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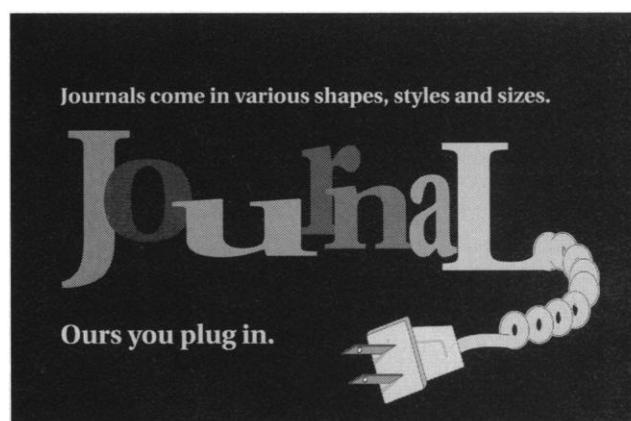
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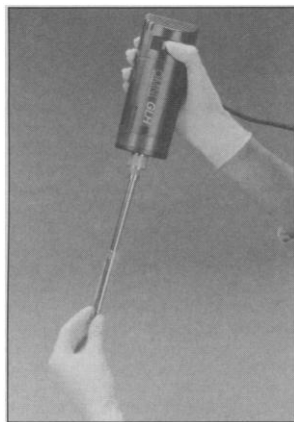
PRIMARY JOURNALS ONLINE

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Homogenizers

The Omni line of homogenizers includes three lightweight instruments that can process material in volumes from 0.03 ml to more than 20 liters. The company also makes a disposable mechanical-shear generator that can be used with most laboratory homogeniz-



ers. Made of tough plastic, the Omni-Tip is designed for applications where cleaning after use is difficult or impossible. The plastic construction means the tip can be disposed after each use, yet it is rugged enough for reuse in most liquid-to-liquid and soft tissue applications. **Omni International.** Circle 89.

pH Microprobe

The PHG-1 is a tiny glass pH electrode suitable for immersion in harsh buffers and solutions from 0 to 14 pH. Its tip diameter is 1.2 mm, allowing measurement in samples as small as 1 μ l. The electrode is compatible with most pH meters. The small size makes it particularly useful in biotechnology applications where small volumes are measured, such as in polymerase chain reaction tubes. **Physitemp Instruments.** Circle 90.

Environmental Immunoassays

EnviroGard QuantiTube Test Kits are enzyme immunoassays that can detect the presence of

pesticides in food, soil, and water in minutes with minimal sample extraction or clean-up. Using a QuantiTube Test Kit, an analyst can process 12 samples in fewer than 30 min. Test results can be quantitated using the EnviroQuant Spectrophotometer. Negative samples can be quickly screened out, leaving more time for detailed analysis of positive samples using liquid chromatography, gas chromatography, or other standard methods. The manufacturer offers 25 different kits. **Millipore.** Circle 91.

NMR Probe for Small Samples

The Nano-nmr probe is designed for analyzing smaller quantities with nuclear magnetic resonance (NMR) spectroscopy than can be achieved with traditional probes with microcells or microprobes. The probe has an increased filling factor for improved sensitivity. By reducing the amount of solvent used, the probe eliminates solvent artifacts that can cover peaks of interest. **Varian Analytical Instruments.** Circle 92.

Coupling Efficiency Monitor

TritylTech is an on-line trityl-monitor that performs real-time coupling efficiency analysis of automated DNA and RNA synthesizers. The system incorporates an "end-point" method to measure the DMTr cation concentration in the effluent collected at each detritylation step of the synthesis cycle. The effluent from the trityl port of the synthesizer is collected in glass cuvettes and mixed, and the absorbance is measured photometrically. Coupling efficiencies can be measured at each step of the synthesis cycle,



enabling the user to interrupt synthesis if efficiency drops below acceptable levels. **Ana-Gen Technologies.** Circle 93.

Particle Size Measuring

The XRA (Extended Range Analyzer) system features three lasers to measure scattered light at angles up to 160° for measuring particles from 0.04 to 700 μ m. With the optional Automated Small Volume Recirculator (ASVR), the operator needs only to add the sample. Fill, drain, measure, and rinse functions are automatically performed; 100 different sequences and measurement set-ups can be stored for single-button operation. The ASVR's design ensures that a truly representative sample always flows through the sensing zone, providing reliable and accurate measurements without bias. The unit is designed for safe operation with organic liquids. **Leeds & Northrup.** Circle 94.

Gridded Cover Slips

CELLocate is a micro-gridded cover slip that allows easy relocation of cells and cell groups. It is offered in 55- and 175- μ m grid formats. Each size comes with a corresponding grid notepad for accurate documentation. CELLocate is pure borosilicate glass; no other chemicals come in contact with the cells. The grid lines are shallow etched grooves that do

not interfere with normal cell growth. The grid is visible without interfering with the microscope image. **Eppendorf North America.** Circle 95.

3-D Molecular Visualization Software

chemVISION for Windows (version 2.0) software for molecular visualization offers three-dimensional (3-D) rendering and chemical query capabilities. It allows chemists to tap into 3-D chemical structure databases, display and render 3-D molecular structures, rotate and scale molecules in 3-D space, share research results with colleagues, and produce presentation-quality graphics. **Molecular Arts Corp.** Circle 96.

Literature

Shodex HPLC Column is a 12-page brochure of analytical and preparative columns for high-performance liquid chromatography (HPLC) that includes guides for column selection and applications. **Phenomenex.** Circle 97.

The Producers is a new publication that details new products such as a histochemical enzyme substrate series that produces a red precipitate for detection of β -galactosidase, β -glucuronidase, and alkaline phosphatase; labeling reagents; and a derivitizing reagent that achieves ultrasensitive analysis of primary amines. **Research Organics.** Circle 98.

Re-Discover the Western World with MAPS (membrane assay processing systems) is a brochure on automated system for protein immunoblotting. **BioGenex Labs.** Circle 99.

Spectrophotometer Cells lists more than 300 different types of cells, including standard cells, anaerobic cells, micro cells, water-jacketed cells, and dye laser cells. **NSG Precision Cells.** Circle 100.

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

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FAX: 202-682-0816

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+44 223 424695
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POSITIONS OPEN

AQUATIC BIOLOGIST/TOXICOLOGIST

The Environmental Sciences Program of the College of Food and Natural Resources invites applications for a nine-month tenure-track **ASSISTANT PROFESSOR** position (50% teaching/50% research). The Program, one of the fastest growing undergraduate majors at the University, which now has over 300 students, is interdisciplinary with faculty from eight departments and two Colleges teaching and advising in the Program. Duties of the new faculty member will include teaching upper-level courses in aquatic toxicology, team teaching an Environmental Biology course and advising undergraduates, as well as teaching in the home Department. Candidates must have an earned doctoral degree in an appropriate field, strong interdisciplinary interests and demonstrate a potential for developing strong research and teaching program. Departmental affiliation will depend on candidate's strengths and research interests. Areas of research interest could include: trace metal toxicity, effects of pollutants on aquatic community structure or toxicity to aquatic vertebrate or invertebrate species.

Priority consideration will be given to applications received by April 30, 1993. Search will continue until a final candidate is selected. Send curriculum vitae, transcripts and statement of research and teaching goals with the names, addresses and telephone numbers of a minimum of three references to: **Chairperson, Aquatic biologist/toxicologist Search Committee, Environmental Sciences Program, 112 Stockbridge Hall, University of Massachusetts, Amherst, MA 01003.**

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

FACULTY POSITION

Brookdale Center for Molecular Biology The Mount Sinai School of Medicine

Applications are invited for tenure-track positions at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** in the newly established Brookdale Center for Molecular Biology. While we are particularly interested in applicants with research interests in the molecular and cellular aspects of vertebrate embryology, strong candidates with interests in other aspects of development biology or molecular genetics are also invited to apply. The new faculty member will be expected to develop an independent basic research program and participate in the training of Ph.D. and M.D./Ph.D. students and postdoctoral fellows. The selected candidate will have the opportunity to work in new laboratories contiguous with common equipment rooms and extensive, state-of-the-art core research facilities. Start-up funds and extensive long-term support are available for salaries, technical help, supplies and equipment.

Applicants should submit curriculum vitae, reprints and a statement of research interests and future plans. The applicant also should arrange for letters from three references to be sent directly to: **Dr. Robert A. Lazarini, Brookdale Center for Molecular Biology, Box 1126, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** *The Mount Sinai School of Medicine is an Equal Opportunity/Affirmative Action Employer.*

BETH ISRAEL HOSPITAL HARVARD MEDICAL SCHOOL DEPARTMENTS OF PATHOLOGY

The Harvard Department of Pathology at Beth Israel Hospital seeks well-qualified applicants (Ph.D., M.D./Ph.D. or M.D.) for several **ASSISTANT** or **ASSOCIATE PROFESSOR** positions as part of an expansion of our basic research program in tumor biology. Candidates should have completed 3 to 5 years of relevant postdoctoral experience and should have the capability of directing an independent research program in an academic setting in areas of tumor biology such as tumor stroma and its generation, angiogenesis, the tumor microvasculature, tumor invasion or metastasis. Candidates are expected to participate in the teaching activities of the department; i.e., medical students, residents, graduate students and postdoctoral fellows. New laboratory space will become available in January 1994. Applicants should send curriculum vitae, a statement of research interests, and three references to: **Harold F. Dvorak, M.D., Chief, Department of Pathology, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.** *Beth Israel Hospital and Harvard Medical School are Equal Opportunity/Affirmative Action Employers. Women and minorities are encouraged to apply.*

POSITIONS OPEN

Tenure-track faculty position as **ASSISTANT** or **ASSOCIATE PROFESSOR** in the Division of Foods and Nutrition at the University of Illinois-Urbana. Responsibilities include undergraduate and graduate teaching; research and recruiting of external funding in biochemical and molecular nutrition with a specialization in **vitamin or mineral metabolism** is preferred, but other areas will be considered. **Available August 21, 1993.** Application must be received by April 23, 1993. Send letter of application, including a statement of research and teaching interest, curriculum vitae, transcripts, and three letters of reference to: **Dr. Donald K. Layman, School of Human Resources and Family Studies, University of Illinois, 274 Bevier Hall, 905 South Goodwin Avenue, Urbana, IL 61801; Telephone: (217) 333-3791.** *UIUC IS AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER.*

FACULTY POSITION IN HUMAN GENETICS

As the first phase of a major expansion in human genetics, the Laboratory of Genetics, University of Wisconsin-Madison, seeks to hire an **ASSISTANT** or **ASSOCIATE PROFESSOR**. Candidates should possess an M.D. and/or Ph.D. degree and direct an active research program in human genetics. Joint appointments with appropriate clinical departments are possible for M.D. applicants. Laboratory space will be available in the new Genetics-Biotechnology Building under construction. Please send curriculum vitae, a statement of research interests, three letters of recommendation, and representative reprints or preprints to: **Human Genetics Search Committee, c/o Dr. Richard Spritz, 118 Genetics, 445 Henry Mall, Madison, WI 53706.**

The University of Wisconsin-Madison is an Affirmative Action Employer. Women and minority scientists are encouraged to apply. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.

BOTANIST

The Department of Biology invites applications for a tenure-track **ASSISTANT PROFESSORSHIP** from candidates committed to excellence in research and in teaching at introductory and advanced levels. Area of research is open. Preference may be given to candidates able to teach genetics. Submit curriculum vitae, reprints, statement of research interests, and three letters of recommendation to: **William E. Cooper, Chair, Department of Biology, Indiana University-Purdue University Fort Wayne, Fort Wayne, IN 46805** by April 5, 1993. *An Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR. Eastern Washington University Department of Biology invites applications for a possible tenure-track position in Developmental/Cell biology or Environmental biology. Teaching responsibilities include a one-year general biology course for majors plus electives. *Eastern Washington University is an Affirmative Action/Equal Opportunity Employer.* Please send curriculum vitae, statement of research and the names and addresses of three references by May 7, 1993, to: **Dr. F. Gibson, Chair, Department of Biology, Eastern Washington University, Cheney, WA 99004-2499.**

FACULTY POSITIONS

The Department of Health Sciences at East Tennessee State University seeks applicants for two tenure-track positions, contingent upon funding, at the **ASSISTANT PROFESSOR** level opening in August 1993. The positions require teaching undergraduate courses in anatomy, physiology and microbiology and development of a fundable research program. Ph.D. preferred; however, candidates holding other graduate degrees with university-level teaching experience in all three areas may be considered. Screening of applicants will begin in April 1993. Salary will depend on qualifications and experience. Send curriculum vitae, a description of research interest, and the names of three references to:

**Dr. Michael T. Gallagher
Professor and Chair
East Tennessee State University
Department of Health Sciences
P.O. Box 70,673
Johnson City, TN 37614-0673**

East Tennessee State University is an Equal Opportunity/Affirmative Action Employer.



GRANTS FOR INTERNATIONAL JOINT RESEARCH IN THE AREAS OF MATERIALS, ENERGY AND GLOBAL ENVIRONMENT

The New Energy and Industrial Technology Development Organization (NEDO), a Japanese governmental implementing agency supervised by the Ministry of International Trade and Industry (MITI) of Japan, has been carrying out an International Joint Research Program since 1988. This program aims to contribute to the enhancement of the international level of industrial technology as well as to the advancement of international exchange by supporting international joint research teams which conduct superior research. In addition to supporting international joint research teams which conduct original and innovative basic research in the materials area, international joint research teams which conduct research in the energy area and the global environment area will be provided with grants from FY 1993. The program in the global environment area will be conducted jointly with the Research Institute of Innovative Technology for the Earth (RITE).

Research grants will be provided to "International Joint Research Teams" which fulfill the following main requirements:

1. Each team, in principle, must be composed of four or more researchers;
2. Each team must consist of researchers of two or more different nationalities;
3. The research organizations where the team members' major activities take place must be located in two or more countries.
4. Each team must appoint a research coordinator and an accounting coordinator. The accounting coordinator must be responsible for accounting matters and function as the liaison between the team and NEDO. The accounting coordinator's organization and research site must be located in Japan, and he/she must be able to communicate with NEDO in Japanese about all accounting matters. The research coordinator can also hold the post of accounting coordinator.

FY 1983's program is show below.

Research Area	Field of Research	Amount of Each Grant	Number of Themes to be Adopted	Recipients of Applications
Materials	1) Basic research concerning the investigation and elucidation of materials. 2) Basic research concerning the practical use of materials	about 30,000,000 yen in FY 1993	5 themes	NEDO (Note a.)
Energy	Practical research on power generation technologies using oil-alternative energy, on load leveling technologies and on global environment conservation related to those technologies.	about 30,000,000 yen in FY 1993	2 themes	
Global Environment	1) Basic research on conservation and improvement of the global environment	about 24,000,000 yen in FY 1993	2 themes	RITE (Note b.)
	2) Practical research concerning the production, generation and use of oil-alternative energy which contributes to the conservation and improvement of the global environment.	about 30,000,000 yen in FY 1993	2 themes	

(Recipients of Applications)

Note a. Materials and energy areas

International Joint Research Division.
Industrial Technology Department
New Energy and Industrial Technology Development Organization (NEDO)
Address: 21F, Sunshine Bldg.
3-1-1 Higashi-Ikebukuro, Toshima-ku,
Tokyo, 170 Japan
Phone No.: 03-3987-9357
Telefax No.: 03-3981-1536

Note b: Global environment area

Research Proposals Reception Section.
Research Planning Department
Research Institute of Innovative Technology for the Earth (RITE)
Address: 4F. Shin-Kyoto Center Bldg.
Karasumanishi-iru
Shiokouji-dori, Shimogyo-ku, Kyoto 600 Japan
Phone No.: 075-361-3611
Telefax No.: 075-361-5607

Please be informed that the amount of each grant and the number of themes to be adopted may be changed, and that this grant program is subject to government budget approval. A research team may submit an application a maximum of two times for a grant on the same subject.

The application period is from February 25, 1993 to May 25, 1993. No application will be accepted later than May 25th.

ATTENTION: If there are some discrepancies in a submitted application, for example, it does not follow the Application Guidebook or the research contents are different from the proposed research area, it will be considered invalid.

POSITIONS OPEN

MEDICAL ONCOLOGY ASSISTANT PROFESSOR OF MEDICINE TENURE-TRACK POSITION

A position is available for a tenure-track faculty member at the Assistant Professor level in the Division of Medical Oncology, Department of Medicine, University of Minnesota, beginning July 1, 1993. Candidate must be an M.D., board-certified in Internal Medicine and in Medical Oncology, and licensed in Minnesota by start date. Preference will be given to candidates with strong research training and evidence of the ability to attract external funding for research in the area of bioethics, as related to cancer, and with strong clinical training in solid tumor oncology and bone marrow transplantation. Responsibilities include patient care service in Medical Oncology, Medicine, and Bone Marrow Transplantation, including both inpatient and outpatient follow-up, medical outreach, teaching of medical students, residents and fellows, and development of a productive research program. The candidate's qualifications should be sufficient to qualify him/her for a secondary appointment in the Center for Biomedical Ethics at the University of Minnesota. Interested applicants should submit curriculum vitae and a description of research interest and plans by April 30, 1993, to:

Gordon D. Ginder, M.D.
Professor of Medicine
Director, Division of Medical Oncology
Box 286 UMHC
University of Minnesota
Minneapolis, MN 55455
Telephone: (612) 624-7915

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

ASSISTANT PROFESSORSHIPS IN MARINE SCIENCE

The University of Georgia's new Department of Marine Sciences will have two tenure-track positions in biological oceanography and physical oceanography or estuarine hydrography beginning fall 1993. Departmental research focus is on marine and estuarine processes. Collaboration with marine scientists on campus and at Sapelo Marine Institute and Skidaway Oceanographic Institute is highly desirable and encouraged. Teaching responsibilities will include graduate-level core courses in biological or physical oceanography, and participation in other marine science courses. Only graduate degrees offered, but a B.S. degree is planned. Applicants should send curriculum vitae, statement of research and teaching interests, and names of three references, by April 16, 1993, to: **Chair, Search Committee, Department of Marine Sciences, Ecology Building, University of Georgia, Athens, GA 30602-2206.**

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

FACULTY POSITION ASSISTANT OR ASSOCIATE PROFESSOR OF INDUSTRIAL HYGIENE

The Department of Biomedical and Environmental Health Sciences, School of Public Health, University of California, Berkeley, invites applications for tenure-track appointment at the assistant professor level or tenured appointment at the associate professor level in industrial hygiene. Appointment will be joint with the University's Center for Occupational and Environmental Health. Applicants must possess a doctoral degree in an appropriate subspecialty of public health, engineering or chemistry, but with a strong background in chemistry and demonstrated professional commitment to and competence in industrial hygiene. The appointee will be expected to establish a research program in exposure assessment in the occupational environment relevant to the conduct of epidemiological studies. Teaching duties will include professionally oriented courses in industrial hygiene at the master's level and a graduate seminar in exposure assessment issues in occupational and environmental health.

Applicants should send curriculum vitae, statement of teaching and research interests and the names of three references to: **Professor Robert C. Spear, School of Public Health, University of California, Berkeley, CA 94720**, by the closing date of April 30, 1993. The anticipated date of appointment is January 1, 1994.

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

POSITIONS OPEN

FACULTY POSITIONS CELL BIOLOGY AND ANATOMY

The Department of Cell Biology and Anatomy and the Basic Science Section of the Cardiovascular Developmental Biology Center at the Medical University of South Carolina seek to fill several positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level over the next two years. Applicants should have a Ph.D. and/or M.D. degree, proven record of accomplishments as a postgraduate or faculty member, and should desire a highly interactive collegial atmosphere. We are seeking individuals interested in cell and/or developmental biology in either vertebrate or non-vertebrate systems. Candidates with a strong background in molecular biology are preferred. The successful applicants are expected to develop externally funded research programs and to participate in graduate and medical student teaching. Generous start-up packages, technical assistance, and access to core facilities, centers and graduate training programs will be provided. Interested individuals should contact: **Timothy P. Fitzharris, Ph.D., Professor and Associate Chairman, Department of Cell Biology and Anatomy, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

An Equal Opportunity/Affirmative Action Employer.

MUSCLE BIOLOGIST

The University of Maryland Department of Surgery is searching for a Ph.D. with postdoctoral experience in skeletal muscle research to establish a research laboratory with an active clinical group involved in limb lengthening. Collaboration with other muscle researchers on campus is available.

This is a full-time position at the **ASSISTANT PROFESSOR** level. Excellent fringe benefit package and salary commensurate with experience. Applicants should submit curriculum vitae, a brief statement of research interests and names of three references to:

John E. Herzenberg, M.D. and Dror Paley, M.D.
Co-Directors
Maryland Center for Limb Lengthening
and Reconstruction
c/o Lois Reisig
Department of Surgery
5th Floor—405 West Redwood Street
Baltimore, MD 21201

Equal Opportunity Employer/M/F/H/V. Minorities and females are encouraged to apply.

(1) **ASSISTANT PROFESSOR.** Capital University. Tenure-track. Start August 23, 1993. Responsibilities include teaching animal physiology, human anatomy and physiology in the allied health field, and introductory biology. (2) **ASSISTANT PROFESSOR.** Tenure-track. Responsibilities include teaching animal behavior, human anatomy and physiology and introductory biology. (3) **ASSISTANT PROFESSOR.** Renewable term contract. Responsibilities include teaching human anatomy and physiology in the allied health field and contribution to introductory biology. Candidate should have commitment to teaching and an active role in campus life. Capital University is a multi-purpose Lutheran institution. *Equal Opportunity Employer.* Screening will begin April 1, 1993, and continue until position is filled. Send letter of application, résumé, transcripts and names, addresses, and telephone numbers of three references to: **Dr. Jerry Thomas, Biology Department, Capital University, 2199 East Main Street, Columbus, OH 43209.**

PLANT DEVELOPMENTAL BIOLOGIST CARLETON COLLEGE

Applications are invited for a one-year leave replacement beginning September 1, 1993, at the rank of **ASSISTANT PROFESSOR** in the Department of Biology. Teaching responsibilities include a course in developmental botany, a course in vascular plants, a seminar in area of special interest, and participation in laboratory instruction for introductory courses. Ph.D. preferred—ABD considered. *Women and minority candidates are strongly encouraged to apply.* Send application, curriculum vitae, undergraduate and graduate transcripts, a statement of teaching philosophy, a summary of research and three letters of reference to: **G. E. Wagenbach, Department of Biology, Carleton College, Northfield, MN 55057-4025** by March 30, 1993. *Carleton College is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR IN RESPIRATORY BIOLOGY or BIOENGINEERING

The Department of Environmental Health invites applications for a faculty appointment in the Respiratory Biology Program. The most important quality of the successful candidate will be a record of independent original research. We welcome applicants with research interests in physical determinants of lung growth, remodeling or function, with emphasis on the role of physical forces on cellular function.

The successful candidate will be expected to teach graduate students and postgraduates and to develop an independent research program that complements ongoing research areas in the Respiratory Biology Program; these include respiratory physiology, morphology, pharmacology, pathology, cell and molecular biology, and aerosol physics. Funds are available to help establish a laboratory. Applicants should send a statement of current and future research interests, curriculum vitae, and the names of three references to: **Jeffrey J. Fredberg, Ph.D., Chair, Ad Hoc Search Committee, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.**

Harvard University is committed to increasing the number of women and minorities in its faculty and encourages applications from such candidates.

ASSISTANT PROFESSOR OF NUTRITION. A 10-month, tenure-track position is available in the Graduate Program in Nutrition at the University at Buffalo (UB). Ph.D. in nutrition. Postdoctoral training and R.D. desirable. Human/Clinical nutrition research focus. Successful candidates are expected to develop a fundable research program, advise students, teach graduate and undergraduate courses and participate on committees. Deadline: April 16, 1993, or until position is filled. Send curriculum vitae, transcripts, three references, and letter stating research interests and plans to: **Atif B. Awad, Ph.D., R.D., Director, Nutrition Program, 301 Parker Hall, Buffalo, NY 14214.**

UB is an Affirmative Action/Equal Opportunity Employer.

MEDICAL ONCOLOGY ASSISTANT PROFESSOR OF MEDICINE TENURE-TRACK POSITION

A position is available for a tenure-track faculty member at the Assistant Professor level in the Division of Medical Oncology, Department of Medicine, University of Minnesota, beginning July 1, 1993. Candidate must be an M.D., board-certified in Internal Medicine and in Medical Oncology, and licensed in Minnesota by start date. Preference will be given to candidates with strong clinical interest in head and neck cancer as well as gastrointestinal and/or lung malignancies. Candidates should also have a basic science research background and be able to develop a productive research program at the basic clinical interface. Responsibilities include patient care service in Medical Oncology and Medicine, including both inpatient and outpatient follow-up, medical outreach and teaching of medical students, residents and fellows. Interested applicants should submit curriculum vitae and a description of research interests and plans by April 30, 1993, to:

Gordon D. Ginder, M.D.
Professor of Medicine
Director, Division of Medical Oncology
Box 286 UMHC
University of Minnesota
Minneapolis, MN 55455
Telephone: (612) 624-7915

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

ASSISTANT PROFESSOR. A tenure-track position is available for an outstanding **ultrastructural anatomist** starting 1 September 1993. Applicants must have a Ph.D. and postdoctoral experience. Preference will be given to applicants with expertise in vertebrate anatomy. Teaching responsibilities include undergraduate and graduate courses in applicant's areas of training. Send curriculum vitae, a statement of research interests, and three letters of recommendation to: **Dr. H. Lee, Chairman, Biology Department, Rutgers University, Camden, NJ 08102.** Review of applications will begin 9 April 1993 and continue until the position is filled. *Rutgers-The State University of New Jersey is an Equal Opportunity/Affirmative Action Employer.*

Training And Research Opportunities In The Biomedical Sciences.

Listed below are a few of the outstanding opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

Actomyosin-Dependent Cell Motility **Edward D. Korn, PhD**

Several positions are available to study the biochemistry of cell motility. Projects include the regulation of actin polymerization; the site-specific mechanisms by which myosin phosphorylation regulates actomyosin ATPase activity; regulation of the myosin kinases; specific cellular localizations and specific functions of myosin isozymes; actin and actin-binding proteins; correlation of cell motile events to the biochemical state of myosins and kinases; and the mechanisms of interactions of myosins with cell membranes. Laboratory of Cell Biology (OE-28), NHLBI, Building 3, Room B1-22.

Biochemistry and Cell Biology of Molecular Chaperones **Lois Greene, PhD**

The 70 kDa heat-shock proteins, known as molecular chaperones, occur in all living cells and are involved in folding and unfolding proteins, dissociating protein complexes, and translocating proteins across membranes in ATP-dependent reactions. Current studies focus on the role of these proteins in endocytosis. Site-directed mutagenesis and cell free assays are being used to study chaperone action in the cell, and the role of both ATP hydrolysis and protein cofactors in their function *in vitro* is being explored. Laboratory of Cell Biology (OE-28), NHLBI, Building 3, Room B1-22.

Chimeric Toxins for HIV-1 Therapy **Stephen H. Leppla, PhD and Jerry M. Keith, PhD**

Features unique to bacterial toxins are exploited to specifically kill HIV-1 infected cells. Toxins are redirected to HIV-1 infected cells by creating fusion proteins containing single chain antibodies, growth factors, or other ligands. In addition, retroviral constructs will be made in which expression of toxin proteins that sensitize cells to exogenous agents will be under HIV-1 transcriptional control. Experience in eukaryotic cell expression systems, transcriptional control, or retroviral molecular biology is preferred. Laboratory of Microbial Ecology (OE-28), NIDR, Building 30, Room 316.

HIV-1 Envelope Glycoprotein-Mediated Membrane Fusion **Robert Blumenthal, PhD**

Studies on HIV-1 envelope protein-mediated membrane fusion are carried out with intact virus as well as with viral proteins expressed on surfaces of cells using recombinant vectors containing viral envelope protein genes. Experience in cellular virology, membrane biochemistry and biophysics, mathematical modelling, spectrofluorometry and video microscopy, and computer systems is required. Candidates must be US citizens or permanent residents. Section on

Membrane Structure and Function (OE-28), NCI, Building 10, Room 4A01.

Immunology **Abner Notkins, MD**

Senior Staff Fellow position for experienced investigator to study polyreactive antibodies and the biology of CD5+ and CD5- B cells. Studies also focus on the production of human monoclonal antibodies against clinically-relevant antigens and antigen processing/presentation. Experience in molecular biology is required. Opportunity exists to have technical and/or postdoctoral support. Laboratory of Oral Medicine (OE-28), NIDR, Building 30, Room 127.

Nucleic Acid Modelling **Robert L. Jernigan, PhD**

Molecular models of multistranded structures are being developed including molecular models of DNA recombination. Knowledge of molecular biology, molecular mechanics, computer workstations, and the ability to devise new methods of calculation as needed are required. Applicants must be US citizens or permanent residents. Laboratory of Mathematical Biology (OE-28), NCI, 6010 Executive Boulevard, Suite 217, Rockville, MD 20850.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3004922221 or 1,8003582221). The settings for modem access are "7,Even,1". When connected to NIH, type in "vt100" at the connect message, "F5E" at initial, and "AJL1" at account.

A catalog describing NIH research opportunities may be accessed via the network-based (Internet) Gopher Information System. To access the NIH Gopher server, Gopher client software (available via anonymous ftp "boombox.micro.umn.edu") must be running on your computer and configured to point to "gopher.nih.gov", port "70". Select *NIH Information* to reveal the *NIH Office of Education* directory. Those interested in receiving information on other postdoctoral opportunities, clinical training opportunities, or accessing Gopher may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (e.g., MD, DO, DDS, or DVM) accompanied by previous laboratory research experience and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



National Institutes Of Health

9000 Rockville Pike, Bethesda, MD 20892
Equal Opportunity Employer

**Department of Energy
Office of Energy Research**

Energy Research Financial Assistance Program Notice 93-13: Human Genome Program - Ethical, Legal and Social Issues

AGENCY: Department of Energy (DOE)

ACTION: Notice inviting grant applications.

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE) hereby announces its interest in receiving applications in support of the Ethical, Legal, and Social Issues (ELSI) activities of the Human Genome Program (HGP). This Program is a coordinated, multidisciplinary research effort aimed at developing creative, innovative resources and technologies that will lead to a detailed understanding of the human genome at the molecular level. This particular research notice encompasses research grants that address ethical, legal, and social issues that may arise from the use of information and knowledge resulting from the HGP. The DOE especially encourages the submission of applications to conduct multidisciplinary, empirical research on privacy issues from the creation, use, maintenance, and disclosure of genetic information. This may include (but is not limited to) issues of ownership and information, and the role(s) of high performance computers in information management relevant to genetic data. Applications should demonstrate knowledge of the relevant literature, and should include detailed plans for the gathering and analysis of factual information and the exploration of issues associated with the ethical, legal, and social implications of the knowledge gained from the HGP. All applications should include, where appropriate, detailed discussion of human subjects protection issues; e.g., storage of, manipulation of, and access to data. Where survey techniques are proposed, provisions to ensure the inclusion of women, minorities, and potentially disabled individuals must be described, unless specific exclusions are scientifically necessary and justified in detail. All proposed research applications should address the issue of efficient dissemination of results to the widest appropriate audience.

The DOE is also soliciting applications for the preparation and dissemination of educational materials in any appropriate medium that will enhance public understanding of both the scientific aspects and the ethical, legal, and social aspects of the HGP. In addition, the DOE is encouraging applications for the support of conferences focusing on specific issues or areas of concern related to the ethical, legal, and social implications of the HGP. Educational and conference applications should also demonstrate awareness of the relevant literature, and include detailed plans for the accomplishment of project goals, including, where appropriate, video productions. In the case of educational activities, the DOE strongly recommends inclusion of assessments of effectiveness of the proposed activities. In the case of all conferences, a fairly detailed and complete roster of committed speakers is necessary. At the completion of the conference, a summary or report is required. Educational and conference applications must also demonstrate awareness of the need to reach the widest appropriate audience.

DATES: Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., July 15, 1993, to be accepted for merit review in September 1993, and to permit timely consideration for award in Fiscal Year 1994.

ADDRESS: Formal applications referencing Program Notice 93-13 should be forwarded to: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, Washington, D.C., 20585, ATTN: Program Notice 93-13. The following address must be used when submitting applications by U.S. Postal Service Express Mail or commercial mail delivery service, or when handcarried by the applicant: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64, 19901 Germantown Road, Germantown, MD 20874.

FOR FURTHER INFORMATION CONTACT: Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, D.C., 20585, (301) 903-6488.

**RESEARCH SPECIALIST
Division of Reproductive
Endocrinology & Infertility**

The Department of Obstetrics and Gynecology at Cornell University Medical College seeks a Research Specialist for In-Vitro Fertilization Program which is the largest such program in the United States.

Working in our Reproductive Endocrinology Laboratory, the Research Specialist will be in charge of embryo and cell cultures and purification and isolation of protein DNA and RNA. Will also perform southern, northern and western blot techniques. Candidates must possess a Masters degree in Biochemistry, Biology or Molecular Biology with prior experience. Candidates holding a Ph.D. are preferred.

Excellent benefits include health, dental and tuition plans. Send resume with salary history to:
H.L. Brown

**CORNELL UNIVERSITY
MEDICAL COLLEGE**

445 East 69th St., NY, NY 10021.
EEO/AA/M/F/D/V.



The National Aeronautics & Space Administration (NASA) is accepting applications for the following Senior Executive Service (SES) vacancy:

Position: Director, Astrophysics Division
Location: Office of Space Science & Applications,
NASA Headquarters, Washington, DC
Salary Range: \$92,900 - \$115,700

The Director of Astrophysics establishes policy and provides overall direction and management of a national astrophysics program in meeting research objectives related to the origin and evolution of the universe. The Director supports the Associate Administrator for Space Science and Applications (OSSA) in determining and presenting the Astrophysics Program to NASA top management, the Office of Management & Budget and the Congress. The Director has overall responsibility for the development of plans and studies conducted in the astrophysics discipline areas to determine the programs needed to support the objectives of OSSA and the Agency. This includes coordination within NASA, other government agencies, the private sector and the international community to establish a cohesive program of astrophysics research and to build an advocacy for the program. The Director provides the scientific, managerial and technical leadership required to implement the program at the NASA Field Centers, other government research laboratories, universities and industry.

Interested persons should contact Ms. Becky Mulkey, NASA HQ Astrophysics Division, at (202) 358-0340 for additional information concerning application requirements and instructions. Applications must be received by April 16, 1993.

**University of Michigan
Dean, School of Nursing**

The University of Michigan invites applications and nominations for the position of Dean of the School of Nursing. The University of Michigan has a total enrollment of approximately 36,000 students on the Ann Arbor campus. The School of Nursing, with enrollment of about 900 students and over 100 faculty members, offers the BSN, MS and Ph.D degrees. The Dean is the chief academic and administrative officer of the School and reports to the Provost and Vice President for Academic Affairs. The School of Nursing is ranked among the top five nursing schools in the United States.

Candidates for this position should have an earned doctorate in nursing, or a related field, and be eligible for licensing as a Registered Nurse in the State of Michigan. Achievement in research; successful college teaching; experience in clinical nursing; effective communication, interpersonal, motivational, and public relations skills; education/administration experience in baccalaureate and/or higher degree programs in nursing; demonstrated commitment to the principles of affirmative action and equal employment opportunity are required. The Dean is expected to maintain high academic standards and national accreditation for the School. Awareness of current issues in nursing and higher education; the ability to stimulate interdisciplinary and intra-disciplinary work; and an understanding of the mission of a leading research university are crucial. Deans at the University of Michigan play a major role in the fundraising effort.

Applications should include a detailed curriculum vita and the names, addresses, and telephone numbers of three references. While applications are being considered until the position is filled, we will begin reviewing applications in April 1993. The University's dedication to excellence is complemented by our commitment to building a culturally diverse staff. Therefore, we encourage individuals from underrepresented groups to apply. The position will be available on July 1, 1993.

Nominations and applications should be sent to: Nola J. Pender, Ph.D, RN, FAAN, Chair, Search Committee for Dean, School of Nursing, University of Michigan, 3071 Fleming Building, Ann Arbor, MI 48109-1340. Telephone: 313/764-9555; FAX: 313/764-4546.

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Neurotoxicologist

Ciba Plant Protection has an opening for a Neurotoxicologist at its Environmental Health Center in Farmington, CT. Primary responsibilities include the design, conduct and interpretation of neurotoxicity studies to evaluate product safety, meet health safety guidelines of governmental regulatory agencies and support product registrations. Our standard neurotoxicity studies include assessments of functional, behavioral and neurohistological parameters, as well as assessments of systemic toxicity. In addition, the successful candidate may be asked to serve as study director on general and reproductive toxicology/teratology studies.

Candidates should have a PhD in Toxicology or one of its specialty disciplines, neuroscience or a related field. Experience with behavioral testing procedures and equipment and the use of computers is essential. Candidates should also have demonstrated knowledge of experimental design, statistical analysis and excellent oral and written communication skills. The candidate must be able to work within a collaborative team-oriented environment.

Ciba offers on-going growth opportunities, excellent salaries and an attractive package of paid company benefits. The Environmental Health Center is located near the University of Connecticut Health Center, in one of the state's most attractive semi-rural towns. To apply, please send your resume, a brief description of your experience and salary requirements to: **Human Resources Department, Ciba Plant Protection, 400 Farmington Avenue, Farmington, CT 06032.** We Are An Equal Opportunity Employer M/F/D/V.

EXECUTIVE SECRETARY European Molecular Biology Organization (EMBO) Heidelberg, Germany

The EMBO Council invites applications for the position of Executive Secretary of EMBO. The successful candidate will work initially as deputy Executive Secretary under John Tooze and will become Executive Secretary in January 1995.

The successful candidate will be responsible for coordinating the various activities of EMBO, including its fellowship programmes, courses, workshops and the symposium. The Executive Secretary also acts as Secretary to the European Molecular Biology Conference (EMBC). The Conference is the intergovernmental body which provides the funds for the EMBO activities. The Executive Secretary reports directly to the EMBO Council and to the Secretary General of the EMBO.

Candidates should have a Ph.D. in molecular biology or a related subject, several years of administrative experience, be fluent in English and also have some knowledge of French or German.

The duty station is in the EMBO office, located in the European Molecular Biology Laboratory (EMBL) in Heidelberg, Germany. The position is graded at levels 10 or 11 (EMBL scale), depending on experience, and will be available from the autumn of 1993.

Applications should be sent to Professor Jeff Schell, Chairman of the EMBO Council, at the address below, by 1 May 1993:

MPI für Züchtungsforschung
Abt. Genetische Grundlagen der Pflanzenzüchtung
Carl-von-Linné-Weg 10
DW-5000 Köln 30
Germany

National Institutes of Health
National Institute of Environmental Health Sciences
Research Triangle Park, North Carolina

Cell Proliferation and Eicosanoids (Molecular Biologist)

A post-doctoral position is available in the Eicosanoid Biochemistry Workgroup of the Laboratory of Molecular Biophysics to study the epidermal growth factor stimulated formation of oxygenated lipids derived via lipoxygenase and/or prostaglandin H synthase pathways. These studies are focused on determining the role of these lipid mediators in mitogenic signal transduction with particular emphasis on the interaction of oxygenated lipids with tyrosine kinases and phosphatases.

Individuals with a strong background in molecular biology are desired to isolate, clone and sequence relevant genes and to study the regulation of their expression by kinase activity.

FOR PROMPT CONSIDERATION: Send cover letter indicating area of interest, Curriculum Vitae, and three letters of reference by March 26, 1993 to:

Dr. Thomas Eling
NIEHS, LMB, MD 19-04
P.O. Box 12233
Research Triangle Park, NC 27709
Phone: (919) 541-3911
Fax: (919) 541-7880



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POSITIONS OPEN

DIABETES RESEARCH AND TREATMENT CENTRE

The Diabetes Research and Treatment Centre, an interdisciplinary centre within the Faculty of Medicine at the University of Manitoba, invites application for two contingent faculty positions at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Applicants should have a Ph.D., M.D. or equivalent and 3 years of post-doctoral experience in Diabetes Research. Preference will be given to applicants with research interests in the area of molecular genetics or diabetic complications. The primary appointment will be in the Department of Medicine with the possibility of a conjoint appointment in an appropriate basic science department. The successful candidate will be expected to direct independent research projects and teach both graduate and medical students. Salary will be commensurate with qualifications and experience. *The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, aboriginal people and persons with disabilities.* The University offers a smoke-free environment save for special designated areas. In accordance with Canadian Immigration, this advertisement is directed to Canadian citizens and permanent residents. Please send your résumé, statement of research goals and names of three referees by May 31, 1993, to: **Dr. L. J. Murphy, Director, Diabetes Research and Treatment Centre, Faculty of Manitoba, University of Manitoba, Room 435, Basic Medical Science Building, 730 William Avenue, Winnipeg, Manitoba, Canada R3E 0W3.**

RESEARCH ASSISTANT PROFESSOR, TENURE-TRACK, FUNDED POSITION available July 1, 1993, to study Alzheimer's disease, other neurodegenerative diseases and experimental models. Experience in protein purification and sequencing and/or molecular genetics desirable. Research activity can be conducted independently or as part of a large, well-established group. Teaching responsibilities optional. Send résumé to: **Pierluigi Gambetti, M.D., Division of Neuropathology, Institute of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, OH 44106.** CWRU is an Equal Opportunity/Affirmative Action Employer.

The University of New Mexico School of Medicine (UNMSOM) is seeking applicants with a Ph.D. in biochemistry for the position of **RESEARCH ASSISTANT PROFESSOR**. Salary in the \$28,000 per annum range and tentative start date of July 1, 1993. The primary appointment will be in the Department of Surgery with a secondary appointment in the Department of Biochemistry. Candidates should have a demonstrated ability to initiate and develop an independent research program and successfully compete for extramural funding. They should be familiar with radioimmunoassay techniques and methods of protein and enzyme analysis. A modest level of graduate and medical student and resident teaching is expected. Interested applicants should send curriculum vitae, representative publications and the names of three referees to: **Karl A. Zucker, M.D., Department of Surgery, 2211 Lomas Boulevard, NE, Albuquerque, NM 87131.** UNMSOM is an Equal Opportunity/Affirmative Action Employer.

THE AMERICAN UNIVERSITY Conservation Biology/Evolutionary Biology

The Biology Department, part of the College of Arts and Sciences, is seeking qualified candidates for a tenure-track **ASSISTANT PROFESSOR** position in conservation biology/evolutionary biology beginning 1993-94 academic year. Preference will be given to candidates applying molecular techniques to environmental and evolutionary problems. Responsibilities include an active research program, teaching graduate and undergraduate courses, especially in environmental biology and evolutionary biology, student advising, and department and university service. Qualifications: Ph.D. required, college-level teaching experience preferred. Salary and rank commensurate with qualifications and experience. Deadline for applications is April 15, 1993, and will continue until position is filled. Position subject to final budgetary approval. Send curriculum vitae and names of three references to: **Dr. David C. Culver, Chair, Department of Biology, Hurst Hall 101, The American University, Washington, DC 20016-8007.** An Equal Employment Opportunity/Affirmative Action University; women and minorities candidates are encouraged to apply.

POSITIONS OPEN

ANATOMIST

The Department of Oral Biology, Faculty of Dentistry, invites application for a tenure-track appointment at the **ASSISTANT/ASSOCIATE PROFESSOR** level, commencing April 1, 1993. Applicants should have the following qualifications: (a) a Ph.D. degree, and/or (b) a D.D.S./D.M.D. degree or equivalent. Preference will be given to candidates with published evidence of research ability in anatomy, dental anatomy or oral biology. The successful candidate will be required to teach oral histology and the development of oral tissue to dental and dental hygiene students and participate in oral biology and anatomy courses at the graduate level. The successful candidate will be expected to develop a strong externally funded research program. *The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, aboriginal people and persons with disabilities.* The University offers a smoke-free environment, save for specially designated areas. Priority consideration will be given to Canadian citizens and permanent residents. Letter of application, complete with curriculum vitae and the names and addresses of three referees should be forwarded to: **Dr. Ian R. Hamilton, Head, Department of Oral Biology, Faculty of Dentistry, University of Manitoba, Winnipeg, Manitoba, R3E 0W2.** Telephone: (204) 788-6615 or 6703. The closing date for applications is June 30, 1993, or until the position is filled.

ECOLOGY/POPULATION BIOLOGY UNIVERSITY OF CALIFORNIA, IRVINE (UCI) ASSISTANT/ASSOCIATE PROFESSOR

The Department of Ecology and Evolutionary Biology at the University of California, Irvine, solicits applications for a tenure-track (assistant professor) or tenured (associate professor) position in the field of Ecology. The Department will consider applications from all outstanding candidates in behavioral, population, or community ecology. The successful applicant will be expected to participate in both the undergraduate and graduate teaching programs in Ecology. Review of applications will begin on March 22, 1993. Please submit curriculum vitae, description of research and teaching interests, and the names, addresses and telephone numbers of at least three referees to: **Ecology Search Committee, Department of Ecology and Evolutionary Biology, University of California, Irvine, CA 92717-0001.**

UCI is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity.

VISITING ASSISTANT PROFESSOR OF BIOLOGY

Anticipated one-year sabbatical replacement position beginning fall 1993. Applicant should possess a strong background in cell and molecular biology and an interest in teaching. Teaching responsibilities include an upper-division cell biology course, an upper-division course in applicant's area of interest, and assisting in molecular biology laboratories. Ph.D. required. Applicants should forward curriculum vitae, evidence of teaching effectiveness, and three letters of recommendation to:

**Dr. Sally Nyquist, Chair
Department of Biology
Bucknell University
Lewisburg, PA 17837**

Closing date for applications: March 31, 1993. *Women and members of minority groups strongly encouraged to apply.*

DIRECTOR, MOLECULAR DNA LABORATORY

The Genetic Screening and Counseling Service (GSCS), a unit of the Texas Department of Mental Health and Mental Retardation, invites applicants to direct a newly established molecular genetics laboratory which is part of a comprehensive clinical genetic program serving a catchment of 11 million Texans. Work relates to use of clinical DNA techniques, family linkage studies with adequate time for research interests and teaching opportunities which are available at several local universities. Candidates must have doctorate degree plus a minimum of 2 years of training in molecular medical genetics and be eligible for certification by the American Board of Medical Genetics. Contact: **Monica R. Kozak, Human Resources, at (817) 383-3561, extension 217.** GSCS is an Equal Employment Opportunity/Affirmative Action Employer.

POSITIONS OPEN

DIRECTOR OF MOLECULAR SCIENTIFIC RESOURCES: Coordinate the efforts of a team of attorneys and scientists; supervise the work of others; and act as liaison with clients and inventors. Direct the utilization of resources and manpower; teach and oversee the work of scientific advisors. Participate in all aspects of scientific patent law, including the preparation of patent applications and patent prosecution. Ph.D. or equivalent in Genetics, Biochemistry, or Microbiology required. 2 years of experience in job offered or in supervision of research scientists required. Must be willing to work some holidays, evenings and weekends. 10% to 20% travel required. Must be willing to travel at a moment's notice. Minimum of 5 publications related to molecular scientific research required. Hours are 8:00 a.m. to 5:00 p.m., 40 hours weekly at an annual salary of \$47,500. Apply at the: **Texas Employment Commission, Austin, Texas, J.O. #6736720** or send résumé to: **Texas Employment Commission, TEC Building, Austin, TX 78778, J.O. #6736720.** Ad Paid by an Equal Employment Opportunity Employer.

MANAGER, *In Vitro* Fertilization Lab

Summa Health System, an 811-bed system comprised of two major adult hospital campuses and numerous satellite facilities, is seeking an experienced Laboratory Manager for the *In Vitro* Fertilization Program. Responsibilities include direction of laboratory functions, research in comprehensive animal facilities, and potential joint appointment to area university faculty groups. Summa's IVF Lab has an excellent reputation with one of the highest success rates in the country. This newly renovated, well-equipped facility includes a large special procedure room. The qualified candidate will have a minimum of a Master's degree in Molecular Biology/Reproductive Physiology or related field. At least 3 years of experience are required in infertility treatment and administrative operation of an *in vitro* fertilization lab. We offer excellent salary, benefits and an ideal location: major metropolitan activity with an advantageous cost of living. Please send résumé and salary history to: **Department of Human Resources, Summa Health System, 525 East Market Street, Akron, OH 44309.** Equal Opportunity Employer.

The Santa Barbara Botanic Garden seeks a **BOTANIST/DIRECTOR OF RESEARCH** to provide leadership in administration of department and in creating and sustaining an environment supportive of excellence in scholarship and instruction; maintain an externally funded research program. Earned doctorate in botany and a scholarly record appropriate for an adjunct faculty appointment at UC Santa Barbara required. Preferred areas of expertise are plant ecology, taxonomy/systematics, or conservation biology. Twelve-month appointment with a competitive salary and excellent benefit package. Start date September 1, 1993. Submit cover letter and résumé by April 1, 1993, to: **Dr. Sherwin Carlquist, Chair, Search Committee, Santa Barbara Botanic Garden, 1212 Mission Canyon Road, Santa Barbara, CA 93105.** Santa Barbara Botanic Garden is an Equal Opportunity Employer.

RESEARCH DIRECTOR—The Division of Critical Care Medicine of Miami Children's Hospital (State University of New York affiliate) is seeking a postdoctoral faculty member to serve as Director of its Research Program. Divisional interests include pulmonary physiology and biology, inflammatory and repair processes, and organ resuscitation. Excellent salary and benefit package. Academic rank will be determined by individual qualifications. Good initial intradepartmental research support and opportunity for collaboration with Miami Children's Hospital Research Institute. Please direct inquiries to: **Jack Wolfsdorf, M.D., Director, Critical Care Medicine, Miami Children's Hospital, 6125 S.W. 31st Street, Miami, FL 33155; Telephone: (305) 662-2639.**

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Protein Purification and Delivery

Research Scientist

Due to a major increase in resources committed to cystic fibrosis research and development, Genzyme has an excellent opportunity for an individual with a proven track record of accomplishment and contributions in cystic fibrosis research. Candidate will devise new ways to purify analytical and reagent amounts of membrane proteins such as CFTR. Must have a Ph.D. plus 1 to 5 years of post-doctoral experience including demonstrated expertise in the purification and analysis of membrane proteins.

Genzyme rewards success with an excellent compensation and benefits package, including 3 weeks' paid vacation, a 401(k) plan with a company match, extensive insurance benefits and an Employee Stock Purchase Plan. Please forward your resume to: Steve Grossman, Human Resources Department, Dept. SM35, Genzyme Corporation, One Kendall Square, Cambridge, MA 02139. An equal opportunity employer.

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THE AARON DIAMOND FOUNDATION POSTDOCTORAL RESEARCH FELLOWSHIPS

in the Biomedical and Social Sciences

In 1993, The Aaron Diamond Foundation will support 25 postdoctoral research fellowships—to encourage excellence in research addressing the problems of **AIDS and drug abuse** and to increase the number of **biomedical and social scientists** working in **New York City** on these problems. The fellowship program is administered by the New York State Health Research Council, aided by a panel of distinguished scientists comprising the Fellowship Selection Committee.

The fellowship application is co-developed by the potential fellow and a mentor at a New York City institution. A list of nearly 200 established scientists interested in serving as mentors is included in the application materials, although applicants may apply with any qualified New York City scientist.

Support is provided for two years; a third fellowship year may be awarded upon subsequent application. The annual stipend is \$36,000 in the first year; the mentor's institution receives \$30,000 per year to cover costs associated with the fellow's research.

Preference is given to: (1) those with doctoral degrees awarded after 1986 (generally MDs must have completed their residency, while applicants with non-medical degrees may initiate the fellowship immediately after graduation); (2) applicants early in their careers, with three or fewer years of postdoctoral research experience; (3) those who are relocating to New York City; and (4) U.S. citizens or permanent residents. Women and members of minority groups are especially encouraged to apply.

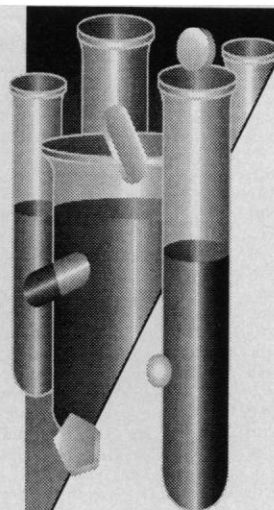
APPLICATION DEADLINE: JULY 30, 1993

FURTHER INFORMATION:

Margaret Brown, Ph.D., Program Director
The Aaron Diamond Foundation Postdoctoral Research
Fellowship Program
5 Penn Plaza, Room 308
New York, NY 10001
(212) 613-2525

A DYNAMIC MISSION

**At the Glaxo Inc.
Research Institute,
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In Research Triangle Park, NC, the inspirational Sir Paul Girolami Research Center

houses the new Glaxo Inc. Research Institute. Here, professional excellence teams with scientific leadership in a unified mission: to advance the progress of drug discovery and development. The result is an environment of exceptional challenge...and unsurpassed reward.

We invite you to join us today in the following opening.

ASSOCIATE SCIENTIST Molecular Biology

The successful candidate will assist in supporting structure-based drug discovery efforts, as well as novel therapeutic target identification. Major duties will include performing cloning, site-directed mutagenesis and sequencing experiments. In addition, this individual will construct and analyze genetically transformed yeast cells for the production of heterologous proteins that are of interest as therapeutic targets.

Background must include a BS Degree in a Biological Science with a minimum of 2 years experience in genetic manipulations including cloning, mutagenesis, sequencing and expression of genes and their mutant forms in microbial systems. Experience in yeast genetics or expression systems would be a plus.

At Glaxo, pride in our people is reflected in an excellent salary and a flexible benefits package, as well as in such amenities as an on-site fitness center and a work setting in which you will take pride. Equally appealing is our world famous scientific, industrial, and academic community in Research Triangle Park, NC. Send your resume, which must include position title and salary history, to: **Human Resources Department, Job #ASC911805, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/D/V.

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The Time For Achievement Is Now

POSITIONS OPEN

DIRECTOR LABORATORY ANIMAL RESOURCE CENTER

Indiana University School of Medicine seeks applications for the position of Director of the Laboratory Animal Resource Center (LARC). Extramural support for the School exceeded \$44.5 million last year. The recently opened state-of-the-art primary facility, a 29,000 square foot center, includes housing, breeding and surgical facilities for a wide range of large and small animals. The Director will have administrative, teaching, service, and research duties, will be a member of the University's Animal Care and Use Committee and will report to the Associate Dean of the School of Medicine. Duties will include administrative authority over the laboratory animal services and facilities for the School and overseeing procedures and protocols to ensure compliance with federal regulations for the humane care and use of animals.

Applicants must possess a Doctor of Veterinary Medicine degree, be a Diplomate of the American College of Laboratory Animal Medicine, be licensed or eligible for licensure in Indiana, and have a working knowledge of and experience with AAALAC accreditation. A tenure-track faculty appointment may accompany the directorship if credentials and experience warrant. An excellent opportunity exists for independent and collaborative research. Application reviews will begin immediately and will continue until the position is filled. Send curriculum vitae and references to: **Joseph N. Hingtgen, Ph.D., Chairman, LARC Search Committee, Indiana University School of Medicine, 1120 South Drive, Fesler Hall 302, Indianapolis, IN 46202-5114.**

Affirmative Action/Equal Opportunity Employer, M/F.

RESEARCH MANAGER—BIOLOGICALS

Kemin Industries, Inc., a leading manufacturer of animal feed ingredients, has an immediate opening in its Research and Development Department for a Research Manager who would oversee research on its digestive enzyme additives and edible antimicrobials. The Research Manager will report directly to the Vice President of R&D and will have principal responsibility for the invention of enzyme products to increase the digestibility of animal feeds as well as products to protect feeds from molds and bacterial contamination (e.g., *Salmonella*). Major job functions include direction of laboratory personnel, data interpretation and writing, bench laboratory work on particular enzymatic assays. Preference will be shown to those with previous industrial/supervisory experience and will be especially shown to those with an agricultural background. Job offer is conditional on passing a medical examination including a drug screen. Smoking is prohibited in all buildings. *Kemin Industries is an Equal Opportunity Employer.* Please forward your résumé to: **Dr. C. E. Nelson, Vice President of Research and Development, Box 70, Des Moines, IA 50301.**

VISUAL NEUROSCIENCE

Tenure-track **FACULTY POSITION** (any level). Emphasis is placed on research and graduate education in close communication with a large group of visual scientists. Interests include molecular biology, photoreceptor cell biology, retinal and central circuitry and behavioral studies. External funding is required for senior appointments. Send curriculum vitae, names of three references and a statement of research interests and plans to: **Dr. H. G. Sperling, Sensory Sciences Center, The University of Texas Health Science Center at Houston, Graduate School of Biomedical Sciences, 6420 Lamar Fleming Avenue, Houston, TX 77030.** *The University of Texas is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

FACULTY POSITION IN GENETICS—DUKE UNIVERSITY MEDICAL CENTER invites applications for a faculty position in genetics, with a focus on mammalian or human genetics. This appointment can be made at any level. The research environment is excellent and an extremely attractive and generous package of research support is available. Interested individuals should forward curriculum vitae, statement of research plans, and the names of three referees to: **Dr. Joseph R. Nevins, Section of Genetics, Howard Hughes Medical Institute, Duke University Medical Center, P.O. Box 3054, Durham, NC 27710.** *Duke University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The **ELECTRON MICROSCOPE LABORATORY** at the University of California, Berkeley, has an opening for a full-time, career **SUPERVISORY POSITION** to oversee and direct the interdepartmental EM facility for the Berkeley Campus. Duties include supervision of three EML employees, coordination of student training, instrument supervision, and collaborative research. The new Supervisor should expect to participate in collaborative efforts with faculty labs to enhance the research activities of the EML, and to participate in development and application of new technology. Qualifications: Ph.D. and published record of EM contributions and experience with laboratory management. Experience with cryotechnology and EM immunocytochemistry preferred. Salary range \$42,000 to \$50,000 commensurate with experience. Send curriculum vitae and three suggested references to: **Dr. Beth Burnside, EM Lab, 26 Giannini Hall, University of California, Berkeley, CA 94720.** Deadline for application: April 2, 1993. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

DEPARTMENT CHAIRPERSON, ANATOMICAL SCIENCES. The University of Pacific School of Dentistry, 2155 Webster Street, San Francisco, CA, 94115, invites applications and nominations for this full-time, tenure-track position, available January 1, 1994. Responsibilities include coordinating departmental instruction, conducting independent research, managing and developing faculty, and providing service. Required: Ph.D., teaching experience, and established record of anatomical science research with ability to attract independent research funding. *Equal Opportunity/Affirmative Action Employer.* Send application with curriculum vitae to: **Dr. David Chambers, Associate Dean for Academic Affairs, by June 1, 1993.**



NEW ZEALAND UNIVERSITY OF CANTERBURY LECTURER IN PLANT ECOLOGY

Applications are invited for the above position in the Department of Plant and Microbial Sciences. Applicants should have a Ph.D. degree in a relevant field and have expertise in biostatistics and computing. The appointee will be expected to: contribute to the teaching of courses in plant ecology, biostatistics and conservation biology; conduct field courses; and pursue an active research programme, including the supervision of M.Sc. and Ph.D. students.

The salary for Lecturers is on a scale from NZ\$38,000 to NZ\$49,088 per annum.

Applications close on 30 April 1993. Further particulars and Conditions of Appointment may be obtained from the undersigned. Applications, quoting **Position Number PL48**, must be addressed to: **Mr. A.W. Hayward, Registrar, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.**

The University has a policy of Equality of Opportunity in Employment.

OREGON HEALTH SCIENCES UNIVERSITY (OHSU) CENTER FOR RESEARCH ON OCCUPATIONAL AND ENVIRONMENTAL TOXICOLOGY (CROET)

Growing multidisciplinary research institute invites applications for **FACULTY POSITIONS** in molecular toxicology. We seek interactive, team-oriented and, preferably, funded scientists (Ph.D., M.D., D.V.M. with postdoctoral training) focused on chemical perturbations of gene expression in neurodegeneration, aging or carcinogenesis. Start-up funds, competitive salaries (50% state-supported), and generous benefit package. Send curriculum vitae, career goals, one publication and three references by April 2, 1993, to: **Dr. P. Spencer, Director and Senior Scientist, CROET, OHSU, 3181 SW Sam Jackson Park Road, L606, Portland, OR 97201-3098.** *OHSU is an Equal Opportunity/Affirmative Action Emp*

More than 150,000 people paid to see your ad in **SCIENCE**. Classified Advertising Department telephone: 202-326-6555. FAX: 202-682-0816. *loyer.*

POSITIONS OPEN

BIOLOGIST—The University of Richmond seeks an **ASSISTANT PROFESSOR** for a 3-year term appointment to teach introductory courses in general biology for non-majors and botany/zoology for majors beginning in August 1993; Ph.D. preferred. Duties will include lecture and laboratory instruction. There will be a 12-hour teaching load. Opportunities for development of instructional materials/skills and the pursuit of research are available. Send letter of application, curriculum vitae, graduate and undergraduate transcripts, and three letters of support to: **Dr. F. B. Leftwich, Department of Biology, University of Richmond, VA 23173.** *The University of Richmond is an Affirmative Action/Equal Opportunity Employer and it encourages women and minorities to apply for its positions.*

SIMMONS COLLEGE DEPARTMENT OF BIOLOGY

ASSISTANT PROFESSOR, tenure-track position to begin September of 1993. Teaching responsibilities will include Neurobiology, General Biology, Anatomy and Physiology, and Psychobiology. Requirements: Ph.D., a commitment to excellent undergraduate teaching, and a research program with opportunities for student participation. Simmons College is a comprehensive women's college which combines liberal arts with professional education. For detailed information and application procedure, write to: **Dr. Karen Talentino, Department of Biology, Simmons College, 300 The Fenway, Boston, MA 02115.** Completed applications should be received by March 31, 1993.

ASSISTANT/ASSOCIATE PROFESSOR in Science Education, Rutgers University Graduate School of Education. Tenure-track position, teaching and research. Opportunity to link with Center for Math, Science, and Computer Education.

Send letter of application, curriculum vitae, and three letters of reference to: **Search Committee for Science Education, 10 Seminary Place, New Brunswick, NJ 08903-5050.** Closing date March 15, 1993.

ASSISTANT PROFESSOR, FULL-TIME, TENURE-TRACK, THERAPEUTIC RADIOLOGY/RADIATION ONCOLOGY. Requirements: M.D., Minnesota licensure by start date and board certification in Therapeutic Radiology/Radiation Oncology. Candidate should have at least one year of academic experience, and experience in interstitial radiation therapy. Experience in neuro-oncology, gynecologic and pediatric oncology patient care desired. Must be interested and experienced in academic research and writing in the area of radiation therapy. Position involves teaching medical fellow specialists, medical students and radiotherapy technologist students in radiation oncology. This position entails patient care in all radiotherapy modalities. Salary open to negotiation depending upon experience. Start date is July 1, 1993. Apply to: **Search Committee, Department of Therapeutic Radiology, Box 494 UMHC, Harvard Street at East River Road, Minneapolis, MN 55455** before March 31, 1993.

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

TWO POSTDOCTORAL POSITIONS available immediately to study the enzymology of anaerobic CO/CO₂ fixation by acetogenic and methanogenic bacteria and anaerobic bioremediation of halogenated and aromatic compounds. Experience in enzymology is required and experience in spectroscopy is desirable. Applicants should send curriculum vitae and names of three references to: **Dr. Stephen W. Ragsdale, Department of Biochemistry, East Campus, University of Nebraska, Lincoln, NE 68583-0718.** *Affirmative Action/Equal Opportunity Employer.*

AQUATIC TOXICOLOGIST. A position is available immediately for a Ph.D. (or M.S. with experience) with expertise in aquatic toxicology to evaluate lethal and sublethal responses of estuarine fish to pesticides. Anticipated funding for 18 months at a salary up to \$30,000 per year, with opportunities for extension. Send curriculum vitae (with names of 3 references) to: **Dr. Bob Van Dolah, Marine Resources Research Institute, PO Box 12559, Charleston, SC 29422** by 15 April 1993 or call **803-762-5048** for more information. *The SCMRRI does not discriminate on the basis of race, sex, color, national origin, religion, age or disability.*



Avigen is an exciting new gene therapy company that is developing treatments for selected diseases using adeno-associated viral (AAV) vectors to insert genes into patients' cells. The company believes that its proprietary gene delivery system represents a major step forward in the clinical utility and commercialization of gene therapy. Our initial programs will be concentrated in the areas of sickle cell anemia, antivirals for HIV, and chemotherapeutic drug tolerance. The company has openings for outstanding individuals in the following areas:

Director of Research

This individual will be responsible for the overall direction of the company's research programs. Applicants must have a Ph.D. or M.D. and at least 10 years of post graduate experience in a cutting edge research environment. Candidates with a background in hematopoiesis and/or virology and at least 2 years experience in a biotech or pharmaceutical company, including management responsibilities, will be given a strong preference.

Virologist

The successful candidate will carry out innovative research in our exciting antiviral program. Applicants must have a Ph.D. or M.D. and post graduate research experience in molecular biology and virology, particularly HIV biology. Candidates with biotech experience will be given a preference.

Hematologist

This individual will conduct state of the art research in our sickle cell anemia program. Applicants must have a Ph.D. or M.D. and postgraduate research experience in hematopoiesis and molecular biology. Candidates should have previous experience in a biotechnology or pharmaceutical company.

Purchasing Manager/Laboratory Manager

This individual will set up and manage all aspects of the company's purchasing and laboratory support departments. Candidates with a BS and a strong technical background in molecular biology or cell biology will be given a preference.

Avigen is committed to providing exciting career opportunities to creative, highly motivated individuals. We are an equal opportunity employer. Submit resumes to: Human Resources, Avigen, Inc., 1201 Harbor Bay Parkway #1000, Alameda, CA 94501.

SENIOR SCIENTIST

Drug or Carcinogen Metabolism

The Biology and Biotechnology Research Program at Lawrence Livermore National Laboratory (LLNL) is seeking a senior scientist/principal investigator to join its expanding, multidisciplinary research team focusing on molecular carcinogenesis. The individual is expected to develop a program in metabolism that concentrates on the biotransformation of carcinogens in cell culture, animal models, and/or humans. Applicants with a background in pharmacogenetics and/or molecular biology are encouraged.

This is an independent research position for an individual with a commitment to a collaborative research environment. Postdoctoral experience or equivalent is required. Start-up funds are available. The BBR Program offers excellent research facilities and a competitive salary and benefits package.

For technical information contact: Dr. James Felton, Molecular Toxicology Group at 510-422-5658 or Fax 510-422-2282. Interested applicants are invited to send their CVs including references to: Phil Harding, Professional Employment Division, Lawrence Livermore National Laboratory, Dept. A93185BI, P.O. Box 808, L-725, Livermore, CA 94551-9900. U.S. Citizenship required. We are proud to be an Equal Opportunity Employer M/F/D/V.

University of California



DIRECTOR OF INTERDEPARTMENTAL PROGRAM IN MOLECULAR BIOLOGY AND BIOTECHNOLOGY

Hahnemann University is seeking an outstanding molecular biologist to enhance and direct an inter-departmental graduate program in Molecular Biology and Biotechnology. The Director will be expected to continue a competitive research program and participate in training students. The successful candidate (Ph.D., M.D., or M.D./Ph.D.) shall have a strong record of accomplishments in research and be qualified for a tenured appointment at the full professor level in the Department of Biological Chemistry.

Hahnemann University is a dynamic academic health center in central Philadelphia with more than 2000 students enrolled in the Graduate School, Medical School, and School of Health Sciences and Humanities. The Graduate School has over 700 Masters and Ph.D. students in 26 different programs, with major inter-disciplinary research programs in molecular biology, neuroscience, immunology, cardiovascular diseases, and neoplastic diseases. The current Molecular Biology Program includes faculty from the Departments of Anatomy, Biological Chemistry, Microbiology/Immunology, Neoplastic Diseases, and Pathology/Laboratory Medicine. Hahnemann University Hospital has 616 beds and is a modern tertiary care hospital.

Applications, including a curriculum vitae and names of four references, should be sent to:

**Molecular Biology
Search Committee
ATTN: Thomas M. Devlin,
Ph.D., Chair
HAHNEMANN UNIVERSITY
Mail Stop 411
Broad and Vine Streets
Philadelphia, PA 19102-1192**

Hahnemann University is an Equal Opportunity Affirmative Action Employer and invites and encourages applications and nominations from women and under-represented minorities

**Hahnemann
University**

POSITIONS OPEN

FACULTY POSITION FOR ACADEMIC YEAR 1993-94 PIMA COMMUNITY COLLEGE EAST CAMPUS

ENVIRONMENTAL TECHNOLOGY IN- STRUCTOR: (Open until filled)

REQUIREMENTS: A minimum of a Bachelor's degree in Environmental Engineering, Environmental Science or related education and three (3) years of directly related occupational experience are required. Teaching experience required. Must be able to teach in the following areas: water treatment and distribution; wastewater treatment and collection; hydraulics; mechanical maintenance; and related science courses. Experience in curriculum development and cooperative education. Demonstrated understanding of the multicultural needs of a southwestern community college student body.

PREFERENCES: Graduate work in environmental sciences. Experience in distribution and collection systems, cross-connection control, toxic and hazardous materials and solid waste. Ability to teach courses in toxic and hazardous materials and solid waste. Experience in grant writing. Applicants must qualify for regular Arizona community college teaching certificate. For an application and complete job announcement, including position requirements, call or write: **Pima County Community College District, Employment/Human Resources, P.O. Box 30120, Tucson, AZ 85702-3010, Telephone: (602) 884-6624; FAX: (602) 884-6290.**

Pima Community College is committed to multicultural diversity and is an Equal Opportunity/Affirmative Action Employer. Women, minorities and other protected classes are encouraged to apply.

VISITING FACULTY POSITION is available 1 May 1993 to study effects of zebra mussel grazing on phytoplankton in Maumee Bay, Lake Erie. Experience with chlorophyll and phosphorus analyses is desirable. Send curriculum vitae, copies of publications, statement of research experience and interests, and three letters of recommendation to: **Peter Fraleigh, Biology Department, University of Toledo, Toledo, OH 43606-3390. Equal Employment Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION: Immediate opportunity for a postdoctoral trainee in the area of synthesis and pharmacology of biologically active peptides. Strong background in organic or medicinal chemistry required. Familiarity with molecular modelling approaches preferred. *Must be U.S. citizen or hold a permanent resident visa.* Please send curriculum vitae and names of three references to: **Dr. R. J. Freer, Director, Biomedical Engineering Program, Box 694, Virginia Commonwealth University, Richmond, VA 23298-0694. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities are encouraged to apply.**

POSTDOCTORAL POSITION—ECOLOGICAL MODELING—Available immediately for Ph.D. in process modeling in plant physiology or plant ecology, systems ecology, or related area to help develop a global model of plant productivity and biogeochemical cycling for terrestrial ecosystems to be coupled to an Earth System Model for the study of global change. Send résumé, letter of application, transcripts, three letters of recommendation, and copies of relevant publications, to: **SANDY RAMBACH, LAWRENCE LIVERMORE NATIONAL LABORATORY, DEPARTMENT A93186PA, P.O. BOX 5510, LIVERMORE, CA 94550. Equal Opportunity Employer M/F/D/V.**

POSTDOCTORAL POSITION Adenosine Receptors/G proteins

We are investigating recombinant adenosine receptors and their interactions with recombinant G proteins. Projects include: expression of receptor chimeras and site-directed mutants; purification of epitope-tagged receptors and R-G complexes; preparation of antireceptor antibodies; reconstitution of homogeneous receptors and G protein subunits; evaluation of allosteric enhancers on human receptors and characterization of novel radioligands. Send curriculum vitae and names of three references to: **Joel Linden, Box 158 Health Sciences Center, University of Virginia, Charlottesville, VA 22908. An Equal Opportunity Employer.**

POSITIONS OPEN

THREE INSTITUTIONAL, 2 NIH PREDOCTORAL AND 6 NIH POSTDOCTORAL FELLOWSHIPS in cardiovascular and neurophysiology beginning 1 July 1992 at the University of California, Davis. **Review of applications is ongoing.** Preceptors (16) will direct individualized training programs to develop knowledge and technical skills required to become independent investigators. Candidates must have M.D. or Ph.D. degrees and be either *U.S. citizens or permanent residents*; M.D.'s must have completed all clinical training. Submit curriculum vitae to: **John Longhurst, M.D., Ph.D., Cardiovascular Medicine, TB172, University of California, Davis, CA 95616. The University of California is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to develop preclinical/laboratory program in vaccine development with emphasis on anti-idiotypic vaccines. Expertise in basic immunology and immunochemistry required. Previous work in development of anti-idiotypic vaccines with additional background in cellular immunology preferred. Please send curriculum vitae, bibliography and three letters of reference to:

**James L. Murray, M.D.,
University of Texas M. D. Anderson Cancer Center
Department of Clinical Immunology
and Biological Therapy—Box 41
1515 Holcombe Boulevard
Houston, TX 77030**

Equal Opportunity/Affirmative Action Employer. Smoke-free environment.

POSTDOCTORAL POSITION MOLECULAR SYSTEMATICS

The Department of Zoology, Brigham Young University solicits applications for a two-year postdoctoral research position in molecular systematics, to begin 1 June 1993 or earliest date thereafter. Successful applicant will participate in a program using cladograms derived from DNA sequence data for testing hypotheses of adaptation and historical biogeography. Research skills in collection and analysis of sequence data mandatory. Application materials should include curriculum vitae and three letters of reference; send to: **Dr. Jack W. Sites, Jr., Department of Zoology, Brigham Young University, Provo, UT 84602.**

POSTDOCTORAL POSITION available for recent (within past 36 months) doctoral degree recipient to study transport of inhaled toxicants to the central nervous system. Work will also include modeling of vapor uptake and xenobiotic metabolism in the respiratory tract. Ph.D. in a life science discipline including, but not restricted to, biochemistry, neuroscience, pharmacology, toxicology or pathology is required. Specific background related to project research not required. Successful candidate should have an interest in broadening his/her research scope and be able to work independently in an interdisciplinary environment. First year stipend of \$24,000 per annum plus health insurance, relocation allowance and leave benefits. *U.S. citizenship or permanent residency required.* Contact: **Dr. David E. Bice, Education Coordinator, Inhalation Toxicology Research Institute, P.O. Box 5890, Albuquerque, NM 87185, or call (505) 845-1257 for application materials. WE ARE AN EQUAL OPPORTUNITY EMPLOYER.**

POSTDOCTORAL POSITIONS IN NEUROSCIENCE

Three NIH-funded positions are available in a newly created Neuroscience department at the Chicago Medical School (CMS). Studies will focus on (1) cellular dopamine receptor distributions using molecular and fluorescence localization (Marjorie Ariano), (2) neurophysiological and behavioral roles of dopamine and glutamate receptors and their modification by chronic cocaine (Francis White), and (3) the roles of dopamine and glutamate in behavioral sensitization to amphetamine and cocaine using *in vivo* microdialysis (Marina Wolf). CMS is located on Lake Michigan in a beautiful, wooded area of Northern Illinois with easy access to both the Chicago and Milwaukee metropolitan areas. Send curriculum vitae with names and addresses of 3 references to: **Ms. Jane Landers, Department of Neuroscience, The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064-3095. FAX: (708) 578-3428.**

POSITIONS OPEN

JOINT INDUSTRIAL/ACADEMIC POSTDOCTORAL POSITION IN ANTI-INFLAMMATORY DRUG DISCOVERY RESEARCH

We seek applications from scientists interested in developing novel, quantitative assays applicable to anti-inflammatory drug discovery and investigations of the pharmacology and cell biology of adhesion macromolecules (selectins, integrins) or other inflammatory mediators. The candidate selected will work part-time at the University of Colorado Health Sciences Center, Denver, Colorado (Dr. F. A. Fitzpatrick) and part-time at the Monsanto Corporate Research Center near St. Louis, Missouri (Dr. Marshall Michener). Individuals with background or experience in analytical chemistry or physical chemistry are urged to apply: **c/o F. A. Fitzpatrick, Department of Pharmacology, C236, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262.**

The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

SCIENTIST/MOLECULAR BIOLOGIST

A **POSTDOCTORAL POSITION** is available at the Research Institute at Miami Children's Hospital for a Scientist with recent Ph.D. and experience in molecular biology or molecular cytogenetics. Eligibility for the American Board of Medical Genetics is desirable. Please send résumé to: **Ana Poveda, Human Resources, MIAMI CHILDREN'S HOSPITAL, 6125 SW 31st Street, Miami, FL 33155. Equal Employment/H/V.**

A **POSTDOCTORAL POSITION** is available for an individual with expertise in molecular biology or protein chemistry. This research focuses on molecular and cellular mechanisms of activation and signal transduction by bacterial endotoxin leading to eicosanoid and cytokine production.

Send curriculum vitae and two reference letters to: **Dr. James A. Cook, Professor of Physiology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425. Grant requires U.S. citizen or permanent resident status.**

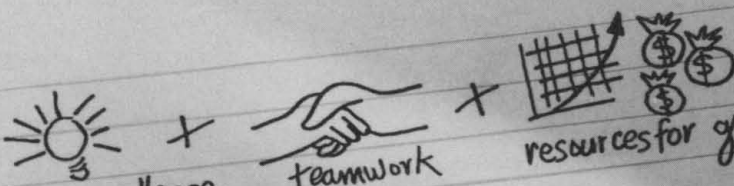
POSTDOCTORAL POSITION UNIVERSITY OF PENNSYLVANIA

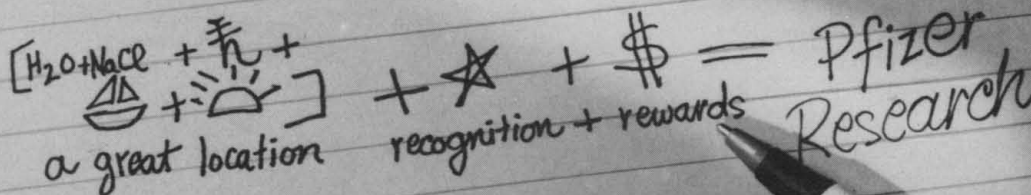
Postdoctoral position available in Hematology Division, Children's Hospital. Interests of the laboratory include structure-function relationships and regulation of expression of the vitamin K-dependent clotting factors and gene therapy of hemophilia B. Institutional resources include the newly established Institute for Human Gene Therapy at Penn. Interested candidates should send curriculum vitae, statement of research experience and interests, and names of three references to: **Dr. Katherine A. High, Hematology Division, Children's Hospital of Philadelphia, 34th Street and Civic Center Boulevard, Main Building, Room 5132, Philadelphia, PA 19104. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION: Opportunity to study integrated glucocorticoid/receptor regulation of gene expression in cultured cells and *in vivo*. Background in molecular techniques, plasmid preps, RNA isolation, hybridization assays, and transfection procedures essential; experience with receptor binding assays and gel shifts helpful. Position available July 1, 1993. Salary \$20,000 to \$25,000. Send curriculum vitae and statement of career goals to: **Tomas C. Welbourne, Ph.D., LSUMC-Shreveport, Department of Physiology, 1501 Kings Highway, P.O. Box 33932, Shreveport, LA 71130. LSU is an Affirmative Action Employer.**

POSTDOCTORAL POSITION IN MOLECULAR AND CELL BIOLOGY. Available immediately to investigate mechanisms of regulation of lipoprotein lipase, hepatic lipase and lipase binding—heparan sulfate proteoglycans at the transcriptional and posttranscriptional levels. Topics studied include: Dissection of promoter regions, purification, cloning and characterization of transcription factors, tissue specific expression. Experience with recombinant DNA necessary. Send résumé and names of three references to: **Dr. Andre Bensadoun, Professor, Division of Biological Sciences and Nutritional Biochemistry, 321 Savage Hall, Cornell University, Ithaca, NY 14853. Affirmative Action/Equal Opportunity Employer.**

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Pfizer is a lot more than a pharmaceuticals and healthcare industry leader. It's a group of people dedicated to discovering, developing and marketing innovative pharmaceuticals, animal health and food industry products that improve the quality of life worldwide. As a Fortune 100 company, Pfizer is committed to continuing its remarkable growth by investing close to a billion dollars annually in research and development.

If you have a BS or MS, 3-5 years relevant laboratory experience and strong theoretical knowledge, take advantage of this opportunity to join multi-disciplinary teams in one of the following areas:

Infectious Diseases – Prepare and maintain cultures of human pathogens used in *in vitro* and *in vivo* screens; take part in the implementation of new molecular technologies for the evaluation of antimicrobial agents.

Infectious Diseases, Molecular Biology – Utilize contemporary molecular biology techniques to assist in the identification and characterization of new antimicrobial targets.

New Leads – Be involved with the development/characterization and implementation of novel radioligand binding and enzyme high throughput screens.

Metabolic Diseases, Lipid Metabolism – Study biochemistry and physiology of cholesterol, bile acid and/or lipoprotein metabolism.

Protein Purification/Preparation – Be involved with the purification and preparation of proteins for structural studies which would include obtaining high purity protein samples, crystallizable material and heavy atom crystal derivatives.

Immune Suppression – Perform *in vivo* (transplantation) procedures, tissue culture, radioisotopic labeling, and work with unknown compounds and human tissue.

Our excellent benefits include competitive salaries, health and dental care, paid holidays and vacations, savings, investment and pension plans, and relocation assistance to our attractive Connecticut shore location.

To learn how you can be part of our success, please send your resume to: **Ms. Ellen Buller, Supervisor, Employee Resources, Central Research Division, Pfizer Inc, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



Central Research

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Postdoctoral Research Associates



The Agricultural Research Service, as the principal scientific research agency of USDA, conducts research to solve technical food and agricultural problems of broad scope and high national priority. The agency's work is carried out under six specific research objectives—conservation of soil, water and air, plant productivity, animal productivity, commodity conversion and delivery, human nutrition and well-being, and integration of systems. Overall aim of ARS research is to ensure the continuation of an adequate supply of food and fiber of high quality to meet the needs of American people and for export.

ARS is currently recruiting for 50 postdoctoral positions throughout the United States. Opportunities exist in many research areas, including:

- Human Nutrition
- Genetics
- Immunology
- Virology
- Biochemistry
- Chemistry
- Microbiology
- Animal Science
- Entomology
- Plant Physiology
- Plant Pathology
- Agronomy
- Soil Science
- Engineering

Successful candidates will be hired initially for up to 2 years in duration. Salary for these positions \$33,623 to \$40,298 (higher in parts of CA and NY) will be based on qualifications and experience. There are some employment restrictions for non-U.S. citizens.

For written descriptions of positions and application procedures, write to:

**J.M. Ruth
Personnel Division (SC)
USDA/ARS
6305 Ivy Lane, Room 129A
Greenbelt, MD 20770-1435
or call:
Julie Cypriano
(301) 344-0101**

ARS is an Equal Opportunity Employer

PRODUCT SPECIALIST

Applied Biosystems, a leading supplier of systems and tools for biotechnology research, is currently seeking a Marketing Professional. Based in the San Francisco Bay Area, you'll enjoy the natural beauty and cultural benefits of Northern California.

Applied Biosystems is seeking an outstanding candidate to market innovative equipment for sample preparation. The position offers an exciting opportunity to join a multidisciplinary team including chemists, software engineers, molecular biologists and marketers working on a broad range of application areas including genetic mapping, genetic linkage, DNA sequencing, sample tracking and mutation detection. Responsibilities will include market analysis, marketing plans, and focus for worldwide communication concerning product development and promotion.

A BS degree in a biological science and 3-6 years' molecular biology experience including research with this technology or similar product is required. An MBA is preferred.

We offer a competitive salary and generous benefits package. Please send your resume to: Applied Biosystems, Attn: Human Resources Ref. #1823, 850 Lincoln Centre Drive, Foster City, CA 94404. We are an equal opportunity employer.

 **Applied Biosystems**
A Division of Perkin-Elmer Corporation

MARINE ENVIRONMENTAL CHEMIST

The Marine Sciences Research Center of the University at Stony Brook, invites applications for an anticipated tenure track faculty position in marine environmental chemistry, effective September 1, 1993. A Ph.D. is required. Preference will be given to candidates at the level of assistant professor. This position is affiliated with the Center's Waste Management Institute. The Institute conducts basic and applied research on a spectrum of issues involving the management of municipal solid waste and waste disposal in coastal environments. Applicants should have an active research program in inorganic chemistry of aquatic/marine systems. Areas of interest include, but are not limited to the chemical stabilization of waste materials, fate and transport of contaminants in coastal waters and municipal solid waste treatment technologies. It is expected that the successful candidate will develop an active research program in accordance with the goals of the Waste Management Institute and will teach courses in his/her specialty. He/she will be expected to secure three months salary through external grants or contracts. Applicants should send a resume, statement of interests and names of at least three references to: Dr. J. Kirk Cochran, Marine Sciences Research Center, The University at Stony Brook, Stony Brook, NY 11794-5000

Deadline for application: April 30, 1993

The University at Stony Brook is an equal opportunity educator and employer. Women and minorities are strongly encouraged to apply.



STONY BROOK

**DEAN
COLLEGE OF AGRICULTURE & LIFE SCIENCES
VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY**

Virginia Polytechnic Institute and State University (Virginia Tech) invites nominations and applications for the position of Dean of the College of Agriculture & Life Sciences. The Dean reports to the Senior Vice President & Provost and has responsibility for the College, Virginia Cooperative Extension, and the Virginia Agricultural Experiment Station. The Dean oversees all aspects of the academic program, including faculty affairs and finances.

The College encompasses 15 degree programs in agriculture and life sciences, and has approximately 290 faculty, 285 Extension agents with faculty status, 500 support staff, and approximately 300 graduate and 1,000 undergraduate students.

Preference will be given to candidates who have demonstrated strong academic leadership. This will include a record of accomplishment in teaching, research and extension as well as a commitment to collaboration with other constituencies internal and external to the University. The successful candidate will also have a record of commitment to affirmative action. Review of applications began Feb. 15 and will continue until the position is filled. Virginia Tech is committed to diversity among its faculty and staff and particularly encourages applications from women and minorities. Nominations are also invited. Communications should be addressed to:

**Dr. James Wolfe
Vice Provost for Academic Affairs
201 Burruss Hall
Virginia Tech
Blacksburg, VA 24061-0132
(703) 231-6122
FAX (703) 231-7211
Bitnet: Wolfe @ VTVM1**

VPI&SU is an Equal Opportunity, Affirmative Action Employer.

KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH

Kuwait Institute for Scientific Research (KISR) is a nonprofit organization actively engaged in applied research in the fields of environmental and earth sciences; water resources; food resources; engineering; petroleum, petrochemicals and materials and technoeconomics.

KISR has a vacancy in the following field:

MICROBIAL/ENVIRONMENTAL BIOTECHNOLOGY

Major duties:

Leading and investigating research and development projects for the numerous fields of application of biotechnology, such as: biochemical process scale-up, applied fermentation technology, advanced bioremediation processes for contaminated soil/water, wastewater technology and management.

Qualifications:

Applicants should have a Ph.D. in Biochemical Engineering (Microbiology, Biochemistry) or any related biological sciences with 10-15 years of experience.

KISR offers attractive tax free salaries commensurate with qualifications and experience and generous benefits that include; gratuity, free furnished and airconditioned accommodation, school tuition fees for children, six weeks annual paid vacation, air tickets, free medical care and life insurance.

Interested applicants are requested to send their Curriculum Vitae with supporting information not later than one month from the date of this publication, to:

**Personnel Manager
Kuwait Institute for Scientific Research
P.O. Box 24885
13109 Safat—KUWAIT.**

Postdoctoral Positions Biology and Biotechnology Research Program

The Biology and Biotechnology Research Program at the Lawrence Livermore National Laboratory has an expanding program to investigate the interaction of chemicals with DNA. This is part of a larger program to investigate the cancer and mutation risk posed by chemicals present in the diet and the environment. We currently have the following postdoctoral opportunities available.

Toxicology

We are seeking a postdoctoral fellow with a recent Ph.D. to work as part of an interdisciplinary team of biologists, biochemists and toxicologists, to study processes of DNA adduction and the use of DNA adducts as biomarkers of carcinogen exposure and effect. This position requires a Ph.D. in Biochemistry, Toxicology, Pharmacology or related field. Applicants having experience in ³²P-postlabeling, analytical toxicology, pharmacokinetics, and/or animal handling will be preferred. Some experience with DNA chemistry, mass spectrometry and immunoassays is desirable. Appointments will be initially for two years with the possibility for a 1 year extension, depending on funding and project status. For further technical information contact Kenneth Turteltaub, Ph.D. Molecular Toxicology Group, (510) 423-8152 or FAX (510) 422-2282. Dept. #A93183BI.

Molecular Toxicology

The Molecular Toxicology Group is inviting applicants for a 2-3 year postdoctoral position. We are looking for a synthetic chemist to work with a large multidisciplinary group studying the interaction of chemicals with DNA. The applicant should have a Ph.D. in Chemistry, Pharmacology or equivalent with a background in organic synthetic chemistry. Candidates with a specific background in DNA chemistry will be preferred. For further technical information contact Dr. James Felton, Molecular Toxicology Group Leader, (510) 422-5658 or FAX (510) 422-2282. Dept. #A93184BI.

Interested applicants are invited to send their CVs including references and indicating appropriate Department number to: Phil Harding, Professional Employment Division, Lawrence Livermore National Laboratory, PO Box 5510, L-725, Livermore, CA 94551. U.S. citizenship preferred. We are proud to be an Equal Opportunity Employer. M/F/D/V.

University of California

 **Lawrence Livermore
National Laboratory**

POSITIONS OPEN

POSTDOCTORAL POSITIONS IMMUNOLOGISTS

Available immediately at Vanderbilt University School of Medicine. Research involves design and development of new approach to vaccines. Training in immunology, lipid/liposome chemistry or peptide/protein chemistry is essential. Send curriculum vitae and names of three references to: **Dr. James P. Tam, Vanderbilt University, Department of Microbiology and Immunology, A-5119 Medical Center North, 1161 21st Avenue South, Nashville, TN 37232-2363, U.S.A. Vanderbilt University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION in molecular neurobiology is available immediately to study regulation of proliferation and differentiation of neuroblasts. Project includes characterization of genes involved in transition from proliferation to differentiation. Job requires experience in molecular biology and cell culture. Please send curriculum vitae, statement of interests and names of three references by March 20, 1993, to: **Howard Nornes, Department of Anatomy and Neurobiology, Colorado State University, Fort Collins, CO 80523. (Telephone: 303/491-5791; FAX: 303/491-7907).**

POSTDOCTORAL POSITION VASCULAR BIOLOGY— LOCAL AGENT DELIVERY

Available immediately to investigate *in vivo* models of atherosclerosis and post-angioplasty restenosis with specific emphasis on several approaches for local agent delivery. Research involves the mechanisms of restenosis as well as studies of placement of vascular cell-modulating agents directly into the vascular wall. Prior experience with animal research is beneficial but not required. Competitive stipend and an opportunity to make important contributions are available. Contact: **Dr. Keith L. March, Krannert Institute of Cardiology, 1111 West 10th Street, Indianapolis, IN 46202; Telephone: (317) 630-8257; FAX: (317) 274-9697.**

POSTDOCTORAL POSITION—Available to study molecular basis of cellular resistance to oncogenic transformation in novel revertant cell lines [see *Mol. Cell. Biol.* 12:3117 (1992)]. Experience in molecular biology and cell culture preferred. Highly motivated individuals with an interest in molecular carcinogenesis are encouraged to apply. Competitive salary plus benefits. Send curriculum vitae, statement of research experience and interests, and names of three references to: **Dr. Robert S. Krauss, Department of Biochemistry, Box 1020, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

POSTDOCTORAL POSITION, available spring 1993, to study the olivocerebellar circuitry using chronically implanted arrays of microwires. Network properties correlated with changes in motor performance, such as synchronized olivary oscillations, will be under investigation. Neurosteroid effects on this system will also be examined. Please send curriculum vitae and three letters of recommendation to: **Dr. Sheryl S. Smith, Department of Anatomy, Institute of Neuroscience, Hahnemann University, Broad and Vine, Philadelphia, PA 19102-1192. FAX: 215-762-1982, Telephone: 215-762-4407.**

POSTDOCTORAL POSITION. Available immediately to study oligosaccharides expressed by human skin cancers via immunological and cell biological techniques. The Institute has a cooperative, non-profit research environment with emphasis on infectious disease and cell signalling, and is affiliated with the University of Washington. Send curriculum vitae and names of referees to: **Dr. F. Symington, Telephone: 206-284-8846, Seattle Biomedical Research Institute, 4 Nickerson Street, Seattle, WA 98109. Equal Opportunity Employer.**

POSTDOCTORAL POSITION to study endoclear/intracellular ion concentrations and potentials in the rat cochlea model. The focus of the research is the endocrine regulation of inner ear fluid microhomeostasis. Candidates should possess a relevant doctorate degree and experience. Please contact: **Kyle E. Rarey, Ph.D., University of Florida Health Science Center, Department of Anatomy and Cell Biology, P.O. Box 100235, Gainesville, FL 32610-0235, USA. Telephone: (904) 392-3420; Facsimile: (904) 392-3305.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to study molecular aspects of pathogenesis of infection caused by *Staphylococcus aureus*. Approaches currently include use of glycopeptide-resistant mutants to study virulence determinants in an animal model, study of the molecular mechanisms of glycopeptide resistance in staphylococci and evaluation of the role of iron metabolism in experimental staphylococcal infections. Please send curriculum vitae and names of three references to: **Robert Daum, M.D., Professor of Pediatrics, University of Chicago, 5841 South Maryland Avenue, MC6054, Chicago, IL 60637.**

HARVARD SCHOOL OF PUBLIC HEALTH POSTDOCTORAL POSITION

Applications are invited for a postdoctoral position to investigate how cells respond to DNA damage. We have cloned bacterial, yeast, human and mouse DNA repair genes whose products prevent mutation and/or cell death. Our goals are to understand their *in vivo* roles and to further explore other pathways that protect cells against the effects of damage from chemical mutagens. Experience in molecular biology and biochemistry is required. Please send curriculum vitae and three letters of reference to: **Dr. Leona D. Samson, Molecular and Cellular Toxicology, 665 Huntington Avenue, Boston, MA 02115.**

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available for candidates with experience (1) in molecular biology, to clone and study expression and regulation of dioxin inducible genes in avian liver and (2) in signal transduction and lipid metabolism, to study dioxin actions in liver, epithelial and cardiac cells. Send curriculum vitae, names of three references and a statement of research interests to: **Dr. Arleen Rifkind, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. An Equal Opportunity/Affirmative Action Employer, M/F/V.**

STAFF AND POSTDOCTORAL POSITIONS

RATIONAL ENZYME REDESIGN—Use MD simulations to study structure-function-dynamic relations of enzymes to propose experimentally testable modifications to alter enzyme specificity and efficiency in order to improve environmental biodegradation of recalcitrant pollutants, as well as other biotechnologically oriented objectives of interest to the U.S. Department of Energy.

PROTEIN-DNA COMPLEX SIMULATIONS—Use MD simulations to study protein-DNA complex structure-function-dynamic relations to better understand the basis for molecular recognition and induced-DNA lesion recognition/repair as well as gene regulation.

Interaction with experimental collaborators and publication productivity are essential. Modeling and simulation experience plus a good working knowledge of protein and/or protein-DNA biophysical chemistry preferred. Starting stipend for postdoctoral candidates is at least \$36,000. Send résumé (include e-mail address), representative publications, and names of three references (include telephone numbers). For consideration as a postdoctoral candidate, doctoral degree must have been awarded within last 3 years. Staff position consideration requires a significant history of accomplishment. Starting date for these positions is flexible. Location: National Laboratory in southcentral Washington State. Contact: **Dr. Rick L. Ornstein, Molecular Science Research Center, Battelle-Pacific Northwest Laboratory, P.O. Box 999, K1-95, Department 5077BAH, Richland, WA 99352. Funding for these positions is from the Office of Health & Environmental Research of the U.S. D.O.E. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately to study the regulation of expression of extracellular matrix-degrading enzymes implicated in tumor invasion and metastasis. Experience in molecular biology desirable. Send curriculum vitae and names of references to: **Dr. Douglas Boyd, Department of Tumor Biology-108, M.D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030. The University of Texas, M.D. Anderson Cancer Center is an Affirmative Action/Equal Opportunity Employer and applications from females and minority group members are strongly encouraged.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS (2) are available 1 April 1993 to study fate of soil erosion and contaminants in Maumee Bay, Lake Erie. Experience with HPLC, GC, and/or AA is desirable. Send curriculum vitae, copies of publications, statement of research experience and interest, and three letters of recommendation to: **Peter Fraleigh, Biology Department, University of Toledo, Toledo, OH 43606-3390. Equal Employment Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOW: A position is available immediately for a postdoctoral fellow to participate in studies using *in situ* hybridization to explore human vascular disease. The goal of these studies is to define factor(s) synthesized locally in the vessel wall which contribute to inflammation, thrombosis, smooth muscle differentiation and/or proliferation in atherosclerosis and post-angioplasty restenosis. Previous experience in molecular biology, pathology, and/or cell biology is desirable. Send curriculum vitae and names of three references to: **Dr. Josiah N. Wilcox, Drawer AJ, Department of Medicine, Emory University, Atlanta, GA 30322. We are an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOW (NEUROSCIENCE) to work in CNS cellular electrophysiology; intracellular recording experience necessary. Fellow will investigate topics in excitability control of hippocampal neurons *in vitro* using whole-cell voltage-clamp and single-channel recording techniques. Salary commensurate with experience. Available approximately September 1993. Curriculum vitae and names of references to: **B. E. Alger, Ph.D., Department of Physiology, University of Maryland School of Medicine, 655 West Baltimore Street, Baltimore, MD 21201, USA. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP. University of California/San Francisco General Hospital. A position is available immediately in a program to study the molecular mechanism of membrane fusion during secretion by human leukocytes. The immediate focus is on the role of calcium-dependent membrane binding proteins (annexins) in reconstituting secretion in a permeabilized cell system. Requirements include a Ph.D. and experience in general cell biology techniques and protein purification. Send curriculum vitae and names of three references to: **Dr. Joel Ernst, Box 0868, University of California, San Francisco, CA 94143-0868. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS in endocrinology, metabolism, and diabetes for M.D. or Ph.D. graduates are available at Emory University School of Medicine. Projects in: osteoblast signal transduction/gene regulation; sphingolipids and cell regulation; neuroendocrine neuropeptide neurobiology; molecular genetics of growth; protein kinase C in cancer/heart; signal transduction; regulation of cytochrome P450; regulation of adipose tissue metabolism; molecular regulation of IGFs/IGFBPs; and glucose transporter molecular regulation. *Must be U.S. national or permanent resident. M.D. applicants must have U.S. residency experience.* Send curriculum vitae, statement of research and career objectives, and two letters of reference to: **Lawrence S. Phillips, M.D., Program Director, Emory University School of Medicine, 69 Butler Street, S.E., Atlanta, GA 30303. An Equal Opportunity Employer.**

Two **POSTDOCTORAL FELLOWSHIPS** in atherosclerosis research: (1) Focus will be the role of lipoprotein lipase in stimulating molecular interactions of atherogenic lipoproteins with specific cell-surface proteoglycans (*J. Clin. Invest.* 88:1300, 1991; *J. Biol. Chem.* 267:13284, 1992). (2) Focus will be the function of a cholesteryl esterase in hepatic and intestinal cholesterol and retinoid metabolism (*PNAS* 86:6913, 1989; *Arteriosclerosis & Thrombosis* 12:295, 1992). Techniques for both areas involve cell and molecular biology, including cell transfection and transgenic models. Position supported by NIH training grant with stipend supplementation. *Must be U.S. citizen or permanent resident.* Send cover letter indicating your area of interest and curriculum vitae with names of three references to either: **Dr. Kevin J. Williams or Dr. Edward A. Fisher, Department of Biochemistry, Medical College of Pennsylvania, 2900 Queen Lane, Philadelphia, PA 19129; (FAX: 215-843-8849). Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION IN MICROBIOLOGY AND IMMUNOLOGY

The Department of Microbiology and Immunology, University of Health Sciences/The Chicago Medical School, invites applications for tenure/tenure-track faculty position at the rank of **ASSOCIATE OR FULL PROFESSOR**. Applicants must have a Ph.D. and/or M.D. degree with solid training, research experiences, and interests in **medical virology, molecular biology or immunogenetics**. The successful candidate will be expected to bring and establish a strong extramurally funded research program in the field of **Molecular Virology/Immunology** and to participate in teaching medical and graduate students. The Department has established strength in the areas of Molecular Biology and Immunology. The salary will be commensurate with qualifications and a negotiable starting date. Applicants should send curriculum vitae, a brief outline of current and future research plans, and the names of at least three references to: **Yoon Berm Kim, M.D., Ph.D., Professor and Chairman, Department of Microbiology and Immunology, University of Health Sciences/The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064.**

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Senior Research Investigator

Searle, a world-wide leader in the research, development, and manufacture of ethical pharmaceuticals, is seeking a Senior Research Investigator in our Cardiovascular Discovery Group who shares our vision of excellence.

The position's key responsibilities will be in conducting biochemical analysis of antiplatelet/ antithrombotic agents including supervising in-vitro screening of new compounds and development of studies using monoclonal antibodies and flow cytometry to further characterize compound and receptor interactions.

A Ph.D. in Biochemistry or related field and experience with receptor binding and enzyme studies is required. Applicants with flow cytometry experience and post-doctorate work in the field of platelets and integrin biology are preferred.

Searle offers a challenging, professional environment for career expansion as well as a competitive compensation and benefits package.

For consideration, please send your resume to: Searle, Human Resources, Dept. PB42, 4901 Searle Parkway, Skokie, IL, 60077. An equal opportunity employer M/F/H.



RESEARCH

As an emerging biotechnology/pharmaceutical company, **PeptiMed** is focusing its research efforts on several novel peptides involved in regulation of the gastrointestinal system. We're focusing on the role of growth factors in erosive and inflammatory mucosal diseases, the brain-gut axis, motility disorders and hepatic and pancreatic regeneration. In our multidisciplinary environment, we're involved with a broad range of technologies. To further our research we are looking for new members for our team.

SENIOR SCIENTIST Protein Purification

This is a hands-on, senior-level position in protein purification. You should have at least 3 years post-doctoral experience with many purification methodologies, especially HPLC. An exceptional candidate with a master's/BS and equivalent experience will also be considered. You will be involved in preparation of several novel peptides/proteins for analysis as well as developing and optimizing chromatographic methods for purification of peptides/proteins.

ASSOCIATE SCIENTIST Molecular Biology

The ideal person will have experience in several molecular biology techniques: DNA library construction and cloning, plasmid preparation, PCR, DNA sequencing, etc. We are looking for someone with a master's or bachelor's degree and several years experience.

PeptiMed is an equal opportunity employer and welcomes inquiries from qualified women and minorities.

For consideration, please forward your resume to:

Human Resources,
PeptiMed Inc.,
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**SPACE RESERVATION DEADLINE:
TUESDAY, MARCH 9, 1993**

**DEAN OF THE COLLEGE OF SCIENCES AND ENGINEERING
THE UNIVERSITY OF TEXAS AT SAN ANTONIO**

The University of Texas at San Antonio invites applications and nominations for the position of Dean of the College of Sciences and Engineering. UTSA is a comprehensive public metropolitan university located on the edge of the Texas hill country, serving approximately 17,000 students. The city of San Antonio, which combines a rich cultural heritage with a modern emphasis on technology, research and education, is a dynamic multicultural environment with a population of over 1.5 million in the urban area.

The College of Sciences and Engineering has approximately 118 full-time equivalent faculty and 4,000 students in the disciplines of Biology, Chemistry, Geology, Physics, Computer Science, Mathematics, Statistics, and Electrical, Civil and Mechanical Engineering. In addition to twelve undergraduate programs and ten master's degrees offered by four academic divisions, the College has recently added a doctoral program in Biology with an emphasis in Neurobiology, the University's first free-standing doctoral program. Doctoral programs in Computer Science and Engineering are in the planning stages, complemented by a \$10 million private fund campaign to support Ph.D. program development.

The Dean, who reports to the Provost and Vice President for Academic Affairs, provides dynamic academic and administrative leadership for the College. The Dean interacts with administrators to help create and implement a vision of the role of science and engineering within a metropolitan university. In addition to the Dean's state and national leadership, he/she also plays an active role in promoting science and engineering on the campus, in the surrounding community, and throughout South Texas.

The successful candidate must have an earned doctorate in one of the College disciplines, an outstanding record of ongoing research and teaching sufficient for the rank of tenured professor, and at least three years of successful academic administrative experience. The applicant must have the ability and demonstrated leadership skills to develop new doctoral programs and maintain high standards in existing programs. He or she must be committed to excellence in both teaching and research and to strategic planning as a means to innovate program development. The applicant's record must also demonstrate expertise in budget management, faculty recruitment and development, and performance evaluation in a research setting. Other requirements include: the ability to assist faculty in seeking extramural research support; ability in private fund development and corporate relations; and the capacity to evaluate a broad spectrum of academic scholarship within the sciences and engineering. He or she must have a record of effective working relationships with faculty, students and administrators, and have demonstrated the ability to communicate effectively with a culturally diverse campus and community. In addition, the applicant should have demonstrated success in recruiting and supporting women and minority students and faculty.

The position has a starting date as early as August 1, 1993, or a date as soon thereafter as practical, preferably no later than September 1. Salary is competitive and commensurate with qualifications and experience. Review of candidates will begin on April 1, 1993. Applications and nominations received after this initial deadline will be accepted and reviewed on a bi-weekly cycle as necessary until the position is filled. Candidates should forward a letter of interest, resume, and the names, addresses and telephone numbers of at least three references to:

Dr. Brenda J. Claiborne, Chair
Search Committee for Dean of the College of Sciences and Engineering
Office of the Provost
The University of Texas at San Antonio
6900 North Loop 1604 West
San Antonio, Texas 78249-0603

The University of Texas at San Antonio is an Equal Employment Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

**Mexico-U.S. Foundation for Science
EXECUTIVE DIRECTOR**

The Mexico-U.S. Foundation for Science, a binational private non-profit institution, was established in September 1992 with initial funding of \$4 million, equally subscribed by the Governments of Mexico and of the USA, to promote scientific and technological research cooperation and collaboration on problems of common interest.

The Executive Director position requires a knowledge of science and technology applied to research, education, and joint economic development of Mexico and the USA; Ph.D. or equivalent related to development such as natural or computer sciences, ecology/environment, economics, health or science policy; at least 6 years related experience, and demonstrated administrative, networking and fund raising ability. Must be bilingual. Relevant experience in both countries with binational, international or national organizations preferred.

Venue and Application Instructions

Working location is Mexico City. Mexican and U.S. nationals may apply; salary and benefits will follow guidelines for senior official within the Mexican economy. The initial term is mid-1993 through September 1995. Applications by April 15, 1993 to:

Dr. Guillermo Soberón, Chairman, Board of Governors, Mexico-U.S. Foundation for Science, Avenida Contreras 516, 4oPiso, Col. San Jerónimo Lídice, México 10200, D.F. México. EOE

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RESEARCH
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**Senior Staff Member for Scientific Affairs
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Candidate will be responsible for providing leadership, direction and coordination for scientific efforts of the Association. He/she is expected to identify emerging key scientific issues and provide the Association's leadership with the foresight and direction that will put the Association at the forefront in dealing with these issues. She/he is expected to attain a recognized visible "presence" in Washington as a distinguished representative of this scientific membership society.

Candidate must possess an advanced degree in the pharmaceutical sciences or a closely related field. Experience in serving on scientific panels, committees, and task forces is desirable but not required. Service in a related capacity in which the candidate has functioned as a scientific spokesperson, testified before legislative bodies, or handled contacts with the press or broadcast media is desirable. The successful candidate must possess the ability to articulate scientific concepts and subject matters to a wide audience, including the public and press; and must have demonstrated an ability to approach and resolve differences in a logical and fair manner.

Salary and position title commensurate with qualifications and level of experience. Send c.v. or resume to Chairperson of Search Committee:

Jerome A. Halperin, Executive Director
United States Pharmacopeia
12601 Twinbrook Parkway
Rockville, MD 20852



**Postdoctoral Position
in Cancer Research**

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has an immediate opening that involves the characterization of the role of tyrosine phosphorylation in the mitogenic signal transduction pathways of tumor models in the in vivo setting. The work will be targeted to the development of predictive models that will enable an improved understanding at the in vivo biochemical level of the potential therapeutic effects of inhibitors of mitogenic signalling.

Requirements include a recent Ph.D. in cell biology, biochemistry, pharmacology or related discipline with research experience in the area of growth factor receptor function and associated signal transduction pathways at the biochemical and cellular level. Working knowledge of relevant molecular and cell culture techniques and willingness to work with small animals are essential.

Interested individuals should send their resume to **Box JDM-PD85, Human Resources Department, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. "Smoke-Free Work Environment"**

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Challenging Scientific Opportunities

LIGAND Pharmaceuticals, an acknowledged leader in the field of intracellular receptor technology, seeks to provide novel drugs for the treatment of human disease. Currently we are seeking to fill two Scientist positions.

CELL BIOLOGIST / SCIENTIST

This individual will establish a basic research program integrated with other members of the Oncology Group and will complement our ongoing studies on chemoprevention and chemotherapy.

Qualified individuals should be trained in cancer cell biology with emphasis on cancers of epithelial origin. Experience in establishing and evaluating *in vitro* models of cancer/carcinogenesis, growth control and inhibition is desired. Additional expertise in one or more of the following areas will be given particular attention: primary cell culture, growth factors, cytokines, apoptosis, intracellular receptors, differentiation therapy, histochemical techniques, including immunocytochemistry and *in situ* hybridization. PhD and 2-4 years' postdoctoral experience required.

CARDIOVASCULAR SCIENTIST

This individual will concentrate on cardiovascular disease, with primary emphasis on a research program focusing on transcriptional regulation of HDL and LDL.

Qualified candidates should have a broad and basic knowledge of cardiovascular disease. Experience in establishing and evaluating transcriptional control of apolipoprotein metabolism, *in vitro* assays and models of lipid regulation, general techniques in molecular biology and biochemistry. Additional expertise in one of the following areas is desirable including, primary hepatocytes and hormonal control and molecular mechanisms responsible for HDL/LDL metabolism. PhD and 2-4 years' postdoctoral experience required.

LIGAND provides an exciting intellectual environment with modern research facilities. We offer a competitive salary and benefits package, a premier team of colleagues and ample opportunities to have scientific impact. Please forward your c.v. to: LIGAND Pharmaceuticals, Human Resources / Dept. CB, 9393 Towne Centre Drive, San Diego, CA 92121. EOE.



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Research and development is the foundation of our success. We're Schering-Plough Research Institute, an internationally respected pharmaceutical organization with over \$4 billion in annual sales around the world. At present, we spend over \$500 million annually in scientific research, and we plan to increase this amount almost 20 percent every year over the next five years.

In addition, in December 1992, we completed a new, \$300 million drug discovery facility, providing our scientific professionals with the latest in technical resources.

Commitment of this scope means significant opportunities for research scientists.

We are seeking a Senior Scientist to join our Department of Drug Metabolism and Pharmacokinetics; and to work in the areas of nonclinical and clinical pharmacokinetics, and collaborate with the Departments of Toxicology and clinical Pharmacology to conduct nonclinical and clinical studies on investigational drugs. A PhD in Pharmacokinetics/Biopharmaceutics with 0-3 years of industrial/post-doctoral experience, excellent interpersonal and communication skills, and the ability to work both independently and as part of a multidisciplinary team, are essential.

We offer a salary commensurate with your experience and education, a generous benefits package and the opportunity to join a prestigious organization with a firm commitment to research. For confidential consideration, please send your c.v. and the names, addresses and telephone numbers of three references, to: Mr. William Decker, Human Resources Manager-Research, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer.

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Research Institute**

Opportunities for Senior Scientists in Multi-disciplinary Research Program

The U.S. Environmental Protection Agency (EPA) is seeking senior (GS-11/14) scientists with expertise in ecological monitoring and assessment to lead exploratory research activities for the national Environmental Monitoring and Assessment Program (EMAP). EMAP is an innovative, multi-agency program designed to estimate status and trends in the condition of our nation's ecological resources. Applicants should possess technical proficiency in terrestrial, freshwater, marine, and/or landscape ecology. Experience with ecological indicators, monitoring at regional and national scales, and/or multiple-resource integration is highly desirable.

Contracts management responsibilities constitute approximately 25% of the work in these positions. U.S. citizenship is required.

Positions for exemplary scientists will be located at EMAP's technical center in the Research Triangle Park area of North Carolina. EMAP-Center provides a stimulating research environment with many opportunities for scientists:

- Access to area research universities and science facilities
- Interaction with the national and international scientific community
- Research support that allows senior scientists to remain active in their research fields
- Leadership role in an innovative ecological research, monitoring and assessment program
- Competitive salary

Applications will be accepted through March 18, 1993. Please request applications from:

U.S. Environmental Protection Agency
Human Resources Management Division (MD-29)
Research Triangle Park, NC 27711
Attn: Dorothy Carr - EMAP
(919)541-3014

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DIRECTOR— CENTER FOR THE MANAGEMENT, UTILIZATION AND PROTECTION OF WATER RESOURCES

Tennessee Technological University invites applications and nominations for the position of Director, Center for the Management, Utilization and Protection of Water Resources. This is a twelve month, tenure-track position at the rank of professor. Salary is negotiable. A Ph.D. in a discipline related to water resources is required. A distinguished record of research and publication, excellent communication and interpersonal skills, a record of promoting interdisciplinary research and working effectively with interdisciplinary teams, and a record of attracting and administering research funding are required. The Director, reporting to the Dean of Engineering, will be responsible for all aspects of the Center's operations which include assisting research teams and individuals in obtaining research funding; administering interdisciplinary research programs; interfacing with academic departments and centers, research and regulatory agencies, professional societies and industry; promoting educational opportunities for students; making budget decisions; and advancing the mission of the Center. Screening of applications will begin May 10, 1993, but the applicant pool will remain open until the position is filled. Submit letter of application, resume, a self-assessment in relation to position requirements and responsibilities, and five references to Dr. Karl Rajan, Chairperson, Water Center Director Search Committee, Box 5004, Electrical Engineering Department, Tennessee Technological University, Cookeville, TN 38505, Phone (615) 372-3398. TTU is an AA/EEO/ADA employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP IN PHARMACOKINETIC MODELING. Two-year postdoctoral position available June 1, 1993, for a highly motivated graduate with experience in pharmacokinetics and computer technology. Candidates with a strong background in statistics and math will also be considered. Individual will receive training and conduct physiologically based toxicokinetic modeling with an active toxicology research group. Please send résumé, statement of interests and two letters of reference to: **Dr. James V. Bruckner, College of Pharmacy, University of Georgia, Athens, GA 30602-2356.**

POSTDOCTORAL POSITIONS

Postdoctoral **RESEARCH FELLOWSHIPS** available in respiratory neurobiology and sleep. Projects employ: neuroanatomic and neuropharmacologic methods including tract-tracing, immunofluorescence, receptor autoradiography, and *in situ* hybridization; molecular biology; systems electrophysiology and patch clamp techniques; chronic physiologic monitoring in animal models; and human research including radiologic imaging, behavioral assessments, and epidemiology. Training for two years is available July 1, 1993, for U.S. citizens or permanent residents with a Ph.D., V.M.D./D.V.M. or M.D. Interested candidates should write to: **Dr. Allan I. Pack, M.D., Ph.D., 991 Maloney Building, 3400 Spruce Street, Philadelphia, PA 19104-4283** to obtain further details.

TULANE MEDICAL CENTER TULANE REGIONAL PRIMATE RESEARCH CENTER DEPARTMENT OF PARASITOLOGY

POSTDOCTORAL ASSOCIATE is sought to join a multidisciplinary group working on Lyme disease. The task is the molecular cloning of newly identified antigens of *Borrelia burgdorferi*. These antigens are vaccine candidates. Please send curriculum vitae and names of three references by March 31, 1993, to: **Dr. Mario T. Philipp, Head, Department of Parasitology, Tulane Regional Primate Research Center, Covington, LA 70433.** Tulane University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE position available immediately to study neurotoxicity of organophosphate pesticides. Experience in developmental neurobiology and neurochemistry is desired. Potential to interface with broad spectrum of methodologies including analytical, neurochemical and neurobehavioral procedures. A Ph.D. in pharmacology/toxicology, neurobiology or related field is necessary. Interested individuals should send curriculum vitae and names of three references to: **Dr. Carey Pope, Division of Pharmacology and Toxicology, School of Pharmacy, Northeast Louisiana University, Monroe, LA 71209-0470.** Northeast Louisiana University is an Equal Opportunity Employer. Applications are encouraged from women and members of minority groups.

POSTDOCTORAL RESEARCH ASSOCIATE POSITION in the Laboratory of Cellular and Molecular Pharmacology, National Institute of Environmental Health Sciences (NIEHS), in Research Triangle Park, North Carolina, is available to study calcium regulation and its role in cell signaling with modern techniques of fluorescence microscopy and digital imaging. The successful candidate should have experience and demonstrated expertise in the following areas: techniques for studying calcium metabolism in populations of intact or permeabilized cells using either radioactive calcium or fluorescent calcium indicators; microinjection of small mammalian cells; use of flash photolysis of "caged" precursors in studies of single cells; digital imaging of calcium in single cells using ratioing type fluorescent dyes. Initial appointments are for two years with the possibility of annual renewals for three additional years. Salary range is \$30,000 to \$45,000, commensurate with experience. For additional information, contact: **Dr. James Putney at 919-541-1420.** For prompt consideration, send cover letter, curriculum vitae and names of three references by **April 5, 1993** to: **Mr. Bruce Wiggins, NIEHS Personnel Office (HV66), P.O. Box 12233, Research Triangle Park, NC 27709.** An Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE VESTIBULAR PHYSIOLOGY

A position is available in a multidisciplinary group studying vestibular influences on motor and autonomic control. Experience using standard neurophysiological techniques is required. Please send curriculum vitae and the names of three references to: **B. Yates/V. Wilson, Laboratory of Neurophysiology, The Rockefeller University, 1230 York Avenue, New York, NY 10021; (FAX: 212/327-8530).** An Equal Opportunity Employer.

A POSTDOCTORAL RESEARCH ASSOCIATE position is available for a recent Ph.D. graduate to study molecular mechanisms controlling cell cycle and cell death processes in neoplastic cells. Applicants should have a strong background in molecular biology techniques including cloning, directed mutagenesis, and use of retroviral vectors. Send curriculum vitae with names of three references to: **Dr. J. Houghton, Department of Molecular Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101.** An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE to start immediately for **Ph.D. MOLECULAR BIOLOGIST** with experience in standard molecular biology techniques. This could lead to a faculty position. The research work is performed in a large, multidisciplinary laboratory. Salary and benefits are competitive. Apply to: **D. J. Baylink, M.D., Jerry Pettis VA Medical Center (151), 11201 Benton Street, Loma Linda, CA 92357.**

RESEARCH ASSOCIATE—Research of the afferent and efferent arterioles of the kidney, small blood vessels which crucially control the function of the kidney and blood pressure. Research involves highly specialized techniques of microdissecting these vessels by hand (using forceps) and perfusing them with glass pipettes to study how these vessels react, utilizing microperfusion of the vessels and microassay of renin. Required: M.D. in Medicine, two years of experience in position offered or two years of experience as Resident Physician. Two years of experience must include work in microsurgery and research involving microdissection and microperfusion. Forty hours per week; 9:00 a.m. to 5:00 p.m.; salary: \$33,345 per year. *Must have legal authority to permanently work in the United States.* Send résumés to: **7310 Woodward Avenue, Room 415, Detroit, MI 48202, Reference Number 68392.** Employer paid ad.

RESEARCH ASSOCIATE. Parasitology with strong research background in tropical disease. 3 years of relevant experience. Ability to work independently. Experience with developing monoclonal antibodies against various epitope on malarial protein. **Dr. E. Perry-Thornton, M.D., FCAP, F. Bertoli Research Foundation, 4120 3rd Avenue South, Birmingham, AL 35222.** Equal Opportunity Employer committed to a smoke-free work environment.

CUTANEOUS BIOLOGY RESEARCH CENTER (CBRC) MASSACHUSETTS GENERAL HOSPITAL/ HARVARD MEDICAL SCHOOL TRANSGENIC-ES CELL CULTURE RESEARCH LABORATORY ASSOCIATE

A position as Research Laboratory Associate is available in the CBRC for an individual with demonstrated ability to organize and supervise a transgenic and ES cell culture facility. The individual should have an M.S. or a Ph.D. and/or proven ability to manipulate early mouse embryos successfully. Salary is competitive and commensurate with experience. Curriculum vitae, and names, addresses, telephone and FAX numbers of three referees should be sent to:

**Paul F. Goetinck, Ph.D.
Associate Director for Research
Cutaneous Biology Research Center
MGH-East, Building 149
Charlestown, MA 02129
FAX: (617) 726-4189**

The Massachusetts General Hospital/Harvard Cutaneous Biology Research Center is a Committed Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans and handicapped individuals are encouraged to apply.

POSITIONS OPEN

RESEARCH ASSOCIATE I. Study of different routes of immunization and antigen delivery systems in animal models; blood sample collection; serum extraction and processing; anesthetizing animals; administration of agents to stimulate flow of secretions; collection processing and assaying for virus-specific antibodies in the samples; **B.S. in medical sciences or related, plus 2 years of vaccine research.** The hours are 8:00 a.m. to 5:00 p.m., 40 hours per week. Annual salary: \$19,900. Contact: **Sandra T. Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222.** RE: Job Order #4074176.

ETH Zürich, Institute of Plant Sciences/Phytomedicine RESEARCH ASSOCIATE (Oberassistent/in) in Applied Entomology

We are seeking a creative and cooperative scientist with strong expertise and postdoctoral experience in host insect-parasitoid interactions.

Responsibilities include: (1) research together with graduate and undergraduate students on herbivore-parasitoid interactions including qualitative and quantitative studies on searching behaviour using state-of-the-art technology; (2) participation in teaching (in German) and administration.

Send curriculum vitae, publications and three references to: **Prof. Dr. Silvia Dorn, Institute of Plant Sciences, Applied Entomology, ETH Zentrum, Clausstrasse 21, CH-8092 Zürich.**

RESEARCH ASSOCIATE needed for research in plant molecular biology and plant biochemistry with a goal towards improving quality and quantity of plant lipids in oil seed crops. Cloning of gene(s) that code for enzymes in plant lipid biosynthesis by constructing and screening plant DNA library; sequencing of the cloned genes; construction of transgenic plants with the cloned gene to change plant oil composition; analysis of plants to determine levels of enzyme activity and oil composition; responsible for communication of research findings via written and oral presentation in scholarly journals and scientific conferences respectively. Requirements: Ph.D. in Food Science. Degree specializing in plant lipid molecular biology. One graduate course each in: (1) plant physiology, (2) molecular biology; two graduate courses in biochemistry. Three months of experience in Food Science. Experience must include use of DNA library construction and DNA sequencing techniques. Forty hours per week, 9:00 a.m. to 5:00 p.m., salary \$24,233.50 per year. Send résumés in duplicate (no calls) to: **Jan Davies, JO# 1325899, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.** *Must have proof of legal authority to work permanently in the United States.*

BIOLOGIST. Dickinson College seeks applicants for a one-year sabbatical replacement position, preferably in Cell Biology. Teaching responsibilities include introductory and upper-level courses. Send curriculum vitae, statement of teaching and research interests, transcripts, and three letters of recommendation to: **Dr. William B. Jeffries, Department of Biology, Dickinson College, Carlisle, PA 17013-2896.** Applications will be accepted until the position is filled, beginning 5 March 1993. Dickinson is a highly selective liberal arts college with an emphasis on innovative undergraduate science education. Dickinson is an Affirmative Action/Equal Opportunity Employer.

BIOCHEMIST/RESEARCH ASSOCIATE to conduct research on p53 functions as a tumor suppressor. Design and conduct experiments to study the mechanisms of p53 transactivation. Prepare reports and participate in projects. Requirements: Ph.D. in Biochemistry with research emphasis on biochemistry and molecular biology. Demonstrated abilities in protein purification, phosphorylation, sizing analysis and molecular cloning. Familiarity with transcription techniques and virus preparation.

Job location/interview: Los Angeles. Salary: \$31,400 per year. Send this ad and résumé to **job #cc5681, P.O. Box 269065, Sacramento, CA 95826-9065**, no later than March 20, 1993.

Manager Health Services Research

The Management Decision and Research Center (MDRC) in the Health Services Research and Development Service (HSR&D) of the Department of Veterans Affairs is seeking a manager for its database coordination unit. The unit supports the MDRC in its programs of:

- organization and management research using clinical and administrative databases
- consultation to VHA senior management and policy makers
- technology assessment
- information dissemination

The position is national in scope and provides outstanding opportunities for both research and consultation. As part of the MDRC management team, the individual would have a major role in the MDRC's development and in health care issues of national importance.

An outstanding background in health services research and use of large scale databases is required. Candidates should have an M.D., Ph.D. or equivalent degree. The position is located in Boston.



For more information, please contact:
Martin P. Charns, D.B.A., Director,
MDRC, VA Medical Center (152-M),
150 S. Huntington Avenue, Boston,
MA 02130; (617) 278-4433. An equal
opportunity employer.

POSTDOCTORAL SCIENTIST

Gene Expression Sciences

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an exciting opportunity for a Postdoctoral Scientist to join its Gene Expression Sciences research team.

The selected candidate will identify, clone and characterize novel genes in the yeast *Saccharomyces cerevisiae* involved in cytoplasmic signal transduction aimed at understanding the mechanism of action of immunosuppressive drugs (see Mol. Cell. Biol. 11:1718, 1991; Gene 108:73, 1991; Gene 111:85, 1992).

Requirements for this position include a Ph.D. in Molecular Biology or a related biological science and a strong background in recombinant DNA techniques (experience in yeast genetics is highly desirable). The candidate also should possess a proven record of scientific achievement as evidenced by publications in major scientific journals. SmithKline Beecham postdoctoral scientists are strongly encouraged to publish research findings.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, as well as a stimulating and challenging work environment. For confidential consideration, please submit your C.V. and the names of three references to: SmithKline Beecham Pharmaceuticals, Senior Employment Administrator, #H0532A, PO Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.

PROJECT LEADER

Ross Laboratories, a division of Abbott Laboratories and the leading manufacturer of pediatric and medical nutritional products, has an excellent opportunity for an experienced professional with a Ph.D in Food Science.

Responsibilities include identifying formulations, manufacturing procedures and shelf stability characteristics of new medical foods. The selected candidate will be assigned projects with a high degree of technical responsibility, be expected to secure cooperation with outside vendors and sister divisions, as well as be accountable for the successful completion of project work. This individual will be an independent contributor to endeavors and must clearly communicate with technical and non-technical disciplines. Expertise in Food Science/biochemistry of proteins, lipids and carbohydrates, and the interaction of these ingredients in food matrices is required. Minimal travel is necessary. Industrial experience is preferred, but not needed.

Ross Laboratories offers an excellent compensation and benefits program in a smoke-free workplace. Qualified individuals should send their resume and salary history in confidence to: Manager, Division Employment, Dept. 1000.



ROSS LABORATORIES

Division of Abbott Laboratories, USA
625 CLEVELAND AVENUE
COLUMBUS, OHIO 43216

An Equal Opportunity Employer, M/F

ROSS LABORATORIES

RESEARCH

Join Our Family.

One of Connecticut's leading health care systems, combining the resources and caring values of Saint Francis Hospital & Medical Center, Mount Sinai Hospital, and BlueRidge Center, is seeking candidates for the position of

RESEARCH SCIENTIST

Bone Biology

Saint Francis Campus

Candidates will join our NIH-supported Bone Biology Laboratory, to work on molecular and cellular biology of the bone. Completion of a doctoral degree and a postdoctoral fellowship is required, with prior molecular and cellular biology experience. Candidates will be eligible for an appointment at the University of Connecticut School of Medicine.

Interested candidates should send a resume and references to: **Dr. Ernesto Canalis, Director, Department of Research, Saint Francis Hospital and Medical Center, 114 Woodland Street, Hartford, CT 06105-1299**



SAINT FRANCIS
Hospital and Medical Center



MOUNT SINAI
HOSPITAL



BlueRidge Center

EEO/AA - M/F/D/V
Pre-Employment Drug Testing

DIRECTOR OF CLINICAL PHARMACOLOGY

WALLACE LABORATORIES, the ethical pharmaceutical division of Carter Wallace, is seeking an individual with an MD and/or PhD in Biological Science to take a leadership role in our clinical research environment.

Overall position responsibilities will entail designing, conducting and interpreting results of human pharmacology studies. This may include studies of tolerability, evidence of therapeutic activity and the mechanisms of action.

The position requires a proven manager with a minimum of 5 years relevant experience with Phases I through III plus a knowledge of Pharmacokinetics and Clinical Pathology. In addition, the successful candidate will be computer literate, and be able to interface with the FDA and clinical investigators.

Join a company with a tradition of developing top quality products. We offer a competitive starting salary and excellent benefits. For immediate consideration, send your resume with salary history to: Keith I. Jones, Employment Manager, CARTER-WALLACE, INC., P.O. Box 1001, Half Acre Road, Cranbury, NJ 08512-0181. An Equal Opportunity Employer M/F

CARTER-WALLACE, INC.



U.S. ENVIRONMENTAL PROTECTION AGENCY UNIVERSITY PARTNERSHIP RESEARCH AGREEMENT

The United States Environmental Protection Agency's Environmental Criteria and Assessment Office (ECAO) announces its intent to establish a collaborative research relationship with an educational institution by competitive cooperative agreement in the form of a University Partnership Research Agreement (UPRA). The duration of this UPRA will be 5 years, with an option for a single non-competitive renewal of up to 5 years subject to EPA review and finding of acceptable performance during the initial award. The approximate funding level will be \$500K/year. The purpose of this UPRA is to provide long term support for general environmental assessment projects to include ECAO indoor air research and risk assessment activities. Universities and other educational institutions are encouraged to submit a written request for the solicitation package if they are interested in, and capable of, providing support to ECAO scientists in 1) the assessment of environment pollutants, particularly indoor air pollutants and pollutant mixtures in accordance with standard EPA guidelines and emerging EPA methods, 2) the conduct of multidisciplinary indoor air research in the areas of engineering, exposure monitoring, toxicology, epidemiology and risk assessment, and 3) the organization and administration of international symposia or workshops to bring together experts from NATO countries to discuss state of the art methods and issues related to sampling, analysis and risk assessment of pollutants, particularly nonindustrial indoor air pollutants. The UPRA is likely to involve interaction with other organizations in the RTP, NC area that are currently supporting EPA indoor air risk assessment activities. No telephone requests for the solicitation package will be accepted. Written requests for the solicitation package should be mailed to "ECAO University Partnership Solicitation (MD-52), U.S. EPA, RTP, N.C. 27711." Completed proposals that respond to this solicitation package must be postmarked or received at this address on or before March 26, 1993. Any proposals that are postmarked or received after March 26, 1993 will not be considered. All cooperative agreement proposal packages will be evaluated by a panel of independent peer reviewers for scientific merit. An additional internal EPA review panel will evaluate the proposals for organizational capability, the extent and nature of the proposed collaborative relationship with ECAO, and relevance to ECAO's mission. Preliminary notification concerning award is expected in July or August, 1993.

CAREERS IN SCIENCE: A LOOK AT THE FUTURE

SCIENCE 18 September Reprint

A sequel to last year's "Careers in Science" issue, this 62-page special section takes an in-depth look at career opportunities in science. Is industry the new route to success for scientists in the 90's? In a detailed overview, globalization, the refocusing of R&D, and the need for versatility are among the trends examined to help answer this question.

Among the other topics explored in this special section include:

- Physics Famine: A Search for Job Stability
- The Euro Postdoc: National Barriers are Crumbling
- The Attractions of Biotech Careers Over Academia
- Career Opportunities for Environmental Scientists

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Alcon Laboratories, with sales over \$1 billion and a 5 year R&D budget over \$500 million, has the distinction of possessing the world's most sophisticated ophthalmic research laboratories. We are currently establishing a new Receptor Binding Laboratory, creating an opportunity for the following professional.

SENIOR SCIENTIST-RECEPTOR BINDING

The successful candidate will develop, validate and troubleshoot radioligand binding assays for various receptor systems. Selection criteria include a Ph.D. in Biochemistry/Pharmacology with industry or academic post doc experience conducting receptor binding assays and analyzing data using computer-assisted curve fitting programs. Cell/tissue culture experience preferred.

Located in **Fort Worth, Texas**, Alcon offers you both personal and career rewards, including competitive salary/benefits, relocation assistance and recreational, cultural and economic advantages indigenous to the Sunbelt. Please send C.V. to: Alcon Laboratories, Inc., Placement and Development, T1-3 (SS-RB), P.O. Box 6600, Ft. Worth, TX 76115.

Equal Opportunity Employer, M/F/D/V
Principals Only, Please

Alcon[®]
LABORATORIES

PANLABS, INC., a bioscience service company located in the greater Seattle area, is expanding its U.S. Laboratory.

Ph.D. SCIENTIST Microbiology (Position #92-48)

The successful candidate will have a thorough grounding in microbial physiology. Responsibilities include strain improvement and media optimization. Experience in optimizing production of secondary metabolites desired. Opportunity for individual to move into project management. Requires Ph.D. in Microbiology (2+ years of applicable experience), good communications skills and the ability to work in a team setting.

Submit resume/cv with the names, addresses and phone numbers of three references to:

PANLABS, INC.
Attn: Human Resources, #92-48
11804 North Creek Parkway South
Bothell, WA 98011
or FAX information to:
206-487-3787
(include Position #)



PANLABS

An Equal Opportunity Employer

CANCER GENETICS RESEARCH

The Bristol-Myers Squibb Pharmaceutical Research Institute is the R&D Division of Bristol-Myers Squibb, a worldwide leader in the discovery and development of pharmaceuticals. Currently, we have two research positions available in our recently established Human Genetics Laboratory. Research includes analysis of new candidate tumor suppressor genes in a variety of human tumors, and interactive research projects in cell biology, developmental biology and molecular biology.

- This position requires extensive experience with DNA sequencing. Individual will be responsible for managing a core sequencing facility that includes performing routine DNA sequencing using an ABI automated sequencer (experience with this technology is highly desirable), computer analysis of sequencing data, and management of sequence data. Ability to work independently is important for this position, as is the ability to work well with others. The opportunity to perform basic research on genetic changes occurring during tumorigenesis will also exist. Please reply to **Dept. PRI/JW-48**.

- This position will involve performing experiments on mutation of tumor suppressor genes in human tumors. Some experience with the following techniques required; southern and northern blotting, PCR, agarose and polyacrylamide gel electrophoresis, preparation of DNA from tissue and/or bacterial cultures, and basic micro biological techniques. Please reply to **Dept. PRI/JW-49**.

Please forward your resume with appropriate department number to: **Bristol-Myers Squibb Pharmaceutical Research Institute, P.O. Box 4000, Princeton, NJ 08543**. Equal Opportunity Employer, M/F/H/V.



Bristol-Myers Squibb Company



Associate Research Scientist

NYU Medical Center currently has a POSTDOCTORAL position available. A research-oriented biostatistician is sought to join a multi-disciplinary team conducting epidemiologic studies of the human health effects of air pollution. Current projects include a time series analysis of daily air pollution, weather, and mortality data from the 40 largest U.S. metropolitan areas, spatial modelling of population ozone exposures across the U.S., and design and analysis of field studies addressing the acute and chronic respiratory effects (e.g., asthma exacerbations, lung function decline) of air pollution. The Nelson Institute of Environmental Medicine at New York University Medical Center is a leading center for environmental health research, with its main research facilities located in the 18,000 acre Sterling Forest, 40 miles northwest of Manhattan. Candidates should have an advanced degree, a working knowledge of statistical methods and associated computer software (e.g., SAS) for analyzing longitudinal and cross-sectional data, and experience in handling large data sets.

Please send C.V. and three references to **Maha Singh, Human Resources Dept., NYU Medical Center, 550 First Ave., New York, NY 10016**. Resumes must be received by **March 29**. EOE/M/F.

To all interested in glycoconjugate research: The XII International Symposium on Glycoconjugates will be held August 15-20, 1993 in Cracow, Poland.

Recently at the request of Symposium participants the organizers have added new topics to the program. Topics already planned: Biological role of protein and lipid glycosylation; Neurobiology of gangliosides; Biological functions of proteoglycans; Development and cancer; Control of glycoconjugate metabolism, including novel pathways and enzyme inhibitors; Molecular biology of glycosyltransferases and carbohydrate-trimming enzymes; Carbohydrate-mediated recognition; Recombinant glycoproteins, Intracellular sorting and recycling; Transmembrane signalling; Host-pathogen interactions; Carbohydrates in immunology; Experimentally induced changes in cell glycoconjugate profiles; Structural analysis. Plenary speakers for these topics are: K. Sandhoff, G. Tettamanti, E. Ruoslahti, M. Fukuda, D.H. van den Eijnden, J.B. Lowe, J.C. Paulson, J. Montreuil, R. Pohlmann, G.W. Hart, S. Hakomori, D.M. Marcus, Y. Nagai, A. Dell. New additions: Synthesis of glycans and glycoconjugates (chemical and enzymatic); Medical aspects of glycoconjugate research; Mucins and mucin genes; Tissue expression of blood group antigens; Sialic and polysialic acids. Due to expansion of the program and the courtesy of the publishers (who agreed to receive a few abstracts after the original deadline) the organizers have set a new deadline for receipt of abstracts for **April 10, 1993**.

Information:

Prof. J. Koscielak
Institute of Hematology and
Blood Transfusion, ul.
Chocimska 5, 00957, Warsaw,
Poland, tel. (48)-(22)-48-95-15
FAX (48)-(22)-48-89-70

POSITIONS OPEN

ECOLOGIST/WORKSHOP FACILITATOR

Nationally known, nonprofit educational research institution seeks person for primary role in developing and implementing NSF-funded teacher-training program to get high school teachers and their students involved in collaborative research with ecologists. Research, test, and/or develop necessary teacher and student materials, run summer and school-year workshops for teachers and ecologists. Qualifications: Ph.D. in Ecology; teaching experience including workshop leadership; management experience; excellent writing skills; sense of humor. Salary \$38,000 to \$45,000 per year; to start April 1993. Three-year project. Addresses of 3 references, teaching-related writing sample, and résumé, please. Contact: Dr. Prassede Calabi, TERC, 2067 Massachusetts Avenue, Cambridge, MA 02140. FAX: 617-349-3535. EMail: Prassede_Calabi@terc.edu.
Equal Opportunity Employer.

TENURE-TRACK position for **NEUROSCIENTIST** whose research interests focus on mechanisms of locomotor function. Individual with strong research program in behavioral and/or electrophysiological methods is preferred. The Department has diverse strengths in Neurobiology, including a research group using a variety of cellular, molecular, tissue grafting and electrophysiological methods to promote and evaluate recovery after spinal cord injury. Rank and salary commensurate with experience. Curriculum vitae and three names of references should be sent to: **Marion Murray, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, 3200 Henry Avenue, Philadelphia, PA 19129.**

MOLECULAR MEDICINE/GENE THERAPY: GEORGETOWN UNIVERSITY. Candidates are being sought with research expertise in molecular medicine related to human gene therapy for leadership role in department-wide program in immunology. Candidates with a wide variety of interests will be considered. Research based in clinical areas will be a major component of this program. Candidates should have an M.D. degree and be capable of developing an independently funded research program. Candidates should send curriculum vitae to: **Paul Katz, M.D., Vice-Chairman, Department of Medicine, Georgetown University Medical Center, 3800 Reservoir Road, Washington, DC 20007.** *Georgetown University is an Equal Opportunity/Affirmative Action Employer.*

SCIENTIST (Research and Development)

Immediate opening for individual (preferably Ph.D.-level) to work in R&D laboratory committed to preventing disease transmission by blood transfusion. Primary responsibilities will include projects on *T. cruzi* and bacterial contamination of blood products. Experience in immunoassay development, multicenter studies and project management required. Familiarity with parasitology desirable. Send curriculum vitae and three references to: **Roger Dodd, Ph.D., HOLLAND LABORATORY, Department of Transmissible Diseases, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855.** *Equal Opportunity Employer, M/F/V/H.*

COMMODITY INDUSTRY SPECIALIST (SCIENTIFIC INSTRUMENTS)

The International Trade Administration is offering a position as Program Manager for the Florence Agreement Program. Requirements include: Knowledge of scientific equipment including electronic and technical measuring equipment and skill in preparing technical writings. Preference will be given to applicants with scientific publications to their credit. Benefits include: Government retirement system and tax deferred savings plan with 3-year vesting and government matching contributions; matching of private sector salaries and recruitment bonuses; health and life insurance eligibility and immediate vacation and sick leave benefits. *Must be a U.S. citizen.* Submit SF-171 to:

U.S. Department of Commerce
ITA Personnel—Room 4808
14th & Constitution Avenue, N.W.
Washington, D.C. 20230

Indicate announcement #93-51 in block #1 of page 1 of the SF-171. *An Equal Employment Opportunity Employer.*

POSITIONS OPEN

WILDLIFE BIOLOGIST, Sirenia Project, National Ecology Research Center (NERC), U.S. Fish and Wildlife Service, Gainesville, Florida. Position emphasizes telemetry and population ecology of manatees. Knowledge of computer simulation models for estimation of population parameters, and radio telemetry and analysis of radio tracking data are important. A degree (Ph.D. preferred) with major study in biology, zoology, or related field plus strong background in statistics. Position will be filled at the GS-11 level (\$32,423 per year). *An Equal Opportunity Employer.* Inquiries and requests for application materials should be sent to: **Peggy Colby, NERC, 4512 McMurry Avenue, Ft. Collins, CO 80525.** Telephone: 303-226-9393.



PHARMACOKINETICIST Ph.D.

Rapidly growing company specializing in drug delivery, CNS, and CV drug research seeks outstanding individual with experience in pharmaceuticals, pharmacokinetics, physiology, and *in vivo* animal research to work with a team on oral drug delivery. Strong supervisory skills essential. State-of-the-art research facilities located in southern Westchester County, New York. Submit résumé to: **Human Resources—Research, Pharmaceutical Discovery Corporation, 7 Westchester Plaza, Elmsford, NY 10523.**

THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

invites applications for the post of MOLECULAR BIOLOGIST

at the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture in Vienna, Austria.

Responsibilities: To assist in the use of molecular biology techniques in plant breeding and genetics, crop production and protection, with particular reference to crop problems in developing countries.

Requirements: Advanced university degree (Ph.D. or equivalent) in agriculture/biology with emphasis on molecular biology. At least seven years of professional experience in molecular genetics of plants, including the use of nuclear techniques. Working knowledge of English, French or Spanish.

Benefits: The post carries a net salary per year (inclusive of a variable element for post adjustment) from US\$63,146 to US\$79,151 (without dependents) and US\$67,928 to US\$85,625 (with dependents). Other benefits of the International Civil Service.

Please send detailed curriculum vitae no later than 31 March 1993 quoting VA 283-AGE to: **Central Recruitment, FAO, Via delle Terme di Caracalla, 00153 Rome, Italy; Telex: 610181 FAO I; Telefax: 57973152.**

AGRICULTURAL SPECIALIST I

Regular full-time position at New Mexico State University's (NMSU) Agriculture Science Center (ASC) at Alcalde, New Mexico. Assist in horticultural and agronomic field research at Center and on farms. **MINIMUM QUALIFICATIONS:** B.S. degree in horticulture or related field, M.S. preferred. Minimum of 1 year of related experience. Ability to do field research. Computer data analysis skills. Experience in operating small-scale farm machinery. Valid driver's license. Ability to work well with others essential. Bilingual English/Spanish preferred. Submit letter of application, résumé, university transcripts, and three letters of reference postmarked by March 31, 1993, to: **Dr. Steve Guldán, ASC, P.O. Box 159, Alcalde, NM 87511.** Telephone: 505-852-4241. *NMSU is an Equal Opportunity/Affirmative Action Employer.*

TERRESTRIAL ECOLOGIST (ZOOLOGY/BOTANY). Tenure-track research position. Emphasis on population structure and dynamics, management, nature conservation and effect of environmental conditions. Candidates with at least one year of postdoctoral experience should submit curriculum vitae, list of publications, and request 3 letters of reference. Send to: **Prof. Avital Gasith, Institute for Nature Conservation Research, Tel-Aviv University, Ramat-Aviv 69978, ISRAEL.** Also available **POSTDOCTORAL POSITIONS** in aquatic and terrestrial ecology (including toxicology).

POSITIONS OPEN

SENIOR TOXICOLOGIST. Responsible for managing and performing regulatory toxicology studies for new pharmaceuticals and chemicals, acute through chronic, in all species. Participation in R&D projects a possibility. Seeking a Ph.D. in toxicology with 3 to 5 years of experience in a pharmaceutical or contract laboratory environment. Excellent oral and written skills is a must; board certification would be a plus. Suburban Maryland location. Mail résumé or curriculum vitae to: **Human Resources, Southern Research Institute, Frederick Research Center, 431 Aviation Way, Frederick, MD 21701-4756.**

PART-TIME CONSULTING POSITIONS

AVAILABLE. The Futura Institute is conducting a global assessment of recent advances in the field of toxicology. The current focus is on China and is limited to research in the areas of animal/insect/plant toxins, neurotoxicology, toxins, synthetic toxins, and mutagenic toxins. Work involves evaluating current research in China. Travel/relocation not required. Flexible hours. Qualified applicants will possess Ph.D.'s and have recent work experience in China. Native language fluency is required. Foreign scientists on temporary visa status are especially encouraged to apply. Send curriculum vitae and summary of research/work experience to: **Futura Institute, P.O. Box 2988, Laurel, MD 20709.** Confidentiality is assured. *The Futura Institute is an Equal Opportunity Employer.*

ELECTROPHYSIOLOGY POSITION—Division

of Cardiology: Long Island Jewish Medical Center (LIJ) invites applications for research Electrophysiology position. Adjunct appointment at Hofstra University possible for qualified candidates. Doctoral degree required. Successful candidate will have strong background in signal processing and computing, and background in bio-mathematical modeling or working knowledge of neural network theory and implementation. Ability to independently design and implement systems essential. Position involves evaluation and processing of large amounts of data in new and innovative ways. Must be effective team leader and direct and oversee the research of several graduate students and postdoctoral fellows. Salary commensurate with qualifications and experience. Send résumé and three references to: **Dr. Steven J. Evans, Director, Cardiac Electrophysiology, LIJ, Room 2135, New Hyde Park, NY 11042.** Telephone: (718) 470-7333; FAX: (718) 343-9762. Long Island Jewish Medical Center is the Long Island Campus for the Albert Einstein College of Medicine. *An Equal Opportunity Employer.*

FOREST ECOLOGIST

The University of Georgia, Warnell School of Forest Resources, invites applications and nominations for a 12-month, tenure-track position beginning as early as July 1993. The appointment will be made at the **ASSISTANT PROFESSOR** level. Candidates are expected to conduct independent research and to teach appropriate graduate and undergraduate courses in forest ecology. Please submit curriculum vitae, statements of research and teaching interests, reprints, and four letters of reference to: **Dr. Bruce C. Bongarten, Warnell School of Forest Resources, The University of Georgia, Athens, GA 30602; Telephone: (706) 542-2686, FAX: (706) 542-8356.** Closing date is April 15, 1993. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

OsteoArthritis Sciences, Inc. is a drug discovery company in Cambridge, Massachusetts. We are developing novel treatments for osteoarthritis (OA) and related connective tissue diseases and are committed to scientific excellence. The company is currently seeking a **CREATIVE SCIENTIST** to study protease mediated cartilage breakdown in OA. The successful candidate should have a Ph.D. in biochemistry or related field with extensive experience in protease research. Specific experience in cartilage metalloproteases is a plus. Send curriculum vitae to: **OsteoArthritis Sciences, Inc., One Kendall Square, Building 200, Cambridge, MA 02139.**

Research Scientist- Population Modelling

\$A41,929 to \$A56,531 + Superannuation

Division of Fisheries, Hobart, Tasmania, Australia.

We are seeking an experienced and innovative scientist to research the population dynamics of commercially important temperate Australian fish populations, with a specific emphasis on evaluating and modelling the spatial structure of exploited marine populations. Specific approaches would include quantification of movement and mixing rates from tagging experiments, the analysis and development of fishery databases and the development and evaluation of management strategies including risk assessment. Initially, the appointee will play a major role in a multi-organisational research program on southern shark and in scientific and management discussions relevant to the fishery.

You will need a PhD or equivalent experience in quantitative zoology, fisheries biology, or similar, together with a strong background in mathematics, statistics and the development of mathematical and computer models for biological systems.

You should have a superior record of innovative research achievements and the capacity to communicate research findings to a wide variety of audiences.

The Project Leader, Dr John Stevens, can provide more information on the position, our selection criteria and career opportunities by telephoning +61-2-206 222, fax +61-2-240 530 or telex AA57182. The position is indefinite (**tenured**) and assistance with relocation costs is provided.

Please send applications addressing the selection criteria and including details of your qualifications and experience and the names of two referees, quoting Reference No FC93/2SCI to: **The Human Resources Manager, CSIRO Division of Fisheries, GPO Box 1538, Hobart, Tasmania, 7001, Australia**, by 16 April 1993



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SCIENTIST ANTIBODY DEVELOPMENT

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You will lead a group performing *in vitro* characterization of novel therapeutic agents based on human-sequence antibodies produced in transgenic mice. Immunohistological characterization of human monoclonal antibodies will be a major part of the project, along with development of appropriate functional assays to select candidate antibodies. Additionally, you will play a major role in the investigation of B-cell development and immunoglobulin expression in transgenic mice.

The qualified candidate will be a highly motivated, team-oriented professional with a PhD in Immunology, Pathology or Cell Biology and 2+ years of related postdoctoral experience. You should be familiar with immunohistology, including human histology, and have some experience with T-cell immunology.

RESEARCH ASSOCIATES

Two positions are available requiring experience in hybridoma development or immunohistology.

GenPharm offers an excellent compensation and benefits package with stock option program. Please send your c.v. and the names of three references along with a cover letter to GenPharm International, Attn: Leslie Flint, 297 N. Bernardo Ave., Mountain View, CA 94043. EOE.



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INTERNATIONAL

Research Pharmacologist

Merck Research Laboratories, a leader in the discovery and development of pharmaceutical and biological products, is currently offering an excellent opportunity for a research pharmacologist in the Department of Cardiovascular Pharmacology.

The successful candidate will take major responsibility in the development of novel, therapeutic agents for the treatment of cardiovascular disease.

Candidates must have a Ph.D, M.D. or equivalent degree, successfully completed at least two (2) years post-doctoral training, and a strong record of achievement in cardiovascular research. Specific experience with *in vivo* pharmacological preparations, including primates, is highly desirable.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia.

Please send curriculum vitae with cover letter to: **Personnel Manager, AD #D-4, MRL Human Resources WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486**. EEO/AA/V/Employer.



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The successful candidates will have a Ph.D or equivalent postgraduate research experience in a relevant scientific discipline. For the senior position, at least four years experience in pharmaceutical clinical research and development, including the preparation of IDBs, IND documentation and the clinical sections of NDAs is required. For the junior position, a minimum of two years post-doctoral or equivalent experience with a demonstrated clear, high quality writing style is necessary. The ability to critically review, synthesize and clearly explain complex technical data is essential for both positions. Some foreign travel is required.

We offer competitive salaries, a generous benefits package and significant opportunities for professional development. For consideration, please send a cover letter with your resume and salary history/requirements, indicating position desired, to: **Ms. Lynn Harac, Staffing Dept. LH103CS, Hoffmann-La Roche Inc., Nutley, New Jersey 07110-1199.** We are an equal opportunity employer.

ROCHE**Hoffmann-La Roche**

The Coming School of Ocean Studies at the Maine Maritime Academy invites applications for a full-time position in Ocean Studies. The department offers a B.S. degree in Ocean Studies and has five faculty members with research and teaching interests in marine biology, geology, chemical and physical oceanography. A Ph.D. is desirable in oceanography or related field. Applicants should be interested in teaching at the undergraduate level and developing a research program that would involve undergraduates. Teaching experience is desirable. The successful applicant will be expected to teach introductory oceanography and basic chemistry to non majors in addition to oceanography courses for ocean studies majors. Applicants with expertise in physical, geological, chemical or meteorological oceanography and related disciplines are encouraged to apply. Maine Maritime Academy is an ocean oriented college located on Penobscot Bay and has excellent facilities for ocean going work, including a deep water dock, 80 foot research vessel and numerous smaller craft. The department has technical support and a wide variety of instrumentation including CTDs, side scan sonar, ROV, biological sampling gear and assorted analytical equipment. Potential candidates should send letter of interest and resume to:

**Director of Human Resources
Box C-3**

Castine, ME 04420

Letters of interest, resumes or other relevant material not addressed or delivered to the Maine Maritime Academy Human Resources Office will not be considered. MMA is an EOE

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AWARDS IN THE BIOLOGY OF AGING Call for Nominations from The Gerontological Society of America

The Gerontological Society of America invites nominations for two awards given for research in the biology of aging. These awards will be presented at the Society's 46th Annual Scientific Meeting, November 19-23, 1993 in New Orleans, LA.

The Glenn Foundation Award

For significant research contributions in the biology of aging. A nominee's research contributions must be recent, original and provide a significant addition to the body of knowledge in the biology of aging. Any scientist, regardless of field and nationality is eligible for this award which carries a prize of \$20,000. Nominators must send a nominee's vita; a two-page description of the research contribution to be recognized; reprints of up to five original, peer-reviewed publications based on the contribution; and two letters supporting the significance of the contribution to the address listed below. No self-nominations will be accepted.

The Nathan Shock New Investigator Award

For outstanding biological research in gerontology. Eligible candidates must have a Ph.D., M.D., D.D.S., or equivalent degree and must not be past the seventh postdoctoral year. Nominations should be mailed to the address listed below and must include a curriculum vita indicating the year of the candidate's research, not to exceed 1,000 words; two letters of recommendation; and three reprints of relevant research papers authored by the candidate. This award carries a cash prize of \$1,500. Nominations for both awards must be postmarked no later than May 7, 1993 and mailed to:

**Biological Sciences Section Awards Committee
The Gerontological Society of America
1275 K Street, NW, Suite 350
Washington, DC 20005-4006**

Assistant Professorships in Pathology:

Yale University



The School of Medicine is seeking two clinician/scientists (M.D., M.D./Ph.D.) for full time appointment at the Assistant Professor level. Successful candidates will develop an independent investigative program, participate in the teaching of graduate students, medical students, and residents, and contribute to collaborative investigations with other members of the research and clinical faculty. Applicants with demonstrated creativity, research productivity and training in molecular genetics, molecular oncology, biochemistry, or cell biology, and an interest in problems related to human biology are preferred. Board certification in Anatomic Pathology desirable.

Send current curriculum vitae, and the names of three references before March 30, 1993 to:

Joe S. Morrow, M.D., Ph.D., Professor and Chair, Department of Pathology, Yale University School of Medicine, 310 Cedar Street, New Haven, Connecticut 06510.

If you have submitted your curriculum vitae within the last 18 months, your application is on file.

Yale University is an equal opportunity, affirmative action employer. Minority and women candidates are urged to apply.

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• Ph.D. level scientist will purify and immobilize enzymes. Process scale-up experience beneficial. (Dept. 3B)

CELL BIOLOGY

• Ph.D. level scientist will use cell and tissue culture methods with anchorage dependent cells in adhesion studies. Experience in cell-cell and pathogen-cell adhesion assays required. Additional experience in microbiology and/or glycobiology desirable. (Dept. 2C)

In addition to a competitive compensation package Neose offers a dynamic atmosphere where employees have the opportunity to participate in and benefit from the company's success. Address resumes to **Personnel Manager, Neose Pharmaceuticals, Inc., 102 Witmer Road, Horsham, PA 19044.** EOE.



DIRECTOR OF MEETINGS PROGRAM

Cold Spring Harbor Laboratory, a respected leader in molecular biology and genetic research, is seeking an energetic Ph.D. scientist, with business and entrepreneurial skills, to coordinate the Laboratory's program of advanced scientific meetings. The program annually attracts 5-6,000 visiting scientists from leading research institutions, and is particularly well known for its annual Symposium on Quantitative Biology, now in its 58th year.

The Director of Meetings will head an experienced staff of 5 who handle registration and arrange for on and off grounds accommodations.

The successful applicant will coordinate both the scientific and business aspects of the meetings program and be excited by the challenge of expanding the range of subject matter and creating a year round schedule of meetings. Wide ranging interest in biology, writing ability and an enthusiasm for scientific communication are essential qualifications, as are business ability and strong entrepreneurial instincts.

We offer a competitive salary commensurate with experience, excellent benefits and a beautiful working environment located on Long Island Sound, 35 miles from New York City. For immediate consideration, please send resume, cover letter and list of three professional recommendations to: **Merilyn Simkins, Personnel Manager, Cold Spring Harbor Laboratory, P.O. Box 100, Cold Spring Harbor, New York 11724-2215**

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Department of Energy Office of Energy Research

Energy Research Financial Assistance Program Notice 93-12: Human Genome Program - Technological Advances

AGENCY: Department of Energy (DOE)

ACTION: Notice inviting grant applications.

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE) hereby announces its interest in receiving applications in support of the Human Genome Program. This Program is a coordinated, multidisciplinary, goal oriented, research effort aimed at developing creative, innovative resources and technologies which will lead to a detailed understanding of the human genome at the molecular level. Several research goals are encompassed in this notice, with collaborative, multidisciplinary efforts specifically encouraged. Research will be supported: (1) for development and implementation of mapping resources, cross connecting distinct DNA clone libraries, mapping strategies and automated mapping instrumentation; (2) for advanced DNA sequencing technologies, specifically, innovative instrumentation and automated systems that offer the potential for rapid, cost-effective, large-scale sequencing, and (3) to develop software for use in chromosome mapping and DNA sequencing, and data analysis. Such work may include information retrieval, user interfaces including interfaces compatible with Genome Data Base (GDB), algorithms, software engineering, and data management. Also desired are improved computational resources for analyzing DNA sequences, including identification of homologies, regulatory sites, and protein coding regions.

DATES: Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., July 15, 1993, to be accepted for merit review in September 1993, and to permit timely consideration for award in Fiscal Year 1994.

ADDRESS: Formal applications referencing Program Notice 93-12 should be forwarded to: U.S. Department of Energy, Office of Energy Research, Acquisition and Assistance Management Division, ER-64, Washington, D.C., 20585, ATTN: Program Notice 93-12. The following address must be used when submitting applications by U.S. Postal Service Express Mail or any commercial mail delivery service, or when handcarried by the applicant: U.S. Department of Energy, Acquisition and Assistance Management Division, ER-64; 9901 Germantown Road, Germantown, MD 20879.

FOR FURTHER INFORMATION CONTACT: Dr. David A. Smith, Office of Health and Environmental Research, ER-72 (GTN), Office of Energy Research, U.S. Department of Energy, Washington, D.C., 20585, (301) 903-6488.

RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology Research is seeking applicants for our ongoing program of crop improvement. Pioneer offers competitive salaries, excellent facilities and a highly cooperative research environment. Successful candidates will be expected to interact extensively with ongoing programs in transformation, gene expression, gene isolation or RFLP programs.

PROJECT LEADER, SEED-SPECIFIC EXPRESSION (JOB #1370)

— The scientist in this position will be responsible for obtaining appropriate promoters for optimal expression of seed-specific genes in monocots and dicots. This individual will work closely with researchers involved in gene isolation and transformation to obtain optimally expressed genes in transgenic seed. **EDUCATION/EXPERIENCE:** Ph.D. or equivalent experience in molecular biology or biochemistry plus 3 or more years of relevant research experience. A good working knowledge of seed-specific expression is required. **CONTACT PERSON:** JANE BLACKETER

SENIOR RESEARCH ASSOCIATE, PROTEIN EXPRESSION (JOB #1372-A)

— The person in this position will have responsibility for the expression and purification of proteins for use in various projects in the department. Although expression in *E. coli* will fulfill most experimental requirements, use of other culture systems is likely. We are seeking a skilled and experienced individual to work closely with molecular biologists and biochemists to fulfill this role. **EDUCATION/EXPERIENCE:** MS in biochemistry or equivalent in related field plus 2 years directly related lab experience in protein expression and purification; or 4 years experience with BS degree. Familiarity with computers, good communication and organizational skills, and skill in project management are also required. **CONTACT PERSON:** JANE BLACKETER

SENIOR RESEARCH ASSOCIATE, TRANSFORMATION TECHNOLOGY (JOB #1361)

— We have an immediate opening for a highly motivated scientist to coordinate corn callus and suspension culture needs for the department. The responsibilities of this position will include culture initiation, development and maintenance; and, conducting experiments involving tissue culture, regeneration and transformation methods. This individual will interact closely with other labs working on transformation of agronomic genes for a variety of projects. **EDUCATION/EXPERIENCE:** MS degree in plant biology or equivalent experience plus 2 years directly related lab experience in corn callus and suspension culture initiation and genetic transformation; or, BS degree plus 4 years relevant experience. Familiarity with computers, good communication and organizational skills, and skill in project management are also required. **CONTACT PERSON:** JO ANN JORGENSEN

RESEARCH ASSOCIATE, SPECIALTY OILS BIOCHEMISTRY (JOB #1371-A)

— The person in this position will be part of a group who are isolating genes involved in the biosynthesis and metabolism of fatty acids. Applicants should have experience in molecular biology with additional skills in areas such as biochemistry and/or protein purification. **EDUCATION/EXPERIENCE:** BS degree or equivalent lab experience plus 2 years directly related experience; or MS degree. **CONTACT PERSON:** JANE BLACKETER

Applications received by **APRIL 2, 1993** will be assured of consideration. However, applications will be considered until the positions are filled.

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Plant Breeding Division
Department of Biotechnology Research
Attn: Contact Person JOB # _____
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POSITIONS OPEN

ASSISTANT RESEARCH SCIENTIST

NYU Medical Center has a position available for a recent Ph.D. with experience in molecular biology and immunology. Project: mode of action of immunosuppressive agents and gene expression in human T-cells. Please send curriculum vitae to: **Maha Singh, Human Resources Department, NYU Medical Center, 550 First Avenue, New York, NY 10016.** Résumés must be received by March 29, 1993. *Equal Opportunity Employer, M/F.*

ASSISTANT RESEARCH SCIENTIST

NYU Medical Center has a **POSTDOCTORAL RESEARCH SCIENTIST** position available in the laboratories of Dr. Julia Phillips-Quagliata and Dr. Daniel Meruelo for a recent graduate to clone the gene for a novel murine B cell IgA receptor and to study its structure, function and regulation. Ph.D. in molecular biology required. Send curriculum vitae and names of three references to: **Maha Singh, Human Resources Department, New York University Medical Center, 550 First Avenue, New York, NY 10016.** Curricula vitae must be received by March 29, 1993. *Equal Opportunity Employer, M/F.*

CELL/MOLECULAR BIOLOGIST

The Department of Biology at the University of Toledo invites applications for a tenure-track position as an **ASSISTANT/ASSOCIATE PROFESSOR** of Biology. The successful candidate will be expected to contribute to undergraduate and graduate instruction, and establish an independent research program which complements existing departmental expertise in the area of cell and molecular biology. Competitive salaries, facilities and start-up funds are available. Applicants should submit curriculum vitae, a brief description of research interests, relevant publications and arrange to have three letters of recommendation sent by April 1, 1993, to: **Chair, Search Committee, Department of Biology, University of Toledo, Toledo, OH 43606.** *The University of Toledo is an Affirmative Action/Equal Opportunity Employer, M/F/D/V. Women and minorities are encouraged to apply.*

CELL BIOLOGIST

Position available conducting basic and applied studies of novel anticancer agents using a variety of approaches with *in vitro* systems. Ph.D. in cell biology or microbiology, experience with epithelial tumor systems, knowledge of anticancer drug development and good writing skills required. Duties will include project management, experimental design, and proposal/report preparation. Southern Research Institute offers a competitive salary and benefits package. To apply, send curriculum vitae to:

Mr. G. Dwayne Johnson
Human Resources Representative
Southern Research Institute, Department 667
P.O. Box 55305
Birmingham, AL 35255-5305
Equal Opportunity/Affirmative Action Employer.

GENETIC EPIDEMIOLOGIST FOR NATIONAL HIGH RISK REGISTRY. This is a registry of individuals with multiple family members with cancer. Over 15,000 pedigrees are registered and kept current.

The successful candidate will be expected to establish an independent research program, as well as collaborate with multispecialty members of the Strang-Cornell research team. The applicant must have an appropriate Ph.D. and two or more years of relevant postdoctoral experience. University appointment according to applicant's eligibility. Send résumé to: **Dr. D.G. Miller, Strang Cancer Prevention Center, 428 East 72nd Street, New York, NY 10021.**

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CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND PHYSICAL SCIENTISTS

A one-week intensive course sponsored by the Massachusetts Institute of Technology. June 7-11, 1993, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director, Basic Principles of Cardiovascular Physiology, Cardiovascular Medicine, Diagnostic and Therapeutic Technologies. Contact: **Director of the MIT Summer Session, Telephone: 617-253-2101.**

MOLECULAR TECHNIQUES IN AQUATIC BIOMEDICAL RESEARCH

July 6-July 31, 1993

An intensive workshop utilizing aquatic model organisms to demonstrate molecular biological techniques. Cost: \$1500. Contact: **Barbara Wimpee, NIEHS Marine and Freshwater Biomedical Core Center, Great Lakes Research Facility, 600 East Greenfield Avenue, Milwaukee, WI 53204.** Telephone: 414-382-1726. FAX: 414-382-1705.

MEETINGS

BIODEGRADATION: ITS ROLE IN REDUCING TOXICITY AND EXPOSURE TO ENVIRONMENTAL CONTAMINANTS

will be held **April 26-28, 1993**, at the National Institute of Environmental Health Sciences in Research Triangle Park, North Carolina, USA. This conference brings together a diverse group of scientists in a multidisciplinary framework to examine the current state of knowledge, the research needs in biodegradation and treatment, and the role of these processes in reducing the toxicity and exposure to environmental contaminants. For further information contact: **Lily Young, AgBiotech Center, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903, USA.** (FAX: 908-932-6535).

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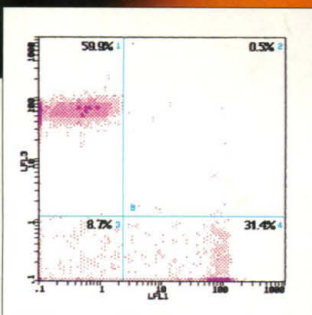
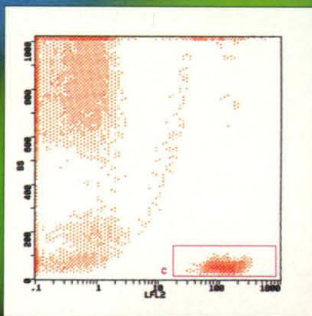
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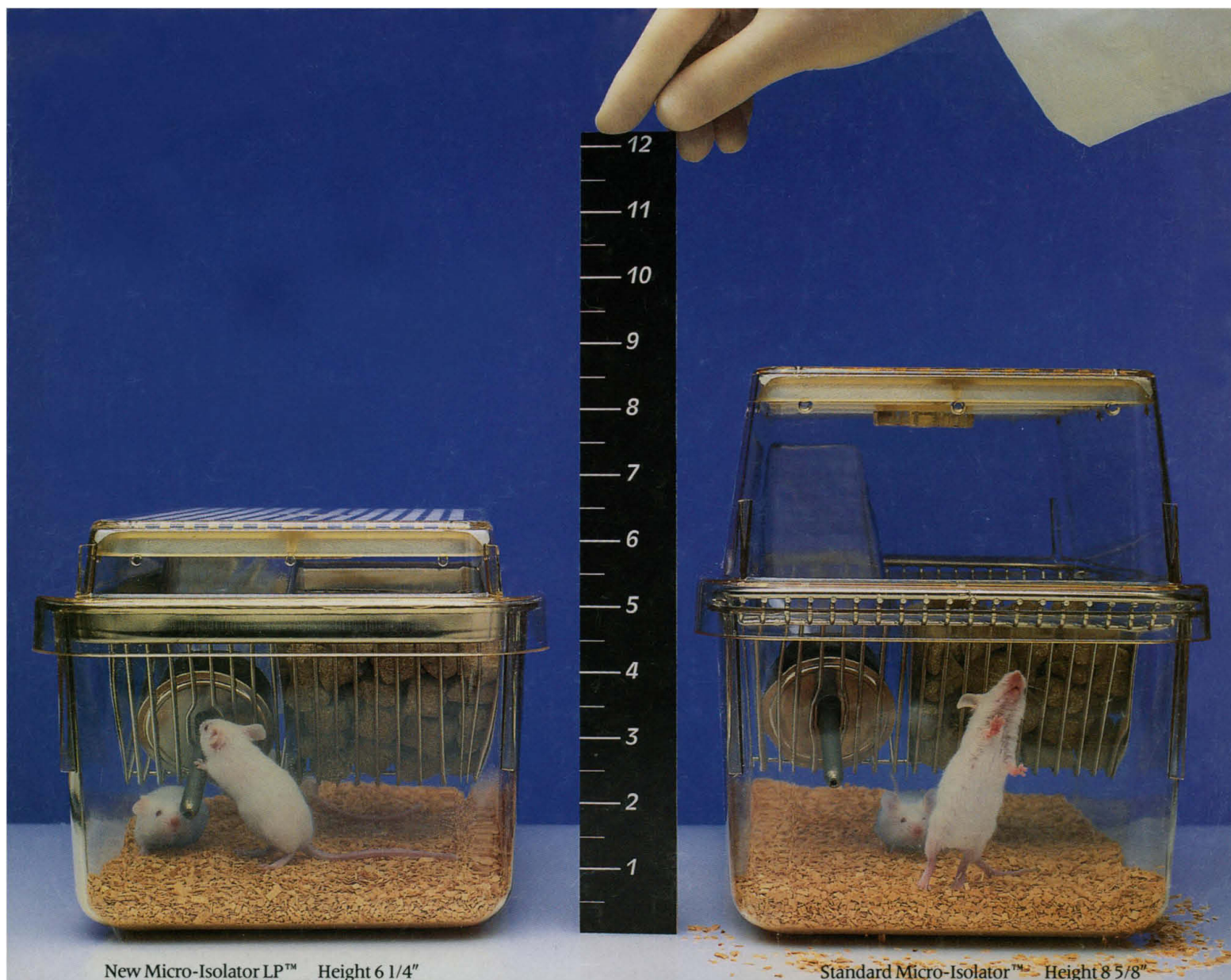
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Introducing the Micro-Isolator LP™

Many of our customers asked for a Micro-Isolator™ system that was more space efficient and effectively contained bedding material. Lab Products, Inc. came back with the Micro-Isolator LP™, a new standard in housing for mice designed to maximize your rack capacity and keep your shelves clean.

For example, 126 new Micro-Isolator LP cages can now be stacked onto a shelf rack where, typically, only 84 cages would fit. This means fewer racks, and fewer racks mean more space available for other functions—a valuable savings on lab real estate. (Where you formerly used 3 rooms, you can now use 2.)

You can realize cost efficiencies, as well, on cleaning and sterilization.

Your Lab Products salesperson will be happy to detail how you can benefit from these new improvements.

lab products inc
a **bioMedic** company

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