising students in an interdisciplinary self-directed degree program; (4) willingness to develop other interdisciplinary courses with science and non-science faculty. Other areas of expertise may include: population biology, fisheries, freshwater biology, or oceanography. Teaching experience and Ph.D. are preferred. Send a letter, a teaching statement addressing the above specifications, a curriculum vitae, and three references to: **Biology Search Committee, College of the Atlantic, 105 Eden Street, Bar Harbor, ME 04609**. Review will begin the last week of December and continue until the position is filled.

College of the Atlantic is a small, selective private college located on Mount Desert Island adjacent to Acadia National Park offering a B.A. and M.Phil in human ecology. Faculty organization is nondepartmental and teaching includes interdisciplinary study, team-teaching, and use of undergraduates in field research. *College of the Atlantic is an Affirmative Action/Equal Employment Opportunity Employer and strongly encourages applications from women and minority candidates.*

INSTRUCTOR/ASSISTANT PROFESSOR to study memory T cell function and homeostasis. Requires Ph.D. and two years of postdoctoral training in molecular and cellular immunology, including familiarity with flow cytometry, immune cell/hybridoma manipulation and culture, immunologic assays, and molecular biology techniques (cDNA cloning, transfections, RT-PCR, etc.). Duties include independent and group research, training and supervision of house staff, graduate students, and technicians, and participation in the development and implementation of esoteric immune testing for clinical studies. Send curriculum vitae, description of current research and relevant reprints, and names of three references to: **Dr. Louis Picker, Department of Pathology, The University of Texas Southwestern Medical Center, 5323 Harry Hines, Dallas, TX 75235-9072**. *An Equal Opportunity Employer.*

MOLECULAR BIOLOGIST. Experienced in cDNA library construction, cloning, DNA sequencing, *in situ* PCR, *in situ* hybridization, quantitation of rare mRNAs, differential display. Ph.D. with three to five years of experience. Laboratories located in Greenville, North Carolina. Competitive salary, comprehensive benefits, excellent opportunities for professional advancement. Please send your résumé with Position Code 97-02 clearly identified (no calls please) to: **Human Resources Director, EpiGenesis Pharmaceuticals, Inc., 3100 Tower Boulevard, Suite 513, Durham, NC 27707**. *EpiGenesis is an Equal Opportunity/Affirmative Action Employer.*

NORTHWESTERN COLLEGE

Northwestern College invites applications for a **ONE-YEAR** position teaching botany, plant taxonomy, and ecology and for a possible **TENURE-TRACK** position teaching human anatomy, physiology, and histology. Candidates must have completed doctorate, teaching experience, and an evangelical Christian faith commitment. Apply to: **Dr. Robert Zwier, VPAA, Northwestern College, Orange City, IA 51041**. E-mail: vpaa@nwcowa.edu.

BRAIN BANK MANAGER responsible for collection, maintenance, and initial processing of specimens for a Psychiatric Brain Bank associated with an academic medical center. Assignments will require exceptional interpersonal skills and some overnight travel (two to three days per month). Candidates with specialized histology skills for large specimens, anatomy background, and previous experience with human tissue work are encouraged to apply for this full-time position. Send curriculum vitae and salary requirements to: **SCIENCE, Box 79, 1200 New York Avenue NW, Washington, DC 20005**.

RESEARCH SCIENTIST

Available immediately for research in CNS-PNS regeneration and restorative neuroscience. Candidates should be experienced in electrophysiology, growth factor neurobiology, histochemistry, and ultrastructure. Send curriculum vitae and statement of research accomplishments to: **Julia K. Terzis, M.D., Ph.D., Director—Microsurgery Program, Eastern Virginia Medical School, 700 Olney Road, Lewis Hall #2059, Norfolk, VA 23504**. FAX: 757-446-5109; e-mail: swinsonjc@borg.evms.edu.



Singapore General Hospital

RESEARCH OPPORTUNITIES AT THE SINGAPORE CANCER CENTRE

The Singapore Cancer Centre (SCC) is inviting applications for Principal Investigators (Research Group Leaders) and Scientific Officers (Post-doctoral Fellows) in the areas of Cellular and Molecular Biology, Epidemiological Sciences and Molecular Epidemiology, Cancer Diagnostics and Therapeutics. Experience with tumorigenesis, angiogenesis, metastasis, cancer gene therapy/tumour targeting, gene transcription/signaling and growth factors/growth factor receptors is especially desirable.

The Cancer Centre, set up within the campus of Singapore General Hospital (SGH), is identified as a national treatment and research centre to deal with the rising incidence of cancers. SGH is Singapore's largest acute care tertiary hospital and national referral centre. It resides in the medical park which comprises other specialist centres such as Singapore National Eye Centre, Singapore Heart Centre, National Blood Centre and National Dental Centre. With the completion of the Cancer Centre and a new Institute of Pathology, this medical park will provide an excellent environment for a competitive world-class culture in medical and basic research.

The Cancer Centre will also provide a unique opportunity for interaction and collaboration between clinicians and research scientists, and the development of innovative approaches towards the education of graduate and medical students.

The research facilities will be housed in a newly constructed state-of-the-art building. Besides offering a competitive salary and benefits package, and generous start-up research funds, access to a large number of core research facilities and cancer patients within the Cancer Centre will be available.

Applicants with the appropriate experience and intent should submit a curriculum vitae, brief statement of future research plans and 3 letters of recommendation to:

Director
Singapore Cancer Centre
c/o Singapore General Hospital
Outram Road, Singapore 169608. Fax No: 65-2256283
E-mail address: gcchkm@sgh.gov.sg or gccabk@sgh.gov.sg

A TRADITION OF CARING AND EXCELLENCE

EUROPEAN CAREER OPPORTUNITIES

Bial

Bial is a leading pharmaceutical company located in Porto, Portugal, with an outstanding reputation in its sectors of market, and fully committed to innovative R&D in neurosciences. The present position is a new and pivotal one in the build-up of the Department of Research and Development.

DRUG METABOLISM SCIENTIST

As a member of an interdisciplinary team, you will plan, design, and conduct *in vivo* and *in vitro* studies to determine qualitative and quantitative aspects of drug biotransformation, distribution, and elimination. Position requires a Ph.D. in analytical chemistry, medicinal chemistry, biochemistry, pharmaceutical chemistry, or a closely related field with a minimum of 2 years relevant postdoctoral experience. Familiarity with modern analytical instrumentation and approaches to analyte isolation and identification is essential. The selected candidate will establish and utilize chromatographic procedures in conjunction with modern analytical instrumentation and mass spectrometry. Previous experience in separation and identification of drugs and metabolites in biological systems is highly desirable.

Excellent salary accompany this position at our modern research facility 15 Km north of Porto.

Please submit your CV and a cover letter to the attention of:
BIAL, Apartado 19, 4785 S. Mamede do Coronado-Portugal.



KAROLINSKA INSTITUTET
Department of Biosciences at Novum
Center for Biotechnology

Postdoctoral research positions in molecular biology of steroid/thyroid hormone receptors

A couple of positions for work on the structure and function of steroid/thyroid hormone receptors as well as orphan receptors belonging to the same superfamily are available at the Center for Biotechnology, Novum, Karolinska Institutet. Special emphasis will be on the newly discovered estrogen receptor β . The project involves state-of-the-art biochemical, molecular biological, cell biological, and gene targeting techniques to understand the structure and function of these transcription factors.

The Center for Biotechnology (CBT) is situated at the South Campus of the Karolinska Institutet, encompassing the Novum Research Center and Huddinge University Hospital. Other research areas represented at CBT include molecular immunology and membrane biology. Novum Research Center also contains the Center for Nutrition and Toxicology as well as the Center for Structural Biochemistry (with facilities for X-ray crystallography, NMR-spectroscopy, EM and molecular modeling). The three centers have together a staff of around 300 persons.

The positions as postdoctors/research associates are initially for two years with possibilities for extension for up to four years. Preference is given to applicants with experience in molecular biology. Adequate laboratory resources will be provided.

Applications should be sent to:

Professor Jan-Åke Gustafsson, Karolinska Institutet,
Department of Biosciences at Novum, S-141 57 Huddinge,
Sweden, together with CV, relevant publications,
and two recommendations letters.
Closing date: December 31, 1997.

POSITIONS OPEN

BOWDOIN COLLEGE PLANT PHYSIOLOGIST

The Department of Biology invites applications for a tenure-track position in plant physiology to begin in the fall of 1998. A Ph.D. is required and postdoctoral experience is preferred. Responsibilities will include teaching a laboratory course in plant physiology, a laboratory course in botany, and an additional course in an area determined by the candidate's interest. The candidate will be expected to maintain an active research program and incorporate undergraduates into his/her research. The Biology Department maintains several biological field stations, a Coastal Studies Center, and has a newly constructed greenhouse and research facilities for the successful candidate. Bowdoin College is a highly selective coeducational liberal arts college located on the coast 25 miles northeast of Portland, Maine, two hours north of Boston. Further information about the department and the college is available at [website: www.bowdoin.edu](http://www.bowdoin.edu).

EVOLUTIONARY BIOLOGIST

The Department of Biology invites applications for an entry-level tenure-track position in evolutionary biology to begin in the fall of 1998. A Ph.D. is required and postdoctoral experience is preferred. The successful candidate will conduct research on the mechanisms of evolution and will incorporate undergraduates in his/her research program. The successful candidate will teach three undergraduate courses each year, including beginning and more advanced courses about evolution and an additional course in an area determined by the candidate's interest. The Biology Department maintains several biological field stations, a Coastal Studies Center, and occupies a new science building. Bowdoin College is a highly selective coeducational liberal arts college located on the coast 25 miles northeast of Portland, Maine, two hours north of Boston. Further information about the department and the college is available at [website: www.bowdoin.edu](http://www.bowdoin.edu).

Review of application materials will begin December 15, 1997. Please send a current curriculum vitae, a statement about teaching and research philosophy, and the names of three references to: **Search Committee, Department of Biology, Bowdoin College, Brunswick, ME 04011**. Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and members of minority groups are encouraged to apply.

EVOLUTIONARY BEHAVIORAL ECOLOGY (RANK OPEN)

We are searching in the area of evolutionary behavioral ecology. We are particularly looking for candidates with strong field and/or laboratory components to their research. Specific research areas and taxa are open. The ideal candidate will interact closely with a faculty with strong quantitative and theoretical interests and will be expected to maintain vigorous research programs, train graduate students, and participate in undergraduate teaching. The search focuses at the Assistant Professor level but appointment at other levels is possible and senior applications will be considered.

Review of application files will begin 8 December 1997. To apply, please send curriculum vitae, a statement of research interests, reprints, and have three letters of recommendation forwarded to: **Animal Behavior Search Committee, Department of Ecology and Evolution, University of Chicago, 1101 East 57th Street, Chicago, IL 60637**. Website: <http://www2.uchicago.edu/bse-eco-euo/>.

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

RESEARCH SCIENTIST

A&PC, a rapidly growing bio-tech company, is currently seeking a highly motivated individual for a Research Scientist to operate and maintain fluorescent microscopy equipment for calcium signaling investigations. This position requires a M.S. degree in biochemistry, cell biology, or physical chemistry. Knowledge and experience in cell signaling, skills in microscopy and computers are beneficial.

A competitive fringe benefit package and pension plan is available. Send curriculum vitae with cover letter by November 28, 1997, to:

**A&PC
Human Resources Department
P.O. Box 130517
St. Paul, MN 55113**

Equal Opportunity Employer.

POSITIONS OPEN



DIVISION DIRECTOR AND SENIOR VICE PRESIDENT FOR THE DIVISION OF PUBLIC HEALTH SCIENCES

The Fred Hutchinson Cancer Research Center invites applications and nominations for the position of Division Director and Senior Vice President for their Public Health Sciences Division. The mission of the Center is to investigate the causes of cancer, explore methods to cure and prevent cancer, and to disseminate the results of its research. The Division of Public Health Sciences includes over 65 full- and part-time scientists, with studies in biostatistics, cancer interdisciplinary research.

The Division Director reports directly to the President and Director of the Center, and is responsible for administrative and scientific guidance of activities within the Division. These responsibilities include Divisional strategic planning, recruitment, space allocation, oversight of more than 650 faculty and staff, and formation of the divisional annual budget of approximately \$40 million.

A joint appointment in the School of Public Health and Community Medicine as a Research Professor is possible depending on interests and qualifications.

Qualifications for the position include an international reputation for scientific excellence and accomplishments with the appropriate educational background. The Division Director is expected to have a peer-review approved research program, and experience in leading a scientific faculty.

Compensation is dependent upon experience.

Please send letters of application with curriculum vitae to: **Director Position LY-301, 1100 Fairview Avenue North, P.O. Box 19024, Seattle, WA 98109-1024**. Submissions must be received by January 31, 1998.

The Fred Hutchinson Cancer Research Center and University of Washington are Equal Opportunity/Affirmative Action Employers. Both institutions are building culturally diverse faculty and strongly encourage applications from female and minority candidates.

NMR SPECTROSCOPIST

The University of California, San Diego, Department of Chemistry and Biochemistry invites applications for an open NMR Spectroscopist position. The successful candidate will support research programs in structural biology and biophysics using 500 and 600 MHz spectrometers. Candidates must have a Ph.D. and be skilled in modern multidimensional and multinuclear NMR, experienced in implementing new pulse sequences, be familiar with maintenance and support of spectrometers, be willing to be involved in challenging research problems and to teach graduate and postdoctoral fellows in the use of NMR. Appointment series level and salary commensurate with experience and based on the University of California pay scale. Candidates should send a curriculum vitae and names and addresses of references to: **Chair, NMR Search Committee, 9500 Gilman Drive, La Jolla, CA 92093-0332**. Electronic applications will also be accepted by sending the requested documents to **e-mail: nmrspec@chem.ucsd.edu**. The deadline for applications is January 1, 1998, but until position is filled all applications received will be assured full consideration. The University of California is an Equal Opportunity/Affirmative Action Employer.

Search continued. The Department of Agronomy at the University of Kentucky invites applications for a **PLANT BIOCHEMIST**. Applicants must have a Ph.D. degree in plant biochemistry, plant physiology, or a related field, and postdoctoral experience in biochemistry, molecular biology, or other pertinent areas. The successful candidate will be expected to develop and maintain an extramurally funded research program, and to be responsible for teaching a graduate-level course in plant biochemistry. Research areas might include biochemical and molecular approaches to metabolic processes, structure/function relationships of macromolecules, and the biochemical basis of plant development. Review of applications will begin January 12, 1998. Candidates should provide a letter of application, a curriculum vitae, a description of research interests, and have three letters of reference sent to: **Plant Biochemistry Search, Department of Agronomy, University of Kentucky, Lexington, KY 40546-0091**. Additional information: **Dr. Joe Chappell, e-mail: chappell@pop.uky.edu**. Equal Opportunity Employer.

POSITIONS OPEN

MICHIGAN STATE UNIVERSITY

The College of Natural Science at Michigan State University invites applications from Mathematics Educators for the position of **CO-DIRECTOR OF THE DIVISION OF SCIENCE AND MATHEMATICS EDUCATION**. The person appointed will have a full-time academic year appointment with at least 51 percent time as Co-Director. Candidates should hold, or be qualified to hold, the rank of tenured Full Professor in the Mathematics Departments of the College of Natural Science and/or in the Department of Teacher Education of the College of Education.

Applicants or nominees must possess an established record of scholarship and proven administrative and leadership skills in mathematics education, excellent communications and interpersonal skills, at least five years of teaching experience in undergraduate mathematics and/or mathematics education, and a broad vision of what science and mathematics education can become in the twenty-first century. Experience in working with inservice teachers is highly desirable.

Applicants should submit a curriculum vitae, names of three references, and a statement (not more than three pages) of the candidate's vision for mathematics and science education at Michigan State University by January 15, 1998, to:

**Dr. George E. Leroi, Dean
103 Natural Science Building
Michigan State University
East Lansing, MI 48824-1115
FAX: 517-432-1054
E-mail: gleroi@msu.edu**

Expected starting date: August 16, 1998.

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

UNIVERSITY OF MINNESOTA RESEARCH ASSOCIATE

The University of Minnesota, Department of Pediatrics, is seeking a Ph.D. Molecular Biologist/Molecular Microbiologist for a full-time position at the rank of Research Associate (annually renewable). This position is located in a laboratory conducting research in molecular genetics of urea cycle and bacterial arginine pathways. The individual will initially conduct funded research and supervise the molecular activities of a research laboratory. The candidate will also have an opportunity to develop their own research interests.

Essential requirements include Ph.D. with three or more years of experience in molecular biology. Experience in microbiology or biochemistry is an advantage. Last date for receipt of application is December 15, 1997. Start date as soon as possible.

Submit letter and curriculum vitae to:

**Mendel Tuchman, M.D.
Professor of Pediatrics
University of Minnesota
Box 400 Mayo
420 Delaware Street Southeast
Minneapolis, MN 55455**

University of Minnesota is an Equal Opportunity Educator and Employer.

RESEARCH ASSOCIATE. The University of Texas Medical Branch at Galveston (UTMB) is seeking a Research Associate to perform a variety of tasks related to the current research program. The selected candidate will maintain, operate, and perform data analysis from an applied Biosystem 373A DNA Sequence analyzer and a 310 Genetic analyzer. You will assume responsibility for sequence data analysis, including contig assembly, consensus determination, restriction maps, and open reading frames as well as the documentation of completed DNA synthesis and sequence analysis. You will oversee inventory and order all supplies associated with DNA sequence analysis and oligonucleotide synthesis. Requires a Master's degree in basic science and one year of related experience, background working with Applied Biosystem 373A or 310 Sequence analyzers is preferred. Must have experience in DNA sequence analysis using Sanger protocols. Prefer a knowledge of nucleic acids, electrophoresis, gene cloning, and polymerase chain reaction. Please submit résumé and cover letter to: **UTMB, Job#977782, HR Staffing Service A035, 301 University Boulevard, Galveston, TX 77555-0141**. FAX: 409-747-1236 or call toll-free Telephone: 800-SEA-UTMB. UTMB is an Equal Opportunity/Affirmative Action Employer, Minorities/Females/Disabled/Veterans.

Postdoctoral Opportunities as Computational Chemists/Programmers

Our Central Research within our Business Group Pharma in Wuppertal/Germany has an immediate opening for two computational chemists (optionally one programming associate). Both positions have tentatively been planned for a period of one year with an option to extend for a second year.

Our Profile

Bayer is a globally active, research-based company in the fields of chemicals and life sciences, headquartered in Leverkusen/Germany. With total annual sales of DM 48.6 billion and an annual R&D budget of DM 3.6 billion in 1996, we can offer a very attractive working environment for highly motivated people. (For more details refer to <http://www.bayer.com>.)

Your Task

You will join a team of computational chemists and modelers. You will use state-of-the-art equipment for computational chemistry and will have almost complete access to virtually all TRIPOS and MSI/Biosym software modules. You will be involved in the developing process for new algorithms and methods supporting drug optimisation and analysis of libraries.

Your Profile

We are currently seeking candidates in the area of computational chemistry and code development, with significant professional expertise in at least one of the following areas:

- development of program code and methods for indirect drug design techniques, proteins, protein/small molecule interaction, analysis of structural databases.
- De novo Drug Design and/or Structure Activity Relationship methodology.
- GA-based optimisation techniques and/or neuronal networks, fuzzy control.
- 2D/3D-Databases and calculated molecular properties for drug finding and drug optimisation, structure and property-based design of libraries.

Working experience in a pharmaceutical company's molecular modeling group will be an advantage. The successful applicant must have a good working knowledge of chemistry. UNIX experience and C-programming skills are essential. Demonstrable expertise and experience in available commercial modeling software packages (e.g., the TRIPOS suite of programs) will also be an advantage.

Our Offer

We offer excellent conditions and the opportunity to work with a young and dynamic team in one of the largest chemical-pharmaceutical companies. You will be part of our Structural Research Department.

Your Application

If your background and personal experience fits to this profile, please send your complete application (including a CV, a brief description of research experience, a list of publications, names of referees, and ref. No. 386) to:

Bayer AG
Personalmarketing
Frau Fengler/Frau Höller
Hauptstraße 119
D-51388 Leverkusen
Germany



Scientific Committee on Antarctic Research Executive Secretary

Cambridge

The non-governmental Scientific Committee on Antarctic Research (SCAR) initiates, promotes and co-ordinates scientific research in the Antarctic and provides scientific advice to the inter-governmental Antarctic Treaty System. The Secretariat, which consists of the Executive Secretary and an administrative assistant, is housed in the Scott Polar Research Institute within Cambridge University, and is the contact point for all SCAR business, implementing the policies established by the SCAR Delegates and Executive Committee.

An experienced scientific administrator, you will have a background in the natural sciences and will preferably have polar experience. As the representative of SCAR at international meetings, you will be an articulate and effective communicator with excellent writing and editing skills and reasonable computer skills. Fluency in another language would be advantageous. The position involves considerable international travel and you should preferably have some experience in the organisation of international meetings of up to 300 participants.

The appointment will be for a five-year, fixed-term to commence in September 1998 (including a 12 month probationary period) with the possibility of future extension. Salary will be in the range of £26,520 to £40,649 subject to qualifications and experience. Pensions arrangements and benefits package are negotiable.

For further information, please contact the President of SCAR, c/o SCAR Secretariat, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER, United Kingdom. Fax: +44 1223 336549. E-mail: execsec@scar.demon.co.uk

You can also visit our web site at <http://www.scar.org>

Closing date for receipt of completed applications, including full CV and details of two referees is 1 February 1998.

SCAR has an equal opportunities policy and welcomes applications from all sections of the relevant scientific community.



POSITIONS OPEN

DUKE DIRECTOR FREE ELECTRON LASER LABORATORY

Duke University is searching for a Director of its Free Electron Laser Laboratory (DFELL). DFELL is organized as a research unit within the Physics Department, with three associated faculty and over \$4 million in external funding per year. The Director is expected to provide leadership for the user operations of the laboratory and to serve as principal investigator on major research grants. At present, user research at DFELL concentrates on medical applications, but applications to the physical sciences are being vigorously pursued. Candidates should have experience with modern light sources, a strong record of leadership in some area of scientific research, and a history of external grant support. The position will be combined with a senior departmental faculty appointment, depending on the candidate's field of specialization.

Applicants interested in this position are requested to send their curriculum vitae and the names of at least three possible references to: **Chair, Department of Physics, Duke University, Box 90305, Durham, NC 27708.**

Consideration of applications will commence on 1 December 1997 and continue until the position has been filled. *Duke University is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH CHEMIST. GS-11/12. U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Southern Regional Research Center, New Orleans, Louisiana. Position requires professional research experience and/or directly related education with proven ability to plan, conduct, and publish independent research in the specialist area. Salary commensurate with experience (\$44,953 to \$58,442). *U.S. citizenship required.* The incumbent will conduct research aimed at determining the role of end products produced during curing and roasting on peanut allergenicity. Applicants must have professional knowledge of protein chemistry and immunochemistry, and related skills. For information about the research program, contact: **Dr. Elaine Champagne, Telephone: 504-286-4451; e-mail: etchamp@nola.srrc.usda.gov.** For full vacancy announcement, including application information, please call **Karen Benedict, Telephone: 301-344-3955**, or access the ARS Employment Opportunities on website: <http://www.ars.usda.gov>. Applications must indicate announcement #ARS-D85-8021 and be postmarked by December 8, 1997. *USDA/ARS is an Equal Opportunity Employer.*

MICROSCOPIST

We are seeking a doctoral or Master's level Research Microscopist experienced in state-of-the-art confocal and electron microscopic techniques. Expertise in maintenance and care of light and electron microscopes is essential. Experience with computerized image analysis and computer networks is desirable. The successful candidate will collaborate with faculty on research projects, contribute to teaching technical courses, and manage the departmental facility, which includes scanning and transmission electron microscopes, and confocal and video light microscopes. Apply by January 15, 1998, to: **Microscopist Search, Department of Biological Sciences, University of Maryland, Baltimore, Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250. Website: <http://www.umbc.edu/biosci>. *UMBC is an Affirmative Action/Equal Opportunity Employer.***

POSTDOCTORAL POSITION available to study conserved aspects of centromere structure and regulation of progress through mitosis. A recent Ph.D. with extensive molecular genetics experience is required. Applicants should send a curriculum vitae, a summary of research interests and career goals, and the names of three references with contact information to: **Dr. Forrest Spencer, Department of Medicine/Genetics, Johns Hopkins University School of Medicine, Ross 1167, 720 Rutland Avenue, Baltimore, MD 21205. E-mail: fspencer@bs.jhmi.edu.**

RESEARCH ASSOCIATE/INSTRUCTOR. Positions are immediately available to do research in the field of reproductive immunology and molecular biology of sperm-egg interaction. Ph.D. degree with experience/interest in reproductive biology required. Send curriculum vitae to: **Dr. Rajesh K. Naz, Professor and Director, Division of Research, Department of Obstetrics and Gynecology, Medical College of Ohio, 3120 Glendale Avenue, Toledo, OH 43614-5809. Telephone: 419-383-3502; FAX: 419-383-4473.**

POSITIONS OPEN

RESEARCH POSITIONS THE CANADIAN RED CROSS SOCIETY Blood Services, Québec Centre at Québec

We are seeking a Ph.D.-level **RESEARCH SCIENTIST** with strong postdoctoral training in molecular cell biology and/or immunology, with experience with gene targeting. The selected candidate will join a team that uses cellular and molecular biotechnologies to expand and modify human blood-derived cells. The position is offered as an initial three-year contract with possibility of renewal. Remuneration is competitive and includes an excellent benefit package. Good interpersonal skills, together with fluency in French, are significant advantages.

A two-year **POSTDOCTORAL POSITION** is also available immediately for research in the same areas. Salary will be based on experience.

Interested applicants are invited to send their résumé in confidence no later than December 15, 1997, to:

**Jean-Guy Poupart
Director, Human Resources
The Canadian Red Cross Society
Blood Services, Eastern Region of Canada
3185 Rachel Street East, Suite 300
Montreal, Québec H1W 1A3 Canada**

SIGNAL TRANSDUCTION AND GROWTH REGULATION, UCLA

POSTDOCTORAL POSITIONS are available in the Laboratory of Signal Transduction and Growth Regulation recently established by **Dr. Enrique Rozengurt** in the Department of Medicine, UCLA. The central aim of this laboratory is to identify and characterize signal transduction pathways that regulate the proliferation of mammalian cells (e.g., *JBC* 271:27895, 1996; *JBC* 271:7829, 1996; *EMBO J.* 15:6220, 1996; *JBC* 272:2509, 1997; *JBC* 272:23952, 1997). A special opportunity for Physicians also exists within the Specialty Training and Advanced Research (STAR) Program based in the Department of Medicine, UCLA. Interested candidates with a strong background in cellular and molecular biology should send a curriculum vitae, an introductory letter containing a brief description of research experience, and contact information for three references to: **E. Rozengurt, UCLA School of Medicine, 900 Veteran Avenue, Warren Hall, Room 11-124, Los Angeles, CA 90095-1786. FAX: 310-267-2399. *UCLA is an Equal Opportunity/Affirmative Action Employer.***

BIOINFORMATICS/PROGRAMMERS

GeneSys Technologies, Inc., is seeking Programmers/Bioinformaticists at the M.S. and Ph.D. level. Applicants need a thorough knowledge of Visual Basic, Visual C++, and the Microsoft Foundation Classes (MFC). A good working knowledge of databases (Access, Oracle, Sybase) is also useful.

We're especially interested in programmers with experience in image and signal processing. GeneSys Technologies, Inc., designs, manufactures, and markets automated DNA sequencing instrumentation and robotics. Please send résumé, salary requirements, and references to: **Jim Golden, Ph.D., Director, Bioinformatics, Genesys Technologies, Inc., 9757 Wilkinson Road, Mazomanie, WI 53560. E-mail: jgolden@genesys-tech.com.**

POSTDOCTORAL FELLOWSHIP available immediately to study the molecular virology and pathogenesis of hepatitis C virus infection in man. Applicants should have a strong background in molecular biology and prior research experience in virology. Send curriculum vitae and names of three references to: **Dr. David Gretsch, University of Washington Viral Hepatitis Laboratory, Pacific Medical Center, 1200 12th Avenue South, 11th Floor, Seattle, WA 98144. *The University of Washington is an Equal Opportunity/Affirmative Action Employer, and strongly encourages applications from female and minority candidates.***

POSTDOCTORAL POSITION available immediately to study the function of mammalian TRP channels and their role in capacitative Ca²⁺ entry. Experience in electrophysiology, biochemistry, molecular and cell biology is required. Send curriculum vitae, description of research interests, and list of three references with telephone and e-mail to: **Dr. Xi Zhu, Neurobiotechnology Center, The Ohio State University, 206 Rightmire Hall, 1060 Carmack Road, Columbus, OH 43210. FAX: 614-292-5379; Telephone: 614-292-5670; e-mail: zhu.55@osu.edu. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.***

POSITIONS OPEN

DEPARTMENT OF RADIOLOGY RESEARCH IN FUNCTIONAL MRI TECHNIQUES

Duke University has established a Brain Imaging and Analysis Center (BIAC) to conduct a major program of research concerning the structure and function of the human brain using high-field (1.5T and 4.0T) magnetic resonance imaging. BIAC and the Department of Radiology is seeking an individual to establish a research program within this Center aimed at developing novel magnetic resonance pulse sequences and image analysis approaches in support of this effort. Candidates should have expertise in the physics, chemistry, and physiology related to functional MRI, and experience with the analysis of functional brain images. Familiarity with GE Medical Systems Signa MRI systems and experience in rapid imaging at high magnetic field strengths is desirable. Academic rank and salary will be commensurate with experience. Contact: **Dr. G. McCarthy, c/o Dr. C. E. Ravin, Chairman, Department of Radiology, Box 3808, Duke University Medical Center, Durham, NC 27710. FAX: 919-684-7124; e-mail: ravin135@mc.duke.edu. *Duke University is an Equal Opportunity/Affirmative Action Employer.***

POSTDOCTORAL ASSOCIATE OR RESEARCH SCIENTIST VESTIBULAR INFLUENCES ON AUTONOMIC CONTROL

A position is available to study influences of the vestibular system on the regulation of blood pressure and respiration. Our laboratory uses neurophysiological approaches in both chronic and acute preparations as well as neuroanatomical techniques. An ideal candidate would have experience in physiological techniques and background in the study of the vestibular system or neural regulation of blood pressure or respiration. Interested candidates should contact:

**Dr. Bill Yates
Department of Otolaryngology
University of Pittsburgh
Eye and Ear Institute, Room 106
Pittsburgh, PA 15213
Telephone: 412-647-9614
FAX: 412-647-2080
E-mail: byates@pop.pitt.edu**

POSTDOCTORAL POSITION available in early 1998 to study the molecular genetics of human gynecologic cancers. Candidates must have the Ph.D. degree and a strong background in basic techniques of cell and molecular biology and molecular genetics, such as cell culture, molecular cloning, PCR, sequencing, and mutation analysis. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Jeff Boyd, Department of Surgery, Box 201, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. *Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.***

POSTDOCTORAL POSITION available immediately to study signaling pathways involved in lymphocyte development and function. Experience in molecular biology and biochemistry is required. Must have a recent Ph.D. and/or M.D. degree. Send curriculum vitae and names of three references to: **Dr. Alessandra Pernis, Department of Medicine, Columbia University, 630 West 168th Street, New York, NY 10032. FAX: 212-305-4478; e-mail: abp1@columbia.edu.**

RESEARCH TECHNICIAN/ASSOCIATE/GRADUATE STUDENT with experience in cellular and molecular biology techniques for projects related to neuronal aging. The University of South Alabama in Mobile combines a fine teaching environment with a low cost of living and a great climate. Convenient to Gulf beaches. Submit curriculum vitae and references to: **Miguel Pappolla, M.D., Department of Pathology, 2451 Fillimgim Street, Mobile, AL 36617.**

POSTDOCTORAL POSITION available to study mechanism of action and regulation of protein-tyrosine-phosphatases in intracellular signaling. Send curriculum vitae and names of three references to: **John M. Denu, Ph.D., Oregon Health Sciences University, Department of Biochemistry and Molecular Biology, 3181 SW Sam Jackson Park Road, Portland, OR 97201. E-mail: denuj@ohsu.edu.**

**TWO FACULTY POSITIONS
PLANT POPULATION GENETICIST
TERRESTRIAL PLANT ECOLOGIST
UNIVERSITY OF TORONTO**

The Department of Botany, University of Toronto invites application for TWO tenure-track positions at the Assistant Professor level effective 1 July, 1998. We seek: 1) a **plant geneticist** with research interests in population and evolutionary genetics. We are particularly interested in applicants using molecular and theoretical approaches to the study of evolutionary processes and with interest in teaching genetics and evolution. 2) A **terrestrial plant ecologist** with research interests in one or more of the following areas: theoretical and/or experimental community ecology, ecosystem processes including biogeochemical cycling, palaeoecology, and interactions between organisms. Applicants should have an interest in contributing to courses in terrestrial field biology and to interdisciplinary programs.

Successful candidates will be expected to develop a vigorous, externally funded research program, train graduate students, and teach at both the graduate and undergraduate levels. A Ph.D. and postdoctoral experience is expected. Applicants should submit a curriculum vitae, copies of up to five recent publications, statements of research and teaching interests, and arrange for three letters of recommendation to be forwarded to the Chair of the Search Committee by January 16, 1998. Applications, specifying the position applied for, should be sent to either (1) **Professor Spencer Barrett, Chair of Population Genetics Search Committee**, or (2) **Professor Robert Jefferies, Chair of Plant Ecology Search Committee**, at the Department of Botany, University of Toronto, 25 Willcocks Street, Toronto, Ontario M5S 3B2 Canada.

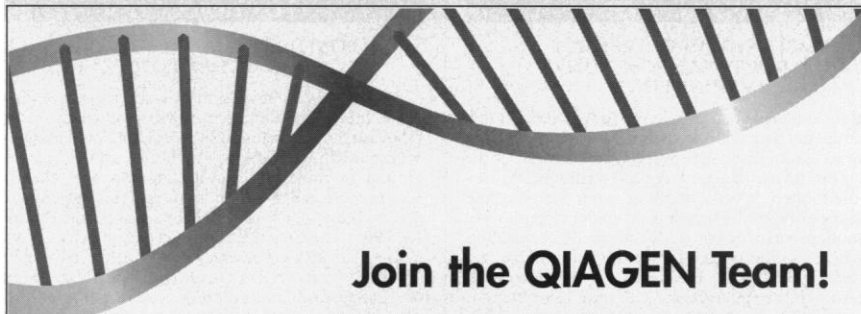
In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Toronto encourages applications from qualified women or men, members of visible minorities, aboriginal people and persons with disabilities.

GLOBAL CAREER OPPORTUNITIES

**RESEARCH FACULTY POSITIONS
INSTITUTE OF ATOMIC AND
MOLECULAR SCIENCES
ACADEMIA SINICA
TAIPEI, TAIWAN, ROC**

The Institute of Atomic and Molecular Sciences, Academia Sinica, is seeking candidates for several tenure-track research faculty positions at the Assistant Research Fellow, Associate Research Fellow, and Research Fellow levels. Qualified candidates (with a Ph.D degree and postdoctoral experience) in one of the following areas are encouraged to apply: **Molecular Reaction Dynamics, Experimental Atomic Physics, Condensed Matter and Biophysical Sciences, Theoretical Atomic Physics and Quantum Chemistry, Surface Sciences, Laser and Optical Sciences, Photochemistry and Molecular Spectroscopy**. Applicants should submit a letter of application, a curriculum vitae including a list of publications, and a brief research plan, to: **Professor Sheng-Hsien Lin, Director, Institute of Atomic and Molecular Sciences, Academia Sinica, P.O. Box 23-166, Taipei, Taiwan 106, R.O.C.** Applicants should also arrange to have three letters of reference sent to the above address. Review of applicants will begin on Feb. 1, 1998, and continue until the positions are filled. Additional information about IAMS is available on its homepage at <http://www.iam.s.sinica.edu.tw>.

EUROPEAN CAREER OPPORTUNITIES



Join the QIAGEN Team!

QIAGEN is one of the most successful and rapidly growing companies serving the global academic and industrial research markets. For over 10 years, QIAGEN has offered an increasing range of high quality, innovative products for molecular biology and molecular diagnostics, and is the world's leading provider of technologies and products for separating and purifying nucleic acids. From its main R&D and production facilities in Germany, to its world-wide network of subsidiaries and distributors, QIAGEN is a multinational team of people committed to providing exceptional products, service, and support.

**Technical/Marketing
Writer Japanese Language**

テクニカル/マーケティング資料の翻訳者(日本語)募集

QIAGEN社は核酸精製試薬で世界有数のメーカーであり、全世界的に急速に成長しています。我々の目指すのは全世界の分子生物学、分子診断学の研究分野に革新的かつ高品質の製品を、高度な専門的技術資料と共に提供する事です。日本での新たなQIAGEN社の設立に際し、ドイツ、デュッセルドルフに国際的マーケティングチームを開設しました。

テクニカル/マーケティング資料の翻訳者(日本語)理想の候補者は日本語を本来話す人で、かつ広範囲な分子生物学の経験を持ち、日本語で科学的文章を独自で書ける事です。職務は技術文書を英語から日本語に翻訳する事と、さらに我々のR&D部門、デザイン部門およびマーケティング部門と協力して、日本のマーケティング資料の準備をする事です。そのチームの中で働くための能力として、英語が話され、また書かれた英語が十分に理解できる事、および言葉の上での情報交換がこの職位には重要です。ドイツ語が理解できればさらに有利です。

職場はデュッセルドルフ近郊、ヒルデンのQIAGEN本社の予定です。デュッセルドルフ地区には約8000人の日本人が住み、働いており、ドイツ最大の日本人共同体を形成しています。

1, 2年後に日本への配置転換も可能ですが、その必要性はありません。もしあなたが、この若く情熱的な多国籍チームの中での高度な職位に興味があれば、あなたの履歴書(Reference JTW-s)を日本語および英語(もしくはドイツ語)で下記にファックスまたは郵送してください。

QIAGEN GmbH
Personalabteilung
Max-Volmer-Str. 4
40724 Hilden
Germany

<http://www.qiagen.com>



POSITIONS OPEN

WASHINGTON UNIVERSITY POSTDOCTORAL POSITION IN IMMUNOLOGY

Position immediately available to study lymphoid differentiation and activation. Experimental approaches include molecular biology, genetics, and biochemistry, with emphasis on the use of gene-targeting techniques to create mouse models. Specific ongoing projects explore the functions of intracellular signaling proteins in lymphocyte maturation, particularly pre-BCR and pre-TCR signaling in early B and T lineage development. (For example, see *Nature* 378:303, 1995). The successful candidate will benefit from diverse interactions with other active labs in the Rheumatology Division and the Center for Immunology. Interested individuals should send curriculum vitae, statement of career interests and goals, and a list of three references to:

Alec M. Cheng, Ph.D.
Departments of Medicine and Pathology
Washington University School of Medicine
660 South Euclid, Box 8045
St. Louis, MO 63110

THE CAROLINA MINORITY POSTDOCTORAL SCHOLARS PROGRAM THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Seeks a minority scholar to fill a **POSTDOCTORAL POSITION** to study programmed cell death or cellular differentiation in plants. This position is a part of University of North Carolina-Chapel Hill commitment to advance underrepresented scholars in higher education. The stipend will be \$34,000 per calendar year and includes health benefit availability. Minority students who will have completed their doctoral degree no later than July 1998 and no earlier than July 1994 are eligible to apply. Preference will be given to U.S. citizens and permanent residents. Send curriculum vitae, publications, statement of research plans, and three letters of recommendation to: **The Carolina Minority Postdoctoral Scholars Program, Office of the Vice Provost for Graduate Studies and Research, CB #4000, South Building, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-4000** by February 1, 1998.

POSTDOCTORAL POSITIONS are available to study signal transduction pathways leading to modulation of the activities of transcription factors involved in differentiation and growth in mammalian cells. Biochemistry/molecular biology experience and interest to work with transgenic/knockout mice is preferred. The Institute of Molecular Medicine and Genetics (IMMAG) is located in a newly designed building and contains state-of-the-art equipment. Contact: **Nahid Mivechi, Ph.D., IMMAG, Medical College of Georgia, 1120 15th Street, Room CB2803, Augusta, GA 30912.** Medical College of Georgia is an Equal Opportunity Employer. Women, minorities, and disabled are encouraged to apply.

POSTDOCTORAL/ASSISTANT PROFESSOR position available immediately at the University of Arkansas for Medical Sciences, Department of Neurosurgery to study molecular biology of meningiomas. Candidates should have a Ph.D.; an interest in brain tumors is required. Send curriculum vitae, statement of research accomplishments, and names of three references to: **Ossama Al-Mefty, M.D., Department of Neurosurgery, University of Arkansas for Medical Sciences, 4301 West Markham, Slot 507, Little Rock, AR 72205.** Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Two positions available to study the molecular mechanism of head/brain development in *Drosophila*. We are focusing on the roles of the homeobox genes and segment polarity genes in early pattern formation. Send curriculum vitae and references to: **Dr. Robert Finkelstein, Department of Neuroscience, University of Pennsylvania, 19104-6074.** E-mail: finkelsr@mail.med.upenn.edu.

POSTDOCTORAL POSITION available at the University of Virginia to study molecular mechanisms of congestive heart failure. Candidates must have experience in molecular biology. Gene targeting experience desired. Send curriculum vitae and names of three references to: **Amy Tucker, M.D., Box 6012-MR-4, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** E-mail: alt8t@avery.med.virginia.edu. The University of Virginia is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH IN BIOCHEMISTRY

Applications are invited for a Postdoctoral position to study the molecular interactions, particularly between DNA-binding proteins and RNA polymerase, involved in prokaryotic transcription. Applicants must have background in molecular biology and physical chemistry. Some experience in enzymology, spectroscopy, and calorimetry is useful. Closing date for applications: December 15, 1997. The Center for Advanced Research in Biotechnology (CARB) is a research center of the University of Maryland Biotechnology Institute and the National Institute of Standards and Technology devoted to fundamental problems of macromolecular structure, function, and engineering. Interested applicants should send curriculum vitae and three letters of reference to:

Biochemistry Postdoctoral
Center for Advanced Research in Biotechnology
University of Maryland Shady Grove
9600 Gudelsky Drive
Rockville, MD 20850

CARB is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

POSTDOCTORAL RESEARCH IN NEUROBIOLOGY

Postdoctoral positions available in the newly founded Neurobiology of Aging Laboratories (NAL) at The Mount Sinai School of Medicine, an outstanding environment for interdisciplinary research and training on the neurobiology of aging and age-related disease. Faculty include **Drs. Morrison (Director), Gordon, Gore, Hof, Mobbs, and Rapp**, with research interests ranging from molecular biology, physiology, neuroendocrinology, transgenic mouse models of neurodegeneration, and cognitive neuroscience. Trainees may work across multiple laboratories, and candidates' interests in quantitative neuroanatomy and behavioral neuroscience are especially encouraged to apply. Send curriculum vitae, statement of research interests, and three references to: **Postdoctoral Search Committee, Neurobiology of Aging Laboratories, Box 1639, One Gustave L. Levy Place, New York, NY 10029-6574.** We are an Equal Opportunity Employer fostering diversity in the workplace.

DANA FARBER CANCER INSTITUTE HARVARD MEDICAL SCHOOL

A **POSTDOCTORAL POSITION** is available immediately for a project involving the molecular basis of Fanconi Anemia, genomic instability, and cancer susceptibility. (**D'Andrea, A.D., Nature Genetics** 14:240-242, 1996; **Kupfer et al., Nature Genetics** 17:Dec, 1997). A background in cell biology, molecular biology, and DNA repair enzymology is advantageous, but highly motivated individuals with experience in related areas are encouraged to apply. Send curriculum vitae and the names of three references to: **Dr. Alan D'Andrea, Division of Cellular and Molecular Biology, Dana Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.** E-mail: a_dandrea@farber.harvard.edu.

POSTDOCTORAL FELLOWSHIPS T CELL DEVELOPMENT

Positions are available to study the molecular mechanisms of T cell development. Studies include proximal signaling events and distal gene regulation occurring in helper cell differentiation and CD4/CD8 commitment. Experience in molecular biology is required. Send curriculum vitae and names of three references to: **Dr. Kenneth M. Murphy, Center for Immunology, Box 8118, Washington University School of Medicine, 660 South Euclid, St. Louis, MO 63110.** FAX: 314-747-4236; e-mail: murphy@immunology.wustl.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION to study immune responses to pulmonary infection with HIV-associated pathogens at Louisiana State University Medical Center. Our NIH-funded research investigates T cell responses to murine infection and modulation of host defenses through local delivery of cytokine genes. Experience in lymphocyte function/gene transfer preferred. Send curriculum vitae and research interests to: **Dr. Judd Shellito and Dr. Jay Kolls, Gene Therapy Program, Pulmonary Medicine, Louisiana State University Medical Center, 1901 Perdido, Room 3205, New Orleans, LA 70112.** E-mail: jshell@lsu.edu. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

MOLECULAR VIROLOGY

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately to join a research group studying the molecular biology of pestiviruses. The selected individual will participate in establishing a functional map of cis- and trans-acting elements in the genome of bovine viral diarrhea virus (BVDV) using an infectious clone developed in our laboratory (*J. Virol.* 71:471, 1997). Requires Ph.D. degree and record of productive experience in molecular biology or genetics. Knowledge of classical virological techniques and eukaryotic cell biology is desirable. Send curriculum vitae and the names and addresses of three references postmarked by January 15, 1998 (or until suitable candidate is found), to: **Dr. Ruben Donis, Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, 202 VBS, Lincoln, NE 68583-0905.** FAX: 402-472-9690; e-mail: rdonis@unl.edu; Telephone: 402-472-6063. University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and assures reasonable accommodation under the Americans With Disabilities Act.

POSTDOCTORAL POSITIONS AVAILABLE

Austin Cooney, Ph.D.: Orphan receptor function and ligand identification strategies. **Franco DeMayo, Ph.D.:** Lung cancer progression using transgenic mouse models. **Carolyn L. Smith, Ph.D.:** Coactivators and estrogen receptor function; selective estrogen receptor agonists and maintenance of bone density in microgravity. **Sophia Tsai, Ph.D. and Ming-Jer Tsai, Ph.D.:** Mouse vascular, neural, and pancreatic development, and mammary gland tumorigenesis. **Nancy L. Weigel, Ph.D.:** Vitamin D and the prevention of microgravity-induced bone loss; vitamin D, androgens, and androgen receptor mutations in prostate cancer.

Interested in Ph.D.'s with experience in molecular biology, biochemistry, developmental biology, tumor biology, or related fields should send curriculum vitae and the names and addresses of three references to the appropriate faculty at: **The Department of Cell Biology, Baylor College of Medicine, Houston, TX 77030.** Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

DREYFUS RESEARCH/TEACHING POSTDOCTORAL FELLOWSHIP IN BIOCHEMISTRY. Two years starting summer 1998, designed as preparation for a faculty position combining teaching and research in an undergraduate setting. The Fellow will teach undergraduate biochemistry courses and participate in research on the structure and *in vitro* assembly of neurofilaments, using a combination of protein chemistry, biophysical chemistry, molecular biology, and electron microscopy. Salary \$25,000 per year plus benefits. Send statement of interest, curriculum vitae, copies of undergraduate and graduate transcripts, and three letters of recommendation addressing both research and teaching capabilities by January 20 to: **Dr. Jeffrey Cohlberg, Department of Chemistry and Biochemistry, California State University Long Beach, 1250 Bellflower Boulevard, Long Beach, CA 90840.** Telephone: 562-985-4944; FAX: 562-985-8557; e-mail: cohlberg@csulb.edu; website: www.chemistry.natsci.csulb.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Position available to study signal transduction and mechanisms of cell death in Alzheimer's disease. For reference see: *JBC* 272:14505, 1997; *Neuron* 16:921, 1996; *Nature* 378:776, 1995; *Nature* 368:756, 1994. Experience in molecular and cell biology is required. Send curriculum vitae, a brief description of research experience, and names of three references to: **Dr. Bruce Yankner, Children's Hospital, Enders 260, 300 Longwood Avenue, Boston, MA 02115.** FAX: 617-738-1542. Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the role of the chloroplast signal recognition particle in thylakoid membrane biogenesis. Applicants should have a Ph.D. and research experience in protein biochemistry and/or molecular biology. Send a curriculum vitae and names of three references to: **Dr. Neil E. Hoffman, Carnegie Institution, Department of Plant Biology, 260 Panama Street, Stanford, CA 94305.** E-mail: hoffman@andrew.stanford.edu; Telephone: 650-325-1521, ext. 214.

DIRECTOR

DEPARTMENT OF NEURO-INFLAMMATION



Astra is an international pharmaceutical company in a phase of rapid expansion. The company's operations are focused on research, production and marketing of pharmaceutical products through subsidiary companies in about 40 countries. Through agents and licencees Astra products are available in an additional large number of countries. Astra has approximately 20,000 employees, 67 percent of whom are outside Sweden. Sales in 1996 totaled approximately SEK 39 billion, of which 91 percent outside Sweden.

ASTRA ARCUS AB

Astra Arcus, a research company in the Astra Group, is engaged in R & D in primarily two areas – CNS and Immunology. Astra Arcus employs some 500 people in Södertälje, Sweden, 35 kilometres south of Stockholm and some 120 people in Rochester, N. Y., USA.

Astra Arcus is seeking a highly qualified and motivated senior scientist to head the Department of Neuroinflammation in Preclinical Research and Development. This department supports research into the area of inflammatory aspects of CNS disease. Our current expertise ranges from immunology, neuroinflammation, cell biology and animal models. We expect the successful candidate to be the leader of this team of highly qualified people. Your tasks also involve resource allocation including management of budgetary issues. Interpersonal/administrative skills are important.

A Ph.D. in neuroinflammation, inflammation, immunology, and/or neuroscience, with a minimum of 5 years postdoctoral experience in an academic or pharmaceutical setting is required. Experience in managing a team of scientists involved in several different projects is essential. In the field of neuroscience or immunology, you should have performed research in the areas of inflammatory mechanisms, molecular pathology, autoimmunity, or intracellular signaling. Astra Arcus offers a challenging and stimulating working environment with significant opportunities for scientific and personal development in an international working environment.

For information, please call Christer Köhler, tel +46 8 553 245 33, Mats Ferm, tel +46 8 553 286 87 or Tom Goldschmidt, tel +46 8 553 258 49.

Please send your written resume and CV clearly marked "Director Department of Neuroinflammation" to Astra Arcus, Human Resources, Knut Natt och Dag, S - 151 85 Södertälje, Sweden. Closing date is December 12, 1997.



POSITIONS OPEN

POSTDOCTORAL ASSOCIATE UNIVERSITY OF IOWA COLLEGE OF MEDICINE

Department of Internal Medicine
Pulmonary Division

The University of Iowa College of Medicine, Department of Internal Medicine, Pulmonary Division is seeking a Postdoctoral Associate. Perform research related to the molecular genetics of genes that modify the host response to environmental toxins; conduct experimental laboratory research work, including testing and evaluating current procedures; and assist in judging the validity of experimental test data obtained.

A Ph.D. in genetics supplemented by one or more years of progressively responsible experience in the conduct of genetics research is required.

Knowledge of immunology or cell biology is desirable. Please send résumé and cover letter indicating Postdoctoral Associate to: **Dr. David Schwartz, c/o Carol Wehby, Human Resources, Internal Medicine, E400 GH, 200 Hawkins Drive, Iowa City, IA 52242-1081.**

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

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to participate in the study of cytochrome *c* and cytochrome α_1 interactions. **Dr. Fred Sherman and Dr. George McLendon** (Department of Chemistry, Princeton University, Princeton, NJ 08544-1009) are using genetic, molecular biological, and physical procedures to investigate structure-function relationships of cytochrome α_1 and the interactions between cytochrome α_1 and cytochrome *c*.

Interested candidates should send their curriculum vitae and a research background description to: **Dr. Fred Sherman, Department of Biochemistry and Biophysics, Box 712, University of Rochester, Rochester, NY 14642. Telephone: 716-275-2766; FAX: 716-271-2683; e-mail: fsm@bphvx.biophysics.rochester.edu; website: <http://www.urmc.rochester.edu/smd/biophys/faculty/sherman.htm>. University of Rochester is an Affirmative Action/Equal Opportunity Employer.**

Mayo POSTDOCTORAL FELLOWSHIP. Neurobiology of aging—Mayo Clinic Jacksonville is seeking applicants for a Postdoctoral Fellowship to study gene expression in the aging brain. The research in this laboratory addresses mechanisms of differential vulnerability of central cholinergic neurons in aging, particularly with respect to oxidative stress. Ongoing projects include studies of mRNA and protein for candidate genes, using methods of *in situ* hybridization histochemistry, immunocytochemistry, RT/PCR, differential display, and Western blotting. Applicants with graduate-level training in molecular neuroscience or biochemistry, and having an interest in aging research, should send their résumé and addresses of three references to: **Dr. Michael McKinney, Ph.D., Mayo Clinic Jacksonville, 4500 San Pablo Road, Jacksonville, FL 32224.** Mayo is an Affirmative Action/Equal Opportunity Educator and Employer.

THE NEUROSCIENCES INSTITUTE SAN DIEGO FLY BEHAVIOR

Applications are invited for the position of **POSTDOCTORAL FELLOW** to study modeling of the neural basis of behavior in the fruit fly, *Drosophila*. Applicants should have a background in some aspect of neurobiology, preferably related to insects or other invertebrates. Previous experience with *Drosophila* is not mandatory. Submit a curriculum vitae, statement of research interests, and names of three references to: **Dr. Ralph J. Greenspan or Dr. Olaf Sporns, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**

POSTDOCTORAL POSITION

Postdoctoral position, molecular biology. Ph.D. in biochemistry, pharmacology, or related field required. Experience in enzyme assays, membrane binding, protein chemistry, cell culture, PCR, cloning, and similar techniques preferred. Send résumé to: **Professor R. J. Bergeron, Department of Medicinal Chemistry, P.O. Box 100485, University of Florida, Gainesville, FL 32610-0485. FAX: 352-392-8406, no phone calls please.**

POSITIONS OPEN

POSTDOCTORAL FELLOWS RESEARCH ASSISTANT PROFESSORS

The Department of Physiology and Cell Biology at University of Nevada School of Medicine is seeking Postdoctoral Fellows/Research Assistant Professors to conduct investigations supported by federally funded and/or agency-funded grants into the ionic basis of rhythmicity in smooth muscles, neural regulation of smooth muscles, endothelium-dependent regulation of vascular smooth muscles, biochemical and molecular biological studies of phosphatases and their substrates, ionic mechanisms in cardiac muscles, development of excitation and contraction mechanisms in smooth and cardiac muscles, or developmental neurobiology. Various molecular, biochemical, electrophysiological, and imaging techniques are utilized in these studies. Requires Ph.D., M.D., or equivalent degree in medical sciences. Experience with smooth muscle physiology, molecular biology, biochemistry, biophysics, electrophysiology, or morphological techniques required.

Send curriculum vitae and three references to: **Kenton Sanders, Ph.D., Department of Physiology and Cell Biology/352, University of Nevada School of Medicine, Reno, NV 89557.** Review of applications will begin January 1, 1998. Applications will be accepted until May 31, 1998. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION YALE UNIVERSITY SCHOOL OF MEDICINE

A Postdoctoral position is available to study protease regulation during *Drosophila* development. Candidates must have a background in developmental biology or developmental genetics and experience in working with *Drosophila* and in molecular and cellular techniques (including chromosomal and RNA *in situ* hybridization, cryosectioning, microinjection of embryos). Relevant background/experience and past productivity must be evident in the form of publications in peer-reviewed journals. NIH-scale, salary commensurate with experience. Send curriculum vitae with names and telephone numbers of three references to: **Dr. Carl Hashimoto, Department of Cell Biology, Yale School of Medicine, 333 Cedar Street, New Haven, CT 06520.**

POSTDOCTORAL POSITION is available to utilize Restriction Landmark Genomic Scanning (RLGS) to detect and clone loci which undergo genetic and epigenetic alterations contributing to multi-step tumorigenesis. RLGS is a method for the 2-D separation of end-labeled genomic DNA restriction fragments and can effectively detect DNA amplification, loss, and alterations in methylation. Candidates with a strong background in molecular biology should send a curriculum vitae, description of research experience, and contact information for three references to: **Dr. William A. Held, Department of Molecular and Cellular Biology, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263. E-mail: wheld@mcbio.med.buffalo.edu.**

Roswell Park is a Females/Disabled/Veterans/Affirmative Action Employer.

POSTDOCTORAL RESEARCH FELLOW positions are available immediately for highly motivated scientists to join a group studying tumor regression. Applicants should have a strong background in molecular and cell biology. Applicants must have a Ph.D. degree in biological sciences or an M.D. and at least one year of experience in molecular genetic techniques, including DNA cloning, development of DNA constructs, and tissue culture. Qualified applicants should submit curriculum vitae and the names and addresses of three references to: **Dr. David Stern, Ph.D., Department of Physiology and Cellular Biophysics, Columbia University, P&S 17-401, West 168th Street, New York, NY 10032.** Columbia University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH positions at Vanderbilt University Department of Cell Biology to work on chemokine receptor signal transduction pathways and transcriptional regulation of chemokines including the development of transgenic models. Prerequisites include ability to qualify for training grant positions or independent training grants, background in molecular biology and cell biology. Send curriculum vitae and three letters of reference to: **Dr. Ann Richmond, Department of Cell Biology, Vanderbilt University, Nashville, TN 37232. FAX: 615-343-4539. E-mail: ann.richmond@mcmail.vanderbilt.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

Positions are available to study the mechanism of action of specific deoxynucleotide-metabolizing enzymes that are targets for cancer chemotherapy. Gene isolation and amplification of their protein products in eukaryotic and prokaryotic systems will be required. Once obtained, substrate and regulatory sites on the protein products will be determined by functional group-specific reagents and affinity labels. In addition, site-specific mutagenesis will be employed to establish the relation of structure to function in these enzymes as well as their subunit interaction, which is essential for the restoration of enzyme activity on mixing inactive mutants. The role of protein phosphorylation in these processes is also being investigated. Cloning, sequencing, and tissue culture experience is desirable. The research will be conducted in a well-equipped core facility. Compensation from Health Research Inc. dependent upon experience. Send résumé and three references to: **Dr. Frank Maley, Wadsworth Center for Laboratories and Research, Empire State Plaza, Box 509, Albany, NY 12201.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION MOUNT SINAI SCHOOL OF MEDICINE DEPARTMENT OF MICROBIOLOGY

A Postdoctoral position is available starting January 1st, 1998, to study the molecular mechanisms involved in the replication cycle of influenza viruses with special emphasis on the interactions of the virus with the host immune system. The successful candidate will be involved in the generation of recombinant influenza viruses expressing immunostimulatory molecules and/or foreign antigens (such as HIV-1, malaria, and tumor-associated antigens), and in the analysis of the immune responses elicited by these viruses. Send curriculum vitae and letters of reference to: **Dr. Adolfo García-Sastre, Department of Microbiology, Box 1124, Mount Sinai School of Medicine, 1 Gustave L. Levy Place, New York, NY 10029. E-mail: agarcia@smtplink.mssm.edu.** For more information, see website: <http://www.mssm.edu/micro/sastre.html>.


POSTDOCTORAL POSITION DEPARTMENT OF BIOCHEMISTRY

The Mount Sinai School of Medicine has positions available immediately to study apoptosis, cell signaling gene expression, mitochondrial bioenergetics, and cytokine interactions in HepG2 liver-derived cell lines expressing the human cytochrome P450E1 isoform. The major focus is the role of oxidative stress in toxicity of ethanol. Experience with molecular and cell biological techniques necessary. Interested individuals are encouraged to forward curriculum vitae and letters of recommendation to: **Dr. Arthur Cederbaum, Department of Biochemistry, Mount Sinai School of Medicine, Box 1020, One Gustave L. Levy Place, New York, NY 10029-6574.** We are an Equal Opportunity Employer fostering diversity in the workplace.

POSTDOCTORAL ASSOCIATE POSITIONS

Two positions will be available (spring/summer 1998) to study molecular aspects of retroviral DNA integration, and the structure and function of retroviral integrases. A Ph.D. with training in chemistry, biochemistry, or retrovirus biology is required. Please send curriculum vitae and have at least two letters of recommendation mailed to: **Dr. A. M. Skalka, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111.** A summary of our research program and information about Fox Chase can be found at the Fox Chase website: <http://www.fccc.edu>. Equal Opportunity Employer.

Interactive group working on the processing of oxidative DNA damage is seeking **POSTDOCTORAL RESEARCH ASSOCIATES**. Projects include enzymological characterization of repair proteins, analysis of translesion synthesis past damages, biological consequences including mutagenesis and cell biology. Experience in biochemistry and molecular biology required. Please send curriculum vitae and the names of three references to: **Dr. Susan S. Wallace, Department of Microbiology and Molecular Genetics, University of Vermont, 201 Stafford Hall, Burlington, VT 05405. E-mail: swallace@zoo.uvm.edu.**



Observation of the Earth and the Earth's Crust

Delft University of Technology has started a number of research centres focused on applied scientific research aimed at solving urgent problems. One of these centres deals with the "Observation of the Earth and the Earth's Crust". In this centre we have started two programmes : Observation of the Shallow Subsurface: Integrated structure-identification and process modelling and Determination and prediction of the three-dimensional movement of the Earth's surface (land and sea). Within these two programmes, researchers from the subfaculties of Applied Earth Sciences, Geodetic Engineering, Civil Engineering, Applied Physics, Applied Mathematics, Aerospace Engineering and Electrical Engineering will be working together. We are looking for a number of postdoc's and PhD students to join us on this applied scientific adventure. We are trying to attract young enthusiastic people of diverse backgrounds to build a creative environment in which we can tackle the challenges posed in these programmes.

Postdoc positions

Appointment for two to four years.
Salary depending on age and working experience between Dfl. 4.664,- and Dfl. 6.140,- gross per month, based on a full-time appointment.

PhD positions

Appointment for four years. Starting salary Dfl. 2.130,-, rising to Dfl. 3.803,- gross per month in the fourth year.

For general information about these positions please contact the Personnel & Organization department of the Subfaculty of Applied Earth Sciences, tel. (31) 15-2786005, e-mail g.c.boogaards@ta.tudelft.nl

A more detailed description can be found on the website: <http://www.ta.tudelft.nl/earth>

Please direct your application, with the reference number mentioned, before 10 January 1998, to:

Personnel & Organization department of the Subfaculty of Applied Earth Sciences
P.O. Box 5028
2600 GA Delft
The Netherlands

Programme

Observation of the Shallow Subsurface: Integrated structure-identification and process modelling

High population density and strict regulations concerning safety, pollution and noise levels, increasingly emphasise the need for an efficient use of landscape and environment in the Netherlands. Consequently, the shallow subsurface will be utilised more and more to compensate for the lack of surface area (subsurface transport, underground construction, storage etc.). In order to optimally manage the shallow subsurface, its structure will have to be mapped at sufficient resolution and the information that is essential for its projected use has to be generated; at the same time, the subsurface processes have to be monitored to prevent undesirable situations in terms of safety and environment.

The dynamic processes at play in the subsurface are affected by heterogeneities at a multitude of scales. Some of this variability can be modelled explicitly. However, many important heterogeneities remain subgrid and have to be included implicitly within the modelling framework. Moreover, the various sources of data that provide insight into the subsurface situation are in general indirect, inaccurate, incommensurable and often apparently contradictory. To address these problems, an optimal and integrated use of the broad spectrum of measuring technologies, specifically based on the projected use of the subsurface, is required (fit-for-purpose data acquisition). Data integration can only be achieved within a statistical framework that accounts for model sensitivities and data uncertainties.

prof. Cor van Kruijsdijk

The following positions are still open :

- **Postdoc** (3 yr) - Heterogeneity at different scales • **PhD position** - Fluid flow in heterogeneous porous media • **PhD position** - Seismo-electric method • **PhD position** - Conditioning of subsurface models to geological data • **Postdoc** (3 yr) - Integration of geotechnical and geophysical methods • **PhD position** - Shallow shear wave seismic.

For additional information please contact
prof. Cor van Kruijsdijk,
tel. (31) 15-2786038 (Applied Earth Sciences),
e-mail c.p.j.w.vankruijsdijk@ta.tudelft.nl,
or refer to our webpage
<http://www.ta.tudelft.nl/earth>

Programme

Determination and prediction of the three-dimensional movement of the Earth's surface (land and sea)

Three-dimensional movements of the Earth's surface are a consequence of various natural and anthropogenic processes within the system 'Earth'. Examples are sea level rise caused by global warming or land subsidence due to the withdrawal of water, gas, and oil. Because of the consequences for society of these processes, significant effort is put to observe and model the underlying geophysical processes with the ultimate goal to provide reliable predictions.

The main objective of the research programme is to monitor, interpret, and model the three-dimensional movements of the Earth's surface. Main emphasis is on the integration of data from airborne and spaceborne sensors, terrestrial measurements, observation of the subsurface with geophysical, oceanographic, and geological techniques, and the geophysical processes involved. The observations will be used as input for geophysical and geological models so that these models can be tuned and a physical interpretation for the detected movements can be given. The study of land-sea interaction satellite observations will provide constraints to a three-dimensional approach which integrates sea bottom topography, coastal morphology, waves, storm surges, and ocean currents into a dynamic model. To participate in the research programme we seek eight highly motivated PhD students and PhD graduates (Postdoc's).

Prof. Roland Klees

The following positions are still open :

- **Postdoc** (4 yr) - Four-dimensional characterisation • **Postdoc** (4 yr) - SAR Interferometry • **PhD/Postdoc** (2 yr) - Atmospheric modeling by GPS • **Postdoc** (3 yr) - Integrated deformation analysis techniques • **PhD position** - Airborne laser altimetry • **PhD position** - Processes in reservoirs on their impact on coastal barrier behaviour • **Postdoc** (3 yr) - Electromagnetic bias and inverse barometer response in satellite radar altimetry • **PhD position** - Deformations caused by loading processes in continental shelf areas

For additional information please contact
prof. Roland Klees,
tel. (31) 15-2785100 (Geodetic Engineering),
e-mail krees@geo.tudelft.nl,
or refer to our webpage
<http://www.ta.tudelft.nl/earth>

**TU Delft**

Technische Universiteit Delft

POSITIONS OPEN

CALTECH POSTDOCTORAL SCHOLARS POSITION AT JPL

The California Institute of Technology (Caltech) Postdoctoral Scholars Program at the Jet Propulsion Laboratory (JPL) is inviting applicants to apply for positions in JPL's Astrobiology Research Element to carry out a program of research in the area of exobiology. Research topics will include the origin and evolution of life and planetary environments, prebiotic organic chemistry in the solar system, and exobiological analysis of extraterrestrial samples.

Applicants should have a recent Ph.D. in geochemistry, biochemistry, or a related field. Appointment is contingent upon evidence of completion of Ph.D. Annual starting salary for a recent Ph.D. is approximately \$39,500 and can vary somewhat according to the applicant's qualifications. Postdoctoral Scholar positions are awarded initially for a one-year period. Appointments may be renewed in one-year increments for a maximum of two additional years. Please send curriculum vitae, statement of research interests, and a list of three references to: **Dr. Gene McDonald** at the address listed below:

**MS 183-301
Jet Propulsion Laboratory
4800 Oak Grove Drive
Pasadena, CA 91109
FAX: 818-393-6546**

E-mail: gene.d.mcdonald@jpl.nasa.gov

The California Institute of Technology and the Jet Propulsion Laboratory are Equal Opportunity/Affirmative Action Employers. Women, minorities, veterans, and disabled persons are encouraged to apply.

POSTDOCTORAL POSITION MOLECULAR AND CELLULAR BIOLOGY

Postdoctoral positions are available immediately for highly motivated scientists with M.D., Ph.D., or equivalent degree at The Research Institute for Children in New Orleans, Louisiana. This appointment will be in the Department of Pediatrics at the Louisiana State University School of Medicine. Ongoing studies involve differentiation and proliferation of pancreatic beta cells, autoimmunity of type 1 diabetes and other autoimmune diseases. The applicants should have a strong background in molecular and cellular biology, handling small animals, and basic tissue culture techniques. Experience with *in situ* hybridization is a plus. Please send a résumé with list of references as soon as possible to: **Dr. Michael S. Lan, The Research Institute for Children, 520 Elmwood Park Boulevard, Suite 160, Harahan, LA 70123. FAX: 504-733-4036; e-mail: resinstchl@aol.com.** Louisiana State University Medical Center is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH STAFF MEMBER

The Molecular and Structural Biology Division has an opening for a Postdoctoral Research Staff Member in an interactive program investigating the biochemical and molecular mechanisms of mammalian DNA repair. The position will entail the design of DNA substrates and the characterization of DNA double-strand break repair proteins. This is a two-year-term position with the possibility for an extension.

Requires a recent Ph.D. in biochemistry or equivalent; experience in protein purification and characterization, as well as molecular biology techniques.

Candidates should send a résumé to: **Lawrence Livermore National Laboratory, Attn: Biology and Biotechnology Research Program, L-452, P.O. Box 808, Livermore, CA 94550, R-4827DW, Department AJSCL7MH.** Lawrence Livermore National Laboratory is an Equal Opportunity Employer.

THE NEUROSCIENCES INSTITUTE SAN DIEGO GENETICS AND BEHAVIOR

Applications are invited for the position of **POSTDOCTORAL FELLOW** to study gene networks, brain development, and behavior in the fruit fly, *Drosophila*. Applicants should have a background in at least one of the following areas: molecular biology, genetics, development, or behavior, though previous experience with *Drosophila* is not mandatory. Submit a curriculum vitae, statement of research interests, and names of three references to: **Dr. George L. G. Miklos or Dr. Ralph J. Greenspan, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.**

POSITIONS OPEN



POSTDOCTORAL POSITION

The Department of Virology and Immunology at Southwest Foundation for Biomedical Research has a position available immediately in molecular virology to study retroviral pathogenesis in the laboratory of **Dr. Jonathan S. Allan**. Ongoing studies include the examination of natural resistance mechanisms to SIV-induced disease in nonhuman primates. Interested individuals with a Ph.D. and/or M.D., D.V.M., and a background in molecular biology should send a curriculum vitae, statement showing area of interest, and three references to: **Director of Human Resources (708), Southwest Foundation for Biomedical Research, P.O. Box 760549, San Antonio, TX 78245-0549.** See our website: <http://www.sfbr.org> for information on our research activities. *Equal Opportunity Employer.*

MASSACHUSETTS GENERAL HOSPITAL HARVARD MEDICAL SCHOOL POSTDOCTORAL RESEARCH FELLOWSHIPS

Applications are invited from individuals with interests in skeletal development and cartilage regulation.

Candidates for this position should have a Ph.D. in molecular/cell biology or an M.D. with significant research experience in molecular/cell biology.

Candidates for this position should have a Ph.D. in biomechanics or mechanical engineering and, preferably, experience in analysis of cartilage or bone.

Research projects focus on growth factor and biomechanical signaling mechanisms in the regulation of growth plate and articular cartilage. Please send curriculum vitae and names of three references to: **Dr. Stephen B. Trippel, Department of Orthopaedics, Research Laboratories, Jackson 11th Floor, Massachusetts General Hospital, Boston, MA 02114.**

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS

The MIT Biology Department has first and second Postdoctoral positions available to work on problems in the biology of signal transduction and cell division. An interdisciplinary program in cellular engineering and discovery is seeking postdoctoralists committed to applying advanced microscopy, mass spectrometry, and bioinformatics technologies to the study of signal transduction in mammalian cells. A strong background in molecular and cellular biology or analytical and synthetic chemistry required. Please send curriculum vitae and three references to: **Prof. Peter Sorger (e-mail: psorger@mit.edu) and Prof. Anthony J. Sinskey (e-mail: asinskey@mit.edu), 68-371, 77 Massachusetts Avenue, Cambridge, MA 02139-4307. FAX: 617-253-8550.** MIT is an Equal Opportunity/Affirmative Action Employer. MIT is a nonsmoking environment.

POSTDOCTORAL FELLOWSHIP IN MAMMALIAN GENETICS

NIH grant-supported position to study genetics of oncology and metastasis, as well as early embryology and the interrelatedness of these processes. Ph.D. in molecular, cellular, or developmental biology with expertise in molecular genetics or generation of transgenic animals desirable.

Send curriculum vitae and three letters of reference by December 12, 1997, to: **Dr. P. J. McCormick, Department of Biological Sciences, University of Albany, SUNY, 1400 Washington Avenue, Albany, NY 12222 USA. E-mail: pmc@csc.albany.edu.** The Research Foundation is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately at the Karmanos Cancer Institute at Wayne State University to study mechanisms of antitumor drug membrane transport by molecular mutagenesis and affinity labeling. Candidates should have a Ph.D. with a strong background in DNA cloning techniques, site-directed mutagenesis, and nucleic and protein biochemistry. Send curriculum vitae, statement of research accomplishments, and names of three references to: **Dr. Larry H. Matherly, Karmanos Cancer Institute, 110 East Warren, Detroit, MI 48201.** Wayne State University School of Medicine, the country's largest single-campus medical school, is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS in neurobiology and neuroimmunology. Two Postdoctoral positions are available for studies of nicotinic acetylcholine receptors (AChRs). One of these positions requires primarily molecular biological skills. These projects involve structure/function studies using mutagenesis and expression of cloned neuronal AChRs in *Xenopus* oocytes and permanently transfected cell lines as well as investigating high-level expression of AChRs for the purpose of crystallographic studies. Experience in biochemistry and molecular biology is required. Experience with neuroscience, pharmacology, and electrophysiology is desirable, but not critical. The second position requires immunological and biochemical skills. These projects involve investigating specific immunosuppressive therapies for experimental autoimmune myasthenia gravis, making mAbs to bacterially expressed subunits of neuronal AChRs, and using these mAbs to purify and characterize AChR subtypes. Experience in biochemistry and immunology is required. Experience with molecular biology and neuroscience is desirable. Send curriculum vitae as well as the names, addresses, telephone, FAX, and e-mail addresses of three references to: **Dr. Jon Lindstrom, Department of Neuroscience, Medical School of the University of Pennsylvania, Philadelphia, PA 19104-6074. FAX: 215-573-2015; e-mail: jsllk@mail.med.upenn.edu.**

NATIONAL CANCER INSTITUTE

POSTDOCTORAL POSITIONS are available immediately to conduct research on the molecular biology and evolution of retroviruses, with emphasis of HIV and related lentiviruses. The laboratory is currently studying AIDS pathogenesis, vaccine development, and the identification of novel antiviral compounds. Applicants must have a Ph.D. and/or M.D. degree with a strong background in molecular biology and virology preferred, and less than five years of postdoctoral experience. *These positions are open to U.S. citizens and foreign nationals; duration is up to five years.* Send curriculum vitae and names of three references by March 1, 1998, to: **Raoul E. Benveniste, Ph.D., M.D., Laboratory of Genomic Diversity, Building 560, Room 21-78, P.O. Box B, NCI-FCRDC, Frederick, MD 21702-1201. FAX: 301-846-1909.** NIH is an Equal Opportunity Employer.

POSTDOCTORAL FELLOW MOLECULAR ENDOCRINOLOGY

Position available immediately on an NIH-funded training grant to join a group studying the role of a novel transcription factor in developmental and homeostatic regulation of gene expression in pituitary and brain. *Must be a U.S. citizen or permanent U.S. resident to be eligible.* Strong background in biochemistry required, and experience in molecular biology and/or genetics preferred. Send curriculum vitae, names and telephone numbers of three references to: **Dr. Carter Bancroft, Department of Physiology and Biophysics, Box 1218, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** We are an Equal Opportunity Employer fostering diversity in the workplace.

POSTDOCTORAL POSITION available for study of murine and human hematopoietic stem cells. We will address questions which pertain to both basic biology and gene therapy. Applicant should be highly motivated with a strong background in molecular biology. Send curriculum vitae and names of three references to: **Dr. M. Goodell, Shell Center for Gene Therapy, Baylor College of Medicine, One Baylor Plaza, T809, Houston, TX 77098. E-mail: goodell@bcm.tmc.edu; Telephone: 713-798-8855; FAX: 713-798-5386.**

Baylor College of Medicine is an Equal Opportunity/Affirmative Action and Equal Access Employer.

SHORT-TERM TRAINING FELLOWSHIPS IN COMPUTATIONAL MOLECULAR BIOLOGY

Available at the BioMolecular Engineering Research Center at Boston University. Housing and domestic travel support provided for one to three weeks. Fellowships open to graduate students, Postdoctoral Fellows, and Senior Researchers for introductory training and/or collaborative research in genetic sequence analysis, protein structure prediction, and/or molecular genetic database support. Preference given to those with a well-defined computational or informatics problem. Send curriculum vitae and description of proposed analysis problem to: **Tom Graf, BioMolecular Engineering Research Center, Boston University, 36 Cummington Street, Boston, MA 02215.**

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study nucleolar protein and tumor suppressor gene expression in prostate cancer. Candidates with experience in *in situ* hybridization, *in situ* RT-PCR, and molecular biology are encouraged to apply. Send curriculum vitae and names and telephone numbers of three references to: **Dr. I. Daskal, Department of Pathology and Laboratory Medicine, Albert Einstein Medical Center, 5501 Old York Road, Philadelphia, PA 19141.**

ANNOUNCEMENT

SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY. The Center for Fluorescence Spectroscopy, at the University of Maryland School of Medicine, is offering a short course on "Principles and Applications of Time-Resolved Fluorescence Spectroscopy" in Baltimore, March 23-27, 1998. The course will cover basic and advanced topics in fluorometry, including time- and frequency-domain measurements, Förster energy transfer, chemical sensing, imaging, fiber optics, infrared fluorometry, two-photon excitation, instrumentation, and fluorescence microscopy. Textbook, course materials, lunches, and refreshments will be provided. The instructors include **Dr. J. R. Lakowicz, Dr. I. Gryczynski, and Dr. R. B. Thompson.** For further information, a schedule, and fees, please contact: **Ms. Mary Rosenfeld or Professor J. R. Lakowicz, Center for Fluorescence Spectroscopy, Department of Biochemistry and Molecular Biology, 725 West Lombard Street, Baltimore, MD 21201. Telephone: 410-706-8409; FAX: 410-706-8408; e-mail: cfs@cfs.umbi.umd.edu; website: http://cfs.umbi.umd.edu.** Deadline for enrollment is January 14, 1998, with later enrollment if space permits.

EUROPEAN CAREER OPPORTUNITIES

UNIVERSITY OF GENEVA DEPARTMENT OF MOLECULAR BIOLOGY RESEARCH POSITION

Applications are invited for a young scientist to lead small, independent research group in the area of molecular/cell biology. Areas of specialization may include (but are not restricted to) molecular genetics, gene expression, cellular structures, cell cycle regulation. The candidate is required to have a doctoral degree and postdoctoral experience, and is expected to seek outside funding for research and to participate in teaching. The successful candidate will have access to all departmental facilities and to graduate students, and will receive some core support for running cost. The level of the nomination will depend on experience and qualifications.

Candidates should send (preferably before January 31, 1998) a curriculum vitae, including a list of publications, and the names of three referees to: **The Chairman of the Department of Molecular Biology, 30 Quai Ernest-Ansermet, CH-1211 Genève 4, Switzerland.**

Women are encouraged to apply.

FELLOWSHIPS

COLLEGE LEVEL ONE FELLOW UNIVERSITY OF WISCONSIN-MADISON Wisconsin Center for Education Research National Institute for Science Education

The National Institute for Science Education (NISE) at the University of Wisconsin-Madison has openings for several one-year Fellows for the 1998-99 College Level One (CL-1) Institute.

The 1998-99 CL-1 Institute will address assessment of student learning in introductory undergraduate science, mathematics, engineering, and technology (SMET) courses. Fellows are expected to have a record of research and/or extensive classroom practice in this field. Responsibilities will include: research and writing toward a synthesis of present knowledge, creation of dissemination tools for post-secondary faculty and administrators; organization of seminars and symposia; and extensive interaction with other Fellows and NISE members.

Requirements are a doctoral in science, mathematics, engineering, or education. Possible candidates include faculty who teach SMET courses with experience in development of assessment tools, education researchers with an expertise in assessment, and members of faculty development programs. Residence at UW-Madison is preferred. Please visit our website for further information and application instructions. **Website: www.wcer.wisc.edu/nise.**

FELLOWSHIPS

GRADUATE FELLOWSHIPS CENTER FOR THE STUDY OF EVOLUTION AND THE ORIGIN OF LIFE UCLA

**Origin of the Universe . . .
Formation of the Earth . . .
Beginnings of Life . . .
Evolution of the Biosphere . . .
Advent of Homo Sapiens . . .**

Center for the Study of Evolution and the Origin of Life (CSEOL) invites applications for five Graduate Fellowships for 1998-99. In addition to support provided by UCLA departments, CSEOL will grant each Fellow a stipend of \$5,000 per year, for each of the first two years of graduate study, with no teaching or other duties. Stipends may be used for any purpose the Fellow deems appropriate—travel, lodging, attendance at scientific meetings, purchase of books, computers, research equipment—for any purpose, without restriction. Fellows are included in a select group of graduate students invited to interact with Center faculty in a weekly dinner/seminar/discussion series. Applicants should be planning to carry out doctoral research under the direction of a CSEOL faculty member in a subject area relating to virtually any aspect of evolution—of the cosmos, of the solar system, of Earth, of the environment, of life, of humans. Areas of particular interest for 1998-99 include (1) planetary evolution and exobiology; (2) origin and early evolution of life; and (3) biochemical evolution and molecular phylogeny. Faculty are members of the UCLA Departments of Anthropology, Astronomy, Atmospheric Sciences, Biology, Chemistry and Biochemistry, Computer Science, Earth and Space Sciences, Economics, Geography, History, Microbiology, Philosophy, Psychology, and Sociology; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute. Fellowship applicants must apply (preferably by 17 February 1998) both to an appropriate academic department and to CSEOL. For application forms and a list of CSEOL members, contact:

**CSEOL Fellows Committee
Geology Building, Room 5687
University of California, Los Angeles
Los Angeles, CA 90095-1567
Telephone: 310-825-1170
FAX: 310-825-0097
E-mail: mantonya@ess.ucla.edu**

PROFESSOR S. MOUCHLY SMALL POSTDOCTORAL FELLOWSHIP

The University at Buffalo is proud to announce the Professor Small Research Fellowship named in honor of the past President of the Muscular Dystrophy Association and former Chairman of the Department of Psychiatry. The \$32,000 per year award will provide salary support to work with one of the following University faculty mentors: (1) **Dr. Richard Almon** (Biological Sciences)—Effects of disuse, corticosteroids, and growth hormone on muscle gene expression; (2) **Dr. Anthony Auerbach** (Physiology and Biophysics)—Electrophysiology and acetylcholine receptor channels in myasthenic syndromes; (3) **Dr. Linda Hall** (Biochemical Pharmacology)—Electrophysiological and molecular biological analysis of muscle calcium channel mutants in humans and *Drosophila*; (4) **Prof. R. Nils Olsen** (Law School)—Special education needs, availability, advocacy training, legal representation of children with neuromuscular disease; (5) **Satpal Singh** (Biochemical Pharmacology)—Electrophysiological analyses of heart/muscle in *Drosophila* mutants; (6) **Dr. Georgianna Vladutiu** (Genetics; Pediatrics and Neurology)—Molecular genetic studies of carnitine palmitoyl transferase deficiencies. Interested applicants with a doctoral degree or equivalent should provide the Selection Committee with the following information in one package postmarked no later than January 1, 1998: Statement of interest to work with one of the aforementioned mentors, curriculum vitae, and three letters of reference. Send to: **Professor Small Fellowship Committee, c/o Dr. Edwin Hewlett, Office of Development, Center for Tomorrow, University at Buffalo, Buffalo, NY 14260.** A committee decision on the single awardee will be made shortly after March 1, 1998, for a July 1, 1998, start date. Support for a second year will be contingent upon successful progress in the first year. Information about the University can be viewed at **website: http://wings.buffalo.edu/academic/departments/.**

The University at Buffalo is an Equal Opportunity/Affirmative Action Employer; no applicant shall be discriminated on the basis of age, creed, color, disability, nation of origin, religion, ethnicity, sex, sexual orientation, marital or veteran status.

FELLOWSHIPS

JEKKAL RESEARCH FELLOWSHIP ALLEGHENY UNIVERSITY OF THE HEALTH SCIENCES

Applications are invited for the Edward Jekkal Muscular Dystrophy Association Fellowship. This award is for outstanding Senior Postdoctoral Fellows about to move into faculty positions or junior research faculty members, including physician scientists, interested in neuromuscular disease research at Allegheny University of the Health Sciences (AUHS). The Fellowship carries an annual stipend of \$40,000 plus fringe benefits, and a research expense fund of at least \$15,000. Funding is for two years.

Applicants will identify a sponsor from within the training faculty at AUHS and prepare the application with the sponsor, who will provide the research support and, if appropriate, a salary supplement. The research project should be in an area consistent with the objectives of the Muscular Dystrophy Association.

Contact: **Dr. Donald S. Faber, Professor and Chair, Neurobiology and Anatomy, AUHS, 3200 Henry Avenue, Philadelphia, PA 19129** for application and descriptions of the training faculty. Deadline July 1, 1998.

DOCTOR OF ARTS IN BIOLOGICAL SCIENCES. FELLOWSHIPS are available for persons interested in this innovative program which stresses preparation for undergraduate teaching at colleges and universities. Applicants should hold a Master's degree in biology. Deadline for receipt of applications is 1 March 1998. For more information about the program, our job placement record, etc., contact: **Chairman D. A. Committee, Department of Biological Sciences, Idaho State University, Pocatello, ID 83209.** An Equal Opportunity Employer.

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1. "The I.M.A.G.E. Consortium: An Integrated Molecular Analysis of Genomes and their Expression", Lennon, G.G., Auffray, C., Polymeropoulos, M., and Soares, M. B. [1995] Genomics.

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