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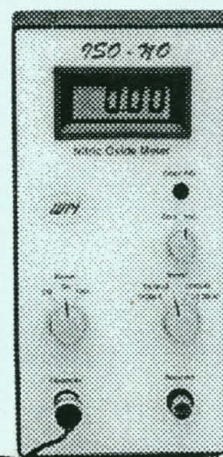
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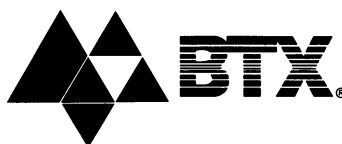
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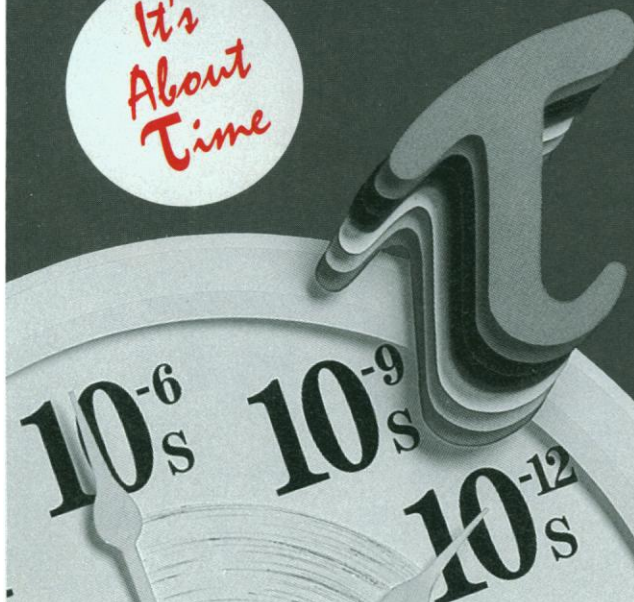
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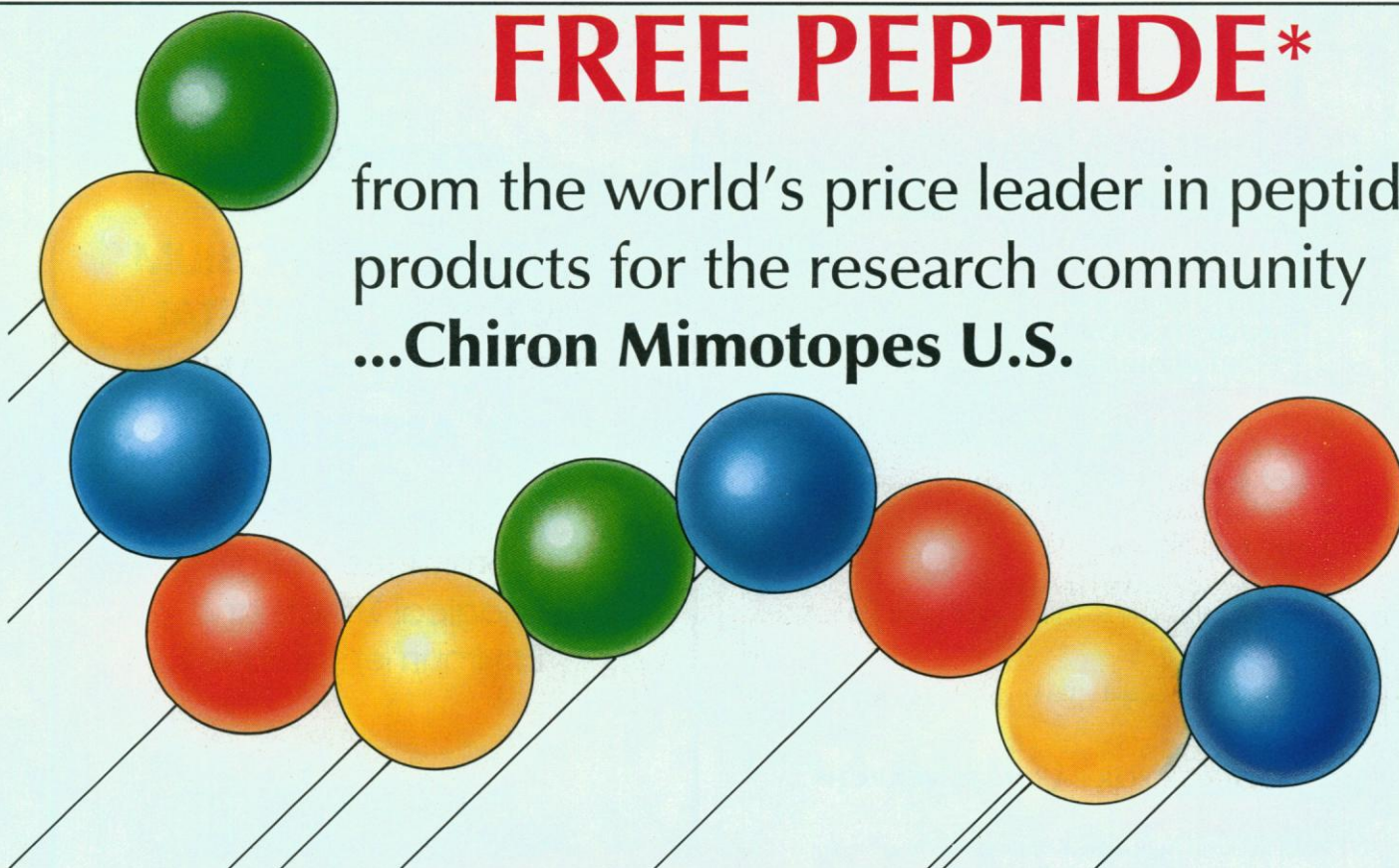
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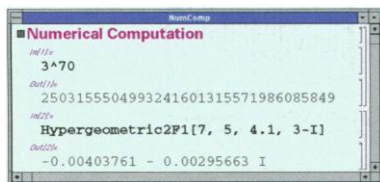
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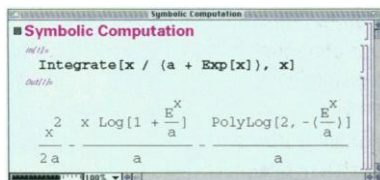
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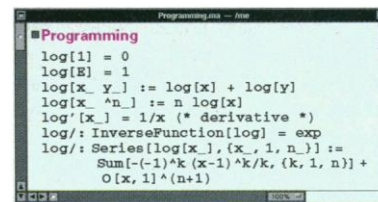
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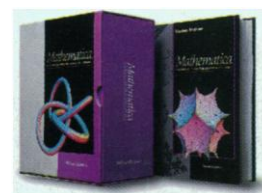
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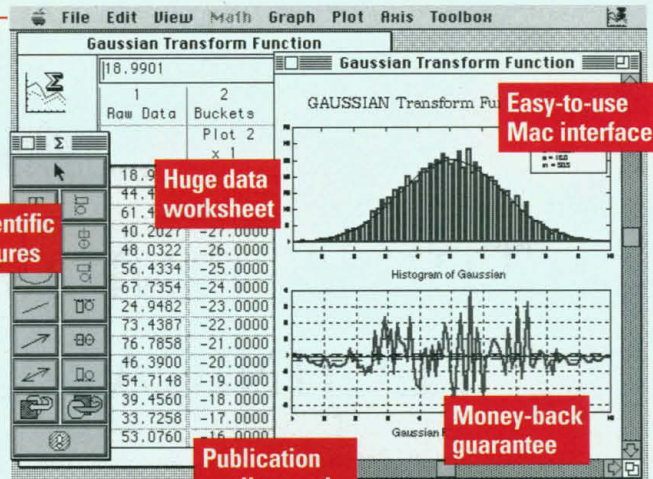
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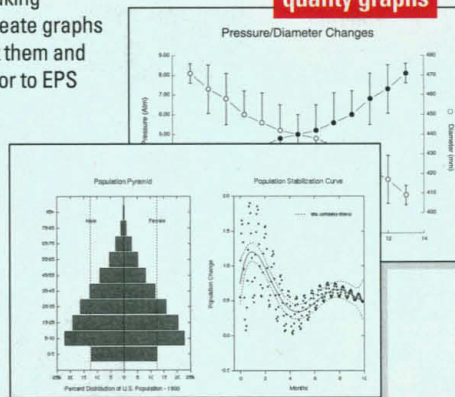
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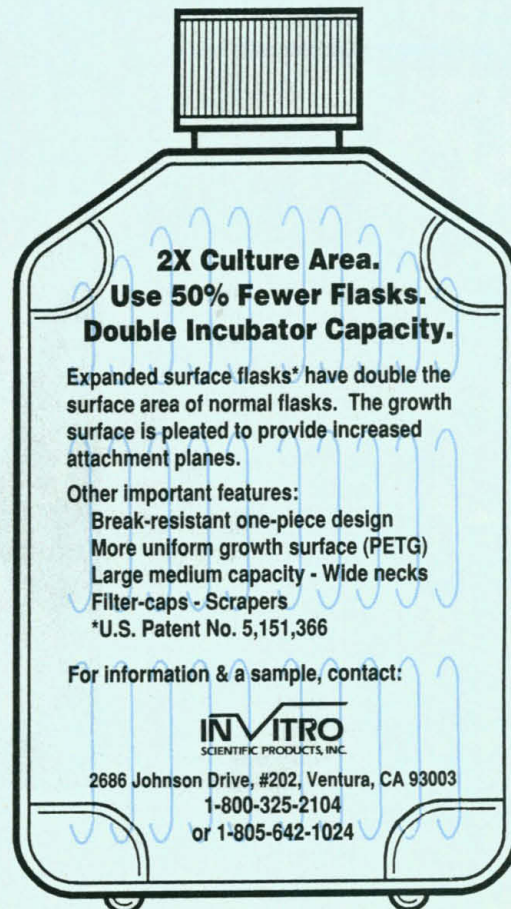
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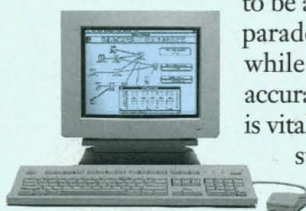
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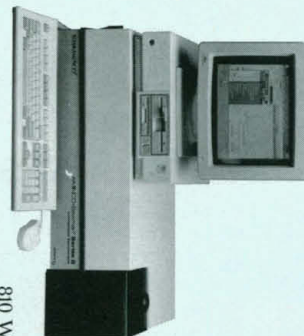
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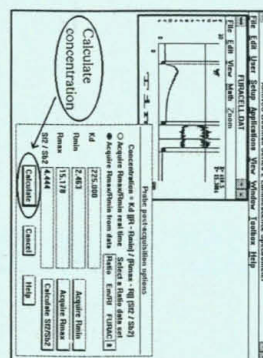
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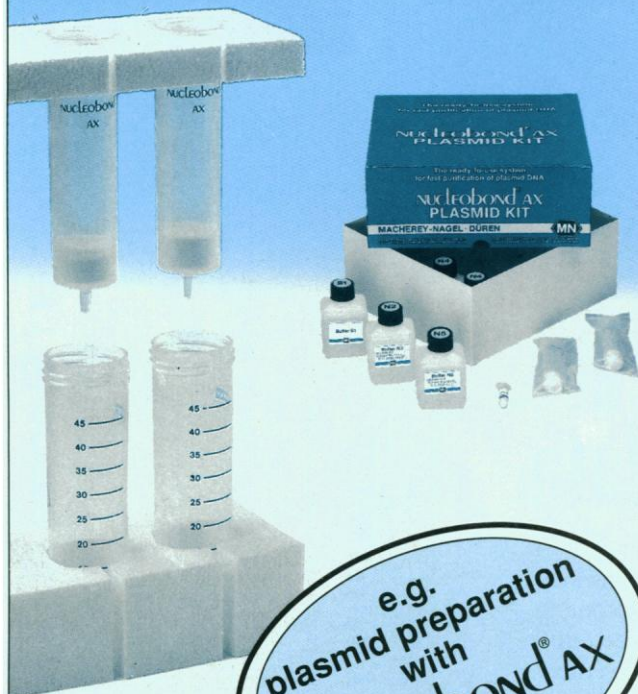


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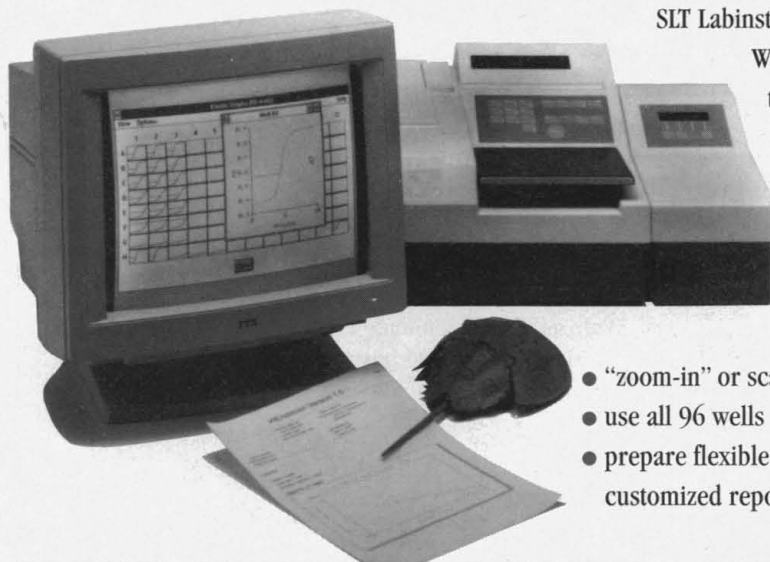
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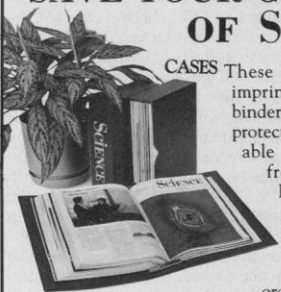
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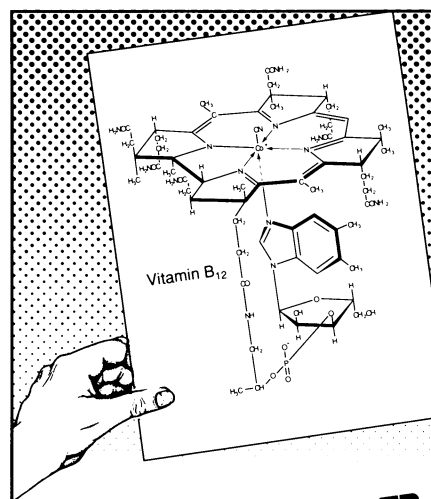
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Review of applications will begin April 1, 1993, and will continue until the position is filled. Candidates should provide a letter of application, curriculum vitae, a statement of research interests and professional goals, and arrange for three letters of recommendation to be sent to:

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ASSISTANT PROFESSOR ANATOMY AND NEUROBIOLOGY

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BROWN UNIVERSITY MOLECULAR PHARMACOLOGY

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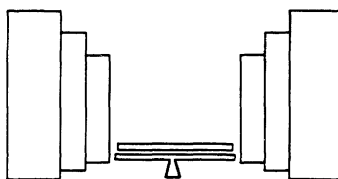
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ASSISTANT PROFESSOR. The Research Group on Burn Injuries in Hotel-Dieu Hospital, Montreal, Canada and the Clinical Research Center of Hotel-Dieu are seeking a young investigator with a Ph.D. in immunology to pursue clinical and/or fundamental research on the immune system during injury and trauma. Send curriculum vitae, names and addresses of three references, and a statement about your research orientations to: **D. R. Garrel, M.D., Clinical Research Center, Hotel-Dieu Hospital of Montreal, Quebec, Canada, H2W 1T8.**

ASSISTANT PROFESSOR—PHYSIOLOGY ENDOCRINOLOGY/ NEUROENDOCRINOLOGY

Individuals with externally fundable research in contemporary endocrinology are invited to apply for this tenure-track position. Preference will be given to research which complements areas of neuroscience currently represented in our department or the Oklahoma Center for Neurosciences. The position requires a Ph.D., M.D., or equivalent, two years (minimum) of postdoctoral experience, and training for teaching endocrinology to medical/graduate students. Please send statement of professional interests, curriculum vitae and 3 letters of reference to: **Jay P. Farber, Ph.D., Department of Physiology, BMSB 653, College of Medicine, The University of Oklahoma HSC, P.O. Box 26901, Oklahoma City, OK 73190.** Completed applications will be accepted until May 15, 1993; anticipated starting time is fall 1993. *An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

ASSISTANT PROFESSOR IMMUNOLOGY/MICROBIOLOGY Indiana University School of Medicine

The Evansville Center for Medical Education is inviting applications for a tenure-track position from Ph.D. or M.D. candidates with training and postdoctoral experience in molecular biology. All areas of research will be considered but preference will be given to candidates with research interests that complement various areas of neuroscience, membrane biology and virology currently represented in our Center. The candidate is expected to establish and maintain an independent, extramurally funded research program and participate in medical student teaching. The position offers an attractive start-up package and laboratory space in a brand new facility. Please send statement of professional interests, curriculum vitae and names of three references to: **Beat Raess, Ph.D., Search Committee Chair, Indiana University School of Medicine, P.O. Box 3287, Evansville, IN 47732.**

Indiana University is an Equal Opportunity/Affirmative Action Educator, Employer, and Contractor, M/F.

BIOCOMPUTING FACILITY POSITION

The Salk Institute has an opening for a full-time systems and network administrator responsible for managing the Biocomputing Facility and supporting computer applications for basic research in molecular biology and neuroscience. This facility includes a Silicon Graphics IRIS Crimson and three VAX computers and various Macintosh workstations. Applicants should have experience in genetic sequence analysis, molecular modeling and volume visualization, and be experienced in managing UNIX and VMS operating systems. Knowledge of C and Fortran required.

The network is an ethernet backbone with an AppleTalk router and a T1 link to Internet. Experience with network integration is essential. This position will support a community of research scientists who depend upon reliable access to Internet including but not limited to Eudora, Gopher, WAIS, Telnet and FTP. Upcoming expansion will include fiber optics.

This position is strongly oriented toward providing support for research. Applicants must have excellent interpersonal and communications skills and a strong interest in biology.

The Salk Institute offers a competitive salary and excellent benefits. Qualified candidates should send a resume or CV, salary history and three references to:

**Human Resources Dept/CS
The Salk Institute
10010 N. Torrey Pines Rd.
La Jolla, CA 92037**

The Salk Institute is an Equal Opportunity Employer.

CHAIRPERSON DEPT OF MICROBIOLOGY

The Dept of Microbiology of The City University of New York Medical School is accepting applications and nominations for Chairperson. The successful candidate should have a Ph.D. or M.D. degree, or both, and a distinguished record of achievement in research and demonstrated administrative experience. The applicant is expected to maintain a vigorous research program. Ability for leadership and a commitment to excellence in medical and graduate education are essential. The Dept has strong and diverse research interests and interacts actively with other University Departments. A priority of our program is the delivery of a high quality of teaching to our medical and allied health professional students.

The School has special commitments to increasing the number of physicians from presently underrepresented minority groups, to emphasizing the role of primary care, and to training for community-based service to underserved urban areas of New York City. Applications and nominations will be reviewed by the Search Committee after May 1, 1993, and will continue until the position is filled. A Curriculum Vitae, a supporting letter of intent and the names of four references should be sent to: **H. Jack Geiger, M.D., Chair, Microbiology Search Committee, Dept of Community Health and Social Medicine, CUNY Medical School.**

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New York, NY 10031



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Neuroscience Research Assistant

You will perform *in vitro* electrophysiological experiments in research projects directed toward the discovery of novel CNS drugs. Techniques used in your research will include patch clamp recording from a variety of cell lines and primary neurons, and patch clamp and intracellular recording from brain slice preparations. Experience should include *in vitro* electrophysiology from neurons, cell lines or other excitable cells. Familiarity with computerized data collection and analysis systems and experience with brain slice recording or tissue dissociation methods are desirable.

Molecular Biology Assistant/Associate Scientist

As a member of our Molecular Genetics and Protein Chemistry Department, you will be involved in the investigation of proteins important for drug discovery. This position requires a BS/MS degree in Biochemistry or a related discipline, plus two years research laboratory experience. Of particular relevance is experience in the areas of microbial protein expression or recovery and characterization of recombinant proteins.

Transgenic Scientists

Will work in development of mouse models of human genetic disease. Experienced candidates with pronuclear and/or ES Cell Transgenic Technology are encouraged to apply.

Protein Chemistry Assistants

BS or MS level scientist with experience in protein purification and characterization. Knowledge of HPLC and electrophoresis is essential; candidates with experience in protein sequencing, amino acid and related techniques are also encouraged to apply.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacations, educational assistance, savings and investment plans, pension plan, relocation assistance and more. To learn how you can be part of Pfizer's future, send your resume, indicating position of interest, to: **Mr. Kym J. Goddu, Employee Resources Associate, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



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POSITIONS OPEN

ASSISTANT PROFESSOR, BIOLOGY. The Biology Department of Gettysburg College invites applications for a one-year position beginning in September 1993. Teaching responsibilities will include one upper-division course in Invertebrate Zoology, one in the applicant's area of interest, participation in the first-year introductory biology course, and work with senior students on research projects. Candidates must have a Ph.D. in biology. Gettysburg College is rated as a highly selective liberal arts college and is near the Washington/Baltimore area. *Gettysburg College is an Equal Opportunity/Affirmative Action Employer; women and minorities are encouraged to apply.* Submit by April 16, 1993, curriculum vitae and three letters of reference, at least one of which should comment on the applicant's teaching effectiveness, to: **Dr. Ralph A. Sorensen, Chairman, Biology Department, Box 392, Gettysburg College, Gettysburg, PA 17325. Email: RSORENSE@GETTYSBURG.EDU or FAX: (717) 337-6251.**

NMR FACULTY POSITION

The Biophysics Department of the University of Rochester Medical Center is seeking applicants for a tenure-track faculty position in NMR spectroscopy as applied to structural biology. Current facilities, within the department, include a GE 400 MHz NMR spectrometer. This will be augmented by the purchase of a new 600 MHz high resolution spectrometer, dedicated to structural studies, on which significant time will be available to the successful applicant. Duties of the position include development of a competitive, independent research program and teaching at the graduate level. While rank and salary will be commensurate with experience, the search is targeted at the **ASSISTANT PROFESSOR** level. Send complete curriculum vitae, future research plans, and the names and addresses of 3 references to: **W. Bernhard, Chairman, NMR Search Committee; Biophysics Department; University of Rochester Medical School; Rochester, NY 14642.** *The University of Rochester is an Affirmative Action/Equal Opportunity Employer.*

The Cardiovascular Research Institute and the Department of Medicine at the University of California, San Francisco invites applications for an IN-RESIDENCE POSITION AT THE ASSISTANT PROFESSOR LEVEL

The candidate will begin a somatic cell gene delivery program with emphasis on animal models in the UCSF Cardiovascular Research Institute. The candidate will develop both an independent research program and collaborate with other investigators focused on vascular biology, thrombosis, and pulmonary disease. Requirements: M.D. or Ph.D.; demonstrated publication record in the area of somatic cell gene transfer and experience with animal models. Candidate will be expected to participate in the teaching activities of the Institute as well as the Department of Medicine. Please send curriculum vitae and names of three references to: **Ms. Diana Ramos, CVRI, UCSF, San Francisco, CA 94143-0130.**

The University of California is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

BOSTON UNIVERSITY SCHOOL OF MEDICINE. DEPARTMENT OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

The Boston University School of Medicine invites applications from distinguished senior as well as junior scientists with expertise in neuroscience, cardiovascular pharmacology or molecular oncology. **FACULTY POSITIONS ARE AVAILABLE AT ALL LEVELS.** Start-up funds, core facilities, and laboratory space are available to foster the establishment of state-of-the-art research programs. Please send curriculum vitae, a brief statement of your research accomplishments and plans, and the names and telephone numbers of references to: **Dr. David H. Farb, Chairman, Department of Pharmacology and Experimental Therapeutics, Boston University School of Medicine, 80 East Concord Street, Boston, MA 02118.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST Vanderbilt University Medical Center

A tenure-track position is available in the Department of Cell Biology for a developmental biologist at the **ASSISTANT PROFESSOR** level. Preference will be given to someone working with an interesting system amenable to genetic and molecular analysis, rather than with a particular organism. The Department already has strong research programs in mouse and *Xenopus* development, and runs an interdisciplinary graduate course in Developmental Biology. Excellent animal facilities and generous start-up funds are available, and the Department provides a supportive and stimulating working environment, with expertise in growth factors, cell cycle control, signaling pathways and transcription factors. Applicants should forward curriculum vitae, summary of past research, and statement of future plans to: **Dr. H. L. Moses, Chairman, Department of Cell Biology, Vanderbilt University Medical Center, C-2306 MCN, Nashville, TN 37232-2175.**

Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR (TENURE-TRACK) POSITION

UCLA, DEPARTMENT OF PHARMACOLOGY invites applications for a full-time tenure-track Assistant Professor position in the molecular aspects of modern Pharmacology. The successful candidate will receive new laboratory space and start-up funds in a setting that fosters professional development. The new Department is the center of a rapidly expanding multidisciplinary program in Molecular and Medical Pharmacology with a highly interactive, productive group of scientists. We are interested in an individual committed to establishing a scholarly research program. The areas of particular interest include, but are not restricted to, rational drug design, receptor (protein)-drug interactions, 3-D protein structure, signal transduction, second messengers, and recombinant DNA technology. The successful candidate will be expected to participate in the educational requirements of medical students and the departmental Graduate Program.

Earliest starting date for the position is July 1, 1993. Send curriculum vitae, statement of future research plans and three letters of reference by May 15, 1993, to:

**Dr. Jorge R. Barrio, Chairman, Search Committee
Department of Pharmacology
UCLA School of Medicine
B2-086A Center of the Health Sciences
Los Angeles, CA 90024-1721**

UCLA is an Equal Opportunity Employer. Women and underrepresented minorities are encouraged to apply.

ASSISTANT/ASSOCIATE PROFESSOR. The Division of Pulmonary and Critical Care Medicine, University of California, Davis, School of Medicine is recruiting for a full-time faculty position. The Division has a strong clinical program and desires an individual with a demonstrated record of research in lung cell biology, competence in teaching and clinical investigations; training and experience necessary for acting as an attending physician in Pulmonary and Critical Care Medicine. Interested applicants should send a résumé to: **Timothy Albertson, M.D., Ph.D., Division of Pulmonary and Critical Care Medicine, University of California, Davis, Medical Center, 4301 X Street, Room 2120, Sacramento, CA 95817** by June 30, 1993. *The University of California, Davis is an Equal Opportunity/Affirmative Action Employer.*

Department of Anatomy, Southeastern University of the Health Sciences, invites applications for full-time **ASSISTANT PROFESSOR**, July 1993. Candidate must have Ph.D. and teaching experience. Assist in teaching of Histology to Osteopathic Medicine and Optometry students. Some limited teaching responsibilities in Gross Anatomy and Neuroanatomy.

Curriculum vitae and three references to: **Lori B. Dribin, Ph.D., Department of Anatomy, Southeastern University, 1750 N.E. 167th Street, North Miami Beach, FL 33162-3017.**

POSITIONS OPEN

MOLECULAR IMMUNOLOGIST

Interdepartmental Immunobiology Program Northwestern University Medical School

The newly established Immunobiology Program of the Northwestern University Medical School seeks applicants at the **ASSISTANT PROFESSOR** level. The Program is committed to promoting immunobiology research across both basic science and clinical departments. The Program is interested in applicants applying molecular biological approaches to examine the pathogenesis of immune-mediated diseases and/or to examine basic immune mechanisms such as immune regulation, signal transduction, gene regulation, or antigen processing. Current areas of immunology research at Northwestern include autoimmunity, neuroimmunology, lymphocyte development, immunogenetics, transplantation, T cell activation and regulation, and antigen presentation. Candidates are expected to have a doctoral degree, to have completed appropriate postdoctoral training, and to have a demonstrated record of significant research accomplishments. The position will carry a full-time, tenure-track appointment in the Department of Microbiology-Immunology. Laboratory space will be located in newly renovated space within the Department of Microbiology-Immunology. To ensure full consideration, applications must be received by May 30, 1993. Applications including curriculum vitae, bibliography, a statement of future research interests, and the names of three referees should be submitted to: **Dr. Stephen D. Miller, Director, Interdepartmental Immunobiology Program, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** *Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.*

ASSISTANT PROFESSOR. The Department of Microbiology and Immunology invites applicants for a 12-month, tenure-track position at the assistant professor level. The applicant should have research experience in the area of the molecular pathogenesis of *Staphylococcus* and will be expected to develop an independent research program as well as participate in teaching activities within the department graduate program and medical student teaching program. In addition, it is anticipated that the individual will pursue an active collaboration with an ongoing research program on staphylococcal osteomyelitis in the Department of Orthopedics and will participate in the institutional Musculoskeletal Research Program. Recruited faculty will be given competitive start-up funds and laboratory space in a newly finished Biomedical Research Building which will house the Department of Microbiology and Immunology. The applicant must have a Ph.D. or M.D. with postdoctoral experience. Salary is commensurate with experience and a generous fringe benefit package is provided. The position is available immediately. Address inquiries with curriculum vitae, statement of research interest, and the names of 3 references to: **Roger G. Rank, Ph.D., Department of Microbiology and Immunology, University of Arkansas for Medical Sciences, 4301 West Markham, Little Rock, AR 72205.** *The University of Arkansas for Medical Sciences is an Equal Opportunity Employer.*

RESEARCH PSYCHIATRIST OR PSYCHOLOGIST

ASSISTANT/ASSOCIATE PROFESSOR of Psychiatry. The Department of Psychiatry at the University of California, San Francisco (UCSF) seeks a research psychiatrist or clinical psychologist with research expertise to be housed at San Francisco General Hospital (SFGH), a major teaching hospital of UCSF. The position is supported by a hard-money State-Funded Salary line from the budget of the Langley Porter Psychiatric Institute of UCSF and is available on or after July 1, 1993. Qualifications required include demonstrated expertise both in research in psychological effects of trauma and violence and in the conduct of cross-cultural psychiatric/psychologic research with ethnic minority populations. Eligibility for California licensure is required. Applications must be received by May 30, 1993. Please send letter of interest and résumé to: **Charles Marmar, M.D., Search Committee Chair, c/o Susan Brekhuis, Department of Psychiatry-7M36, San Francisco General Hospital, 1001 Potrero Avenue, San Francisco, CA 94110.** *UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.*

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At Promega Corporation, we use the expertise and creativity of our people, technology and financial resources to develop, manufacture and deliver innovative scientific products and services

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- Molecular Biologist/DNA Sequencing (MS)
- Molecular Biologist/Mutagenesis (MS)

R & D SENIOR SCIENTISTS (PhD)

- Cellular Immunology (Adhesion Molecules/Receptors) with experience in immunoassay development for cellular and clinical immunology
- Enzymologist with industrial protein purification and management experience for technical direction of basic enzyme R & D Group
- Molecular Biologist (Mammalian Express Systems) with expertise in tissue culture, nucleic acid manipulations and mammalian expression regulation
- Signal Transduction with extensive experience in various techniques related to protein purification and protein phosphorylation

To apply for any of these positions or for further information, forward a resume indicating position of interest with references or write to: Promega Corporation, Human Resources/SCI, P.O. Box 7879, Madison, WI 53711-7879. Equal Opportunity Employer. (No agency solicitation accepted.)

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**DEPARTMENT OF THE ARMY
SENIOR EXECUTIVE SERVICE OPPORTUNITY
DIRECTOR, U.S. ARMY RESEARCH LABORATORY
ADELPHI, MARYLAND**

The U.S. Army Materiel Command is seeking applicants for the career Senior Executive Service position of Director, U.S. Army Research Laboratory. The position has an annual salary range of \$92,900 to \$115,700 depending upon individual qualifications and salary history. The individual selected will also be eligible to earn performance-related bonuses and awards.

The successful candidate will be expected to:

- Build a world class corporate research laboratory system to meet the needs of the Army and the nation well into the next century.
- Provide line authority and technical direction to 3,000 military and civilian employees who are responsible for basic and applied research and advanced technology conducted at locations throughout the United States.
- Maintain a reputation for scientific leadership and serve as the principal laboratory representative to other government agencies, private industry, academic institutions, and international organizations.

Applicants should possess the following qualifications:

- Ability to develop a high performing R&D organization.
- Ability to recognize and advocate applied research thrusts which further Army mission performance through application of technology.
- Ability to effect domestic technology transfer and transition technology to product development.
- Professional stature as a science or engineering expert.
- PhD or ScD in engineering or physical sciences or an equivalent combination of education and research experience.

Applicants must be U.S. citizens and be able to obtain a top secret clearance.

Interested individuals may obtain a complete application package by calling Mr. Thomas Krones, (703) 274-9415, or by writing to: Commander, U.S. Army Materiel Command, ATTN: AMCPE-CS, 5001 Eisenhower Avenue, Alexandria, Virginia 22333-0001. Applications must be postmarked not later than April 30, 1993.

THE DEPARTMENT OF THE ARMY IS AN EQUAL OPPORTUNITY EMPLOYER

**Research Position (ENVIRONMENT)
East-West Center**

The East-West Center is a public nonprofit education and research institution that examines such Asia-Pacific issues as the environment, economic development, population, international relations, resources and culture and communications.

Some 2,000 research fellows, graduate students, educators and professionals in business and government from Asia, the Pacific and the United States annually work with the Center's staff in cooperative study, training and research.

The East-West Center was established in Hawaii in 1960 by the U.S. Congress which provides principal funding. Support also comes from more than 20 Asian and Pacific governments, private agencies and corporations and through the East-West Center Foundation. The Center has an international board of governors.

Applications are being accepted for a position to conduct research in the Program on Environment. This is a three-year renewable limited appointment as Senior Fellow providing expertise in marine ecology and coastal zone management, with particular emphasis upon the Pacific Islands. Senior Fellows are responsible for planning and conducting collaborative research projects on environmental issues of concern to Asia, the Pacific Islands, or the United States. Topics of particular interest to the program include assessment of impacts from development on marine and coastal ecosystems, risk assessment, and management of coastal, island, and reef resources in the tropics.

REQUIRED QUALIFICATIONS: Ph.D. in one of the marine sciences, plus at least 12 years post-Ph.D. experience in research on environmental issues, including research on coastal and marine ecology or coastal zone management in the Pacific Islands. Ability to develop, obtain funding for and to manage environmental research projects dealing with the Pacific Islands. Ability to work with scholars and policymakers from diverse backgrounds and countries. A record of significant publications on environmental issues. Demonstrated ability to work collaboratively to develop international projects.

PREFERRED QUALIFICATIONS: Work experience with scholars and policymakers from Pacific countries.

SALARY RANGE: \$56,627.00 to \$66,067.00 per year, depending on qualifications, plus cost-of-living allowance currently at 22.5% (subject to change) and an attractive benefits package.

Submit a cover letter including position title and a statement addressing how the qualifications are met, a resume, and names and addresses of three professional references. Screening and assessment will be based on the materials you submit. Applications must be postmarked/FAXed by **June 2, 1993**. Send to: **Karen Lam, Personnel Office, Dept. 19E, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96848** or FAX to (808) 944-7970.

An Equal Opportunity/Affirmative Action Employer

**St. Jude Children's Research Hospital
Department of Biochemistry**

Postdoctoral Fellowships

The Biochemistry Department offers a highly interactive environment for postdoctoral research with a focus on the molecular and cellular biology of signal transduction. The research programs within the Department offer recent Ph.D. or M.D. graduates comprehensive training in a large variety of contemporary molecular and biochemical techniques. Laboratory facilities are housed in a new 220,000 sq. ft. research facility. SJCRH offers competitive salaries and fringe benefits. Current research programs within the Department include:

- | | |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| George Cheung: | Regulatory properties and biological functions of calmodulin, Ca^{2+} -regulated enzymes and other Ca^{2+} -binding proteins. |
| John Cleveland: | <i>Myc</i> oncogene control of cell cycle progression, apoptosis and transcription. |
| James Ihle: | Mechanisms of hematopoietic stem cell growth regulation, differentiation and transformation. |
| Suzanne Jackowski: | Cell cycle regulation of membrane phospholipid biosynthesis. |
| Charles Rock: | Role of phospholipid-derived second messengers in growth factor signal transduction. |
| Robert Rooney: | Mechanisms of transcription factor regulation by the E1A oncogene. |
| Gerard Zambetti: | Function of wild-type and mutant p53 in tumor suppression and oncogenesis. |

Applicants should submit a brief statement of research interests, curriculum vitae and the names of three references to:

Biochemistry Departmental Fellowships
The Department of Biochemistry
St. Jude Children's Research Hospital
332 North Lauderdale • Memphis, TN 38101
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Research Scientist (Cell Biology/Osteoporosis)

You will be involved in the developmental aspects of tissue repair and regeneration using autocrine/paracrine/ endocrine growth and differentiation factors. Specific responsibilities will involve: working in receptor identification and characterization, ligand interactions, and signal transduction. Additional duties will involve regulation of protein synthesis, primary cultures/cell cultures, immunoprecipitation/ northern/ immunoblots, and interaction with local and systemic factors in the regulation of protein synthesis and transcription and translation mediators. Extensive experience dealing in related research is essential. Knowledge in bone physiology and metabolism and in vitro and in vivo model systems pertaining to bone remodeling and osteoporosis is a plus.

Research Scientist (Protein Chemistry)

You will develop purification procedures for the isolation of proteins from recombinant and natural sources and apply analytical methods to the characterization of these proteins. A PhD in Protein Chemistry or Biochemistry with 2+ years' experience in protein chemistry is required. Also desirable is expertise in protein structure-function analysis and protein-receptor interactions.

Analytical Protein Chemist

As an experienced Analytical Chemist in our research laboratories, you will be responsible for methods development, structural analysis and characterization of our protein-based pharmaceutical products. A strong background in protein sequencing, amino acid analysis, chromatographic and electrophoretic techniques is essential. Requirements are a PhD in a relevant field and the ability to work independently. Experience in an industrial setting is a plus. As a hands-on team player, you will need excellent communication and interpersonal skills.

Expanding Preclinical Development Department

This department is responsible for designing, implementing and monitoring efficacy, safety, toxicology, and pharmacology studies for our protein based therapeutic products as well as assessing the technical merit of new product candidates. Present openings in this department include:

Toxicology Manager – to plan, initiate and monitor safety and toxicology studies of key product candidates. Experience in animal modeling and practical pathology is required.

Pharmacology Manager – to plan, design and assess safety and efficacy studies. Experience in histopathology and/or pharmacokinetics is required.

Drug Delivery Manager – to assist in the design and improvement of systems for the effective delivery of protein based product candidates. Experience with a drug formulation or polymer chemistry background is required.

The above three positions require a PhD, MD, DVM, or equivalent degree and 3-5 years' relevant experience in pharmaceutical and/or biotechnology industries.

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For immediate consideration, please send your resume, indicating position of interest, to: Human Resources, Creative BioMolecules, 45 South Street, Hopkinton, MA 01748. An Equal Opportunity Employer. Principals, please.

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POSITIONS OPEN



SWEDISH MEDICAL CENTER

RESEARCH LABORATORY DIRECTOR

The Swedish Hospital Tumor Institute is expanding its research efforts. We are looking for an individual with experience, energy and enthusiasm to spearhead this expansion. Requirements include an M.D. or Ph.D. degree, at least five years of research experience, management and supervisory skills, and excellent oral and written communication skills. Current institutional support, space and staff are generous; however, recruitment of additional researchers and the development of supplementary funding is expected.

This is an open search for an outstanding individual whose research involves innovative therapies and who is interested in moving these concepts into clinical trial. Current laboratory studies are focused on clinically related topics which require a close interaction with medical and surgical staff. These include immunology, modulation of drug resistance, and high-dose chemotherapy.

This position allows an opportunity for relocation to the beautiful Pacific Northwest and work at the premier cancer treatment facility in the region. Applicant should send curriculum vitae and two recent publications to:

Gary E. Goodman, M.D., M.S.
Research Director, Search Committee
Clinical Research Division
1221 Madison Street
Seattle, WA 98104

CHAIR, DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE UCLA SCHOOL OF MEDICINE

The UCLA School of Medicine is recruiting a chair for its Department of Pathology and Laboratory Medicine. She/he will provide leadership for the teaching, clinical, and research programs of the department.

Candidates are requested to submit curriculum vitae to: Pathology Search Committee, UCLA School of Medicine, Office of the Dean, 12-138 CHS, Los Angeles, CA 90024-1722.

UCLA is an Equal Opportunity/Affirmative Action Employer.

ASSOCIATE DIRECTOR OF ANESTHESIA RESEARCH

The Department of Anesthesia at Rush Medical College invites applications for the position of Associate Director of Anesthesia Research. Experience required in large and small animal surgery; computerized data analysis; initiation, supervision and conducting ongoing research. Demonstrated project design and writing skills required. Candidates should possess an advanced degree in the biologic sciences with prior medical research experience. Salary commensurate with qualifications and experience. Send curriculum vitae to:

Kenneth J. Tuman, M.D.
Vice Chairman

Department of Anesthesia
Rush-Presbyterian-St. Luke's Medical Center
1653 West Congress Parkway
Chicago, IL 60612

Telephone: (312) 942-3135 or FAX: (312) 942-8858

CHAIR

Department of Biochemistry and Molecular Biology
University of Nebraska College of Medicine

Applications and nominations are invited for the position of Professor and Chair of the Department of Biochemistry and Molecular Biology. We seek a person to give scientific, academic and administrative leadership to all aspects of the department's activities. The new chair will have the opportunity to recruit additional faculty and develop new programs. Applications should include curriculum vitae and the names, addresses, and telephone numbers of three or more references. Application deadline is May 31, 1993. Send information to: Thomas H. Rosenquist, Ph.D., Chairman, Biochemistry and Molecular Biology Search Committee, c/o Dean's Office, University of Nebraska College of Medicine, 600 South 42nd Street, Omaha, NE 68198-6545. The University of Nebraska is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

CHAIR OF PSYCHIATRY—The University of California, Davis, School of Medicine is seeking a full-time academic Chairperson of Psychiatry. Candidates must have an M.D. degree or equivalent, be Board Certified in Psychiatry or equivalent, eligible for licensure in California, and be academically qualified for appointment at the Full Professor level. Evidence of excellence in academic administration, teaching, clinical practice, and research is required. Please forward the following: (1) letter describing administrative, teaching, clinical and research background; (2) curriculum vitae, and (3) names and addresses of five references to: David Richman, M.D., Chair, Search Committee for a Chair of Psychiatry, c/o Karen Eilers, Dean's Office, School of Medicine, Medical Sciences I-C, University of California, Davis, CA 95616. This position will be "Open Until Filled." Applications will not be accepted after July 31, 1993. The University of California is an Affirmative Action/Equal Opportunity Employer.

CHAIRPERSON

Department of Biochemistry and Molecular Biology
The University of Oklahoma
College of Medicine

The College of Medicine of the University of Oklahoma Health Sciences Center invites applications and nominations for the position of chairperson of the Department of Biochemistry and Molecular Biology. Applicants must have a Ph.D., M.D., or equivalent degree; any relevant research interest will be considered. The successful candidate will have national recognition in research, teaching, academic administration and leadership.

The committee will immediately begin to screen applications and will continue until the position is filled. Interested individuals should submit a letter of application, curriculum vitae, a summary of accomplishments and goals, and the names of at least three references to: Fred G. Silva, M.D., Chairman, Biochemistry and Molecular Biology Search Committee, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190.

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

ASSOCIATE DIRECTOR GENERAL CLINICAL RESEARCH CENTER (GCRC)

The University of California, San Francisco, is recruiting a clinician scientist (M.D. or M.D./Ph.D.) as Associate Director of the GCRC at San Francisco General Hospital. Minimum of 4 years of research experience in field broadly encompassing molecular medicine (e.g., molecular genetics or gene therapy) is required. In addition to establishing a research program, the Associate Director will participate in the administration of the inpatient/outpatient research facility. Appointment will be at the Assistant/Associate Professor level in the appropriate clinical department. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Send curriculum vitae plus names of three references to:

Robert W. Mahley, M.D., Ph.D.
GCRC Search Committee, Chairperson
PO Box 419100
San Francisco, CA 94141-9100

Department of Anthropology seeks a **BIOLOGICAL ANTHROPOLOGIST** whose research and specializations can complement and augment our existing program in Human origins and the evolution of human behavior. This is a tenure-track appointment at the **ASSISTANT PROFESSOR** level beginning July 1, 1994. Appointment to be made during fall 1993. Closing date September 1, 1993. Rutgers University is an Equal Opportunity Employer and encourages minority applicants. Send curriculum vitae, statement outlining present and future research program, and names of three references to: J.W.K. Harris, Chair, Department of Anthropology, Rutgers University, P.O. Box 270, New Brunswick, NJ 08903.

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

POSITIONS OPEN

CHAIRPERSON, DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS

The University of Cincinnati College of Medicine announces the opening of the Chair of the Department of **PHYSIOLOGY AND BIOPHYSICS**. The College of Medicine ranks among the top 30 colleges of medicine nationally in grant holdings and has significant interdisciplinary areas of distinction particularly in cell and molecular biology and cardiovascular research. The Department has a long history of excellence in education, training and basic research and the 15 full-time faculty are well supported by extramural grants.

We seek qualified candidates with demonstrated abilities in research, leadership and administration and a strong commitment to teaching. Increased support and growth within the department are expected. Applications from outstanding individuals in any area of physiology and biophysics are welcomed. Individuals able to take advantage of the University's significant investments in the transgenic and gene targeting technologies are particularly encouraged to apply. Applications and nominations are welcomed. Interested individuals should submit curriculum vitae and the names of three references to: Jeffrey Robbins, Chair, Search Committee, c/o Department of Pharmacology and Cell Biophysics, University of Cincinnati, OH 45267-0575.

The University of Cincinnati is an Affirmative Action/Equal Opportunity Employer. Women, minorities, disabled persons, Vietnam era and disabled veterans are encouraged to apply.

Applications are being invited for the position of **DIRECTOR of the Neurosurgical Brain Tumor Research Laboratory** at the Penn State University, Hershey Medical Center. Applicants must have a Ph.D. in biochemistry or molecular biology, preferably followed by postdoctoral training. The successful applicant will direct research efforts involved in the development of novel therapeutic techniques at the cellular and molecular level for the treatment of brain tumors. The brain tumor research laboratories work closely with other in-house research departments including the Departments of Neuroscience and Radiology. There will also be interactions and contacts with various biotechnology firms. The successful candidate will be expected to supervise ongoing projects in concert with the Divisional Chief of Neurosurgery and also be responsible for establishing additional supplementary techniques and developing new research programs. Please send curriculum vitae, a letter describing your research experience and current research focus, and the names and addresses of three references to: Stephen K. Powers, M.D., Professor and Chief, Division of Neurosurgery, Milton S. Hershey Medical Center, P.O. Box 850-SC, Hershey, PA 17033. The Milton S. Hershey Medical Center is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER CHAIR, DEPARTMENT OF BIOCHEMISTRY, BIOPHYSICS AND GENETICS

The University of Colorado Health Sciences Center invites applications and nominations for the Chair of the Department of Biochemistry, Biophysics and Genetics. Department members interact strongly with Interdisciplinary Programs in Molecular Biology and Neurosciences. Candidates should have a broad understanding and appreciation of mechanistic and structural biochemistry, particularly related to nucleic acids and proteins. The University seeks an outstanding scientist who has an internationally recognized research program, an excellent record of scientific contributions and a commitment to excellence in teaching of medical and graduate students.

Letters of application or nomination should be sent to:

Dr. Boris Tabakoff, Chairman, Biochemistry, Biophysics and Genetics Chair Search Committee, Department of Pharmacology, Box C-236, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262.

Applications should include curriculum vitae, list of publications, a summary of academic experience and a list of references. Deadline for applications is May 1, 1993.

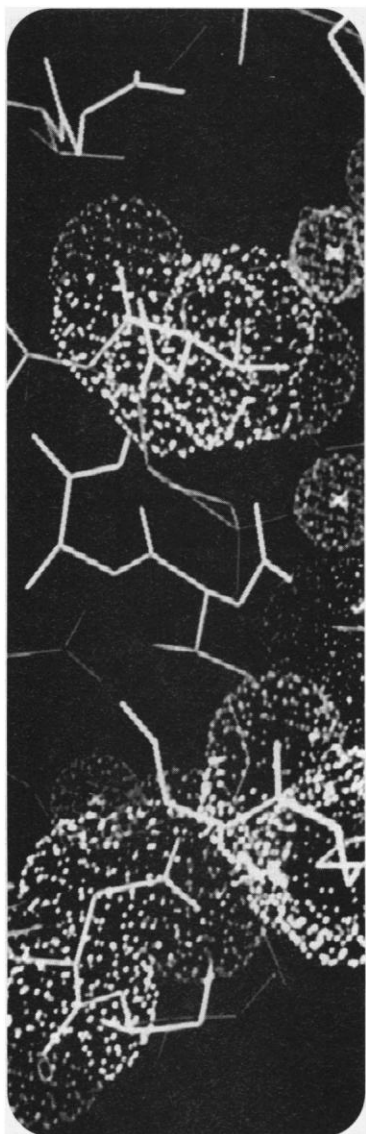
Applications from women and minority groups are encouraged. The University of Colorado Health Sciences Center is committed to Equal Opportunity and Affirmative Action.

ENZYMOLOGISTS • PROTEIN CHEMISTS

GENENCOR INTERNATIONAL is a world leader in industrial biotechnology with its research center located in the San Francisco Bay Area.

We specialize in the research, development and manufacturing of industrial enzymes and specialty chemicals utilizing state-of-the-art technologies such as protein engineering and recombinant DNA technology. We are expanding our research capabilities and seek outstanding individuals who can make a significant contribution to our future success. We currently have openings for:

STAFF SCIENTIST: Enzymologist who will be responsible for developing new enzyme technology and products as well as providing enzymology expertise to various groups within the company. Ideal candidate will have: Ph.D. in Biochemistry/Chemistry; a minimum of 8-10 years of independent research experience in enzyme kinetics, reaction mechanisms, enzyme structure-function and protein engineering; outstanding publication/patent record and experience in training individuals and managing teams. (SSF.5)



SENIOR SCIENTIST: Enzymologist who will lead the enzymology efforts in cellulase research and product development. Ideal candidate will have: PH.D. in Biochemistry/Chemistry; a minimum of 4-6 years of research experience in enzyme kinetics, reaction mechanisms, enzyme structure-function and protein engineering of carbohydrases; strong publication/patent record and supervisory experience. (SSF.6)

SCIENTIST: Enzymologist who will be responsible for enzymology aspects of product development projects and identifying novel industrial enzyme applications. Ideal candidate will have Ph.D. in Biochemistry or related field with a minimum of 2 years of post doctoral enzymology experience with excellent research record. (SSF.7)

SCIENTIST: Protein chemist responsible for purification and characterization of proteins from natural and recombinant sources at microgram to kilogram scale, participating in an aggressive protein engineering program directed at novel enzymes. Ideal candidate will have a Ph.D. in Biochemistry or related field with at least two years of post doctoral experience. Experience in large scale protein recovery and/or screening of novel organisms would be an asset. (SSF.9)

POST DOCTORAL SCIENTIST: Enzymologist who will be responsible for conducting research to understand reaction mechanisms in selected carbohydrases. Requires a Ph.D. in Biochemistry or related field with 0-2 years of research experience in enzymology. (SSF.69)

POST DOCTORAL SCIENTIST: Study the stability and activities of existing variants of an industrial enzyme and to help in designing "rational" stability and/or activity variants. A Ph.D. in Biochemistry or a related field is required. A strong background and interest in protein structure - function relationships and protein stability is essential, together with experience in molecular modeling. (SSF.68)

We offer a challenging and rewarding work environment combined with a competitive compensation and benefits package. To apply, please send your resume, indicating appropriate department code, to: Genencor International, Inc., Attn: HR Dept., 180 Kimball Way, South San Francisco, CA 94080. Or FAX to (415) 583-8269. We are an equal opportunity employer M/F/D/V. Women and minorities are encouraged to apply.

GENENCOR
INTERNATIONAL

POSITIONS OPEN

ENDOWED CHAIR IN COGNITIVE SCIENCE

The Graduate School of the University of Minnesota seeks applications for the Fesler-Lampert Chair in Cognitive Science—an endowed position with tenure. Candidates should have the Ph.D. or its equivalent, an established record of interdisciplinary research and an active research program in cognitive science (for example, cognitive psychology, cognitive neuroscience, psycholinguistics, artificial intelligence, computational neuroscience, philosophy of cognitive science), and a commitment to graduate-level teaching in cognitive science. The international eminence of the candidate will be an important consideration as will the potential for future high-quality research in cognitive science. Teaching responsibilities are flexible but will include courses that contribute to the research training of graduate students in more than one field of cognitive science. Salary level is highly competitive and depends upon qualifications, experience, and distinction. Candidates should submit curriculum vitae, three representative publications, and a letter of application summarizing future research goals to:

Cognitive Science Search Committee
Graduate School, Box S321
321 Johnston Hall
101 Pleasant Street S.E.
University of Minnesota
Minneapolis, MN 55455-0421

APPLICATIONS SHOULD BE POSTMARKED
NO LATER THAN APRIL 21, 1993.

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

USEPA Environmental Research Laboratory—Corvallis, Oregon. **TECHNICAL DIRECTOR, Environmental Monitoring and Assessment Program—Surface Waters (EMAP).** EMAP is a national monitoring program conducted by the EPA in cooperation with states and other agencies. The Surface Waters component is responsible for designing and implementing a program to estimate the condition of the nation's lake and stream resources.

Candidates must have education and/or experience equivalent to a Ph.D. in either (1) biological sciences, agriculture, natural resource management, chemistry or related disciplines; or (2) physical science, engineering, or mathematics; plus experience in managing a national research or monitoring program. Demonstrated skills in written and oral communications are essential. *U.S. citizenship is required.*

For further information and an application package, contact: Pam Taylor, USEPA, at (503) 754-4582. All inquiries must be received by April 5, 1993. *The USEPA is an Equal Opportunity Employer.*

SUPERVISOR IN RETROVIROLOGY is sought by Maryland Medical Laboratory, Inc. Great opportunity for MT with a minimum of 1 year of supervisory experience to supervise our rapidly growing, dynamic ACTG Retrovirology Department. This position includes involvement in clinical service and extensive research. Must be MT(ASCP) registered or eligible or have a B.S. degree in a science with 5 years of lab experience. Virology experience preferred. Inquiries should be made to our: Technical Recruiter at 1-800-368-2576 extension 1447 or to Maryland Medical Laboratory, Inc., 1901 Sulphur Spring Road, Baltimore, MD 21227.

ENVIRONMENTAL SYSTEMS ANALYSIS

The Institute for Environmental Studies (IES) at the University of Wisconsin-Madison invites applications for an anticipated one-year, full-time teaching position as a **LECTURER** or **VISITING PROFESSOR** beginning August 1993. We seek an individual broadly trained in environmental sciences, with a Ph.D. in ecosystem science, ecology, or a related area. Familiarity with computer modeling and undergraduate teaching experience are required. Responsibilities include teaching two courses in environmental systems modeling, a seminar and a course in a specialty area, and student advising. Send curriculum vitae and three letters of reference before 30 April 1993 to: IES Search and Screen Committee, 550 North Park Street, Madison, WI 53706-1491. Unless confidentiality is requested in writing, information regarding applicants and nominees must be released upon request. Finalists cannot be guaranteed confidentiality. *UW-Madison is an Equal Opportunity and Affirmative Action Employer.*

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION open for a scientist with an established record in applying molecular techniques in one of the following areas: radiation biology, cell cycle progression, signal transduction mechanisms, or cell growth factors. The position is in the Research Section of the Department of Radiation Oncology. The present five faculty members have ongoing research in transcriptional/translational regulation of cytokines and their receptors, cell cycle regulation, secondary messenger metabolism, and radiation-induced gene activation and DNA repair. Competitive salary/fringe benefits as well as excellent start-up funds are provided. Academic rank will depend on experience, but the successful candidate must have a Ph.D. or M.D. and have completed postdoctoral studies. Send curriculum vitae, reprints of two recent articles, and arrange for three letters of recommendation to be sent to: Ross B. Mikkelsen, Department of Radiation Oncology, Medical College of Virginia, Box 58, Richmond, VA 23298-0058. *Virginia Commonwealth University, Medical College of Virginia is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION Albert Einstein College of Medicine

The Department of Anatomy and Structural Biology at Albert Einstein College of Medicine is seeking an outstanding scientist working within the broad area of cell biology, using modern methods of biochemistry, biophysics and/or molecular biology. Candidates with special interests in signal transduction, motor molecules of the cytoskeleton, protein trafficking, membrane fusion, or cell cycle and differentiation are particularly encouraged to apply. Applications will be considered for a tenure-track position at the **ASSISTANT PROFESSOR** level. The successful applicant will be expected to develop a strong, independent research program and to participate in the teaching of cell biology and histology to graduate and medical students. The College has state-of-the-art facilities for confocal and video-enhanced light microscopy, electron microscopy, peptide synthesis and sequencing, DNA synthesis, X-ray crystallography, NMR and transgenic mice.

Candidates should send curriculum vitae, brief description of research interests, and names and addresses of three references to: Dr. Peter Satir, Chairman, Department of Anatomy and Structural Biology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. *Albert Einstein College is an Equal Opportunity Employer.*

FACULTY POSITION, Environmental Remote Sensing, Stanford University. The Department of Electrical Engineering and the School of Earth Sciences seek applicants for a joint, tenure-track appointment in Environmental Remote Sensing. We invite applications from those with interests in the passive and active electromagnetic, extended visible, or other techniques pertinent to understanding of Earth's physical environment. Potential areas of focus include the atmosphere, oceans, polar areas, and land surfaces, with emphasis on methods by which these can be studied remotely in the context of Earth systems and Earth as a planet. The successful applicant will teach and conduct advanced research in remote sensing instrumentation, techniques, and applications, and will supervise graduate students drawn from engineering and earth sciences. An appointment will be made at the junior level, tenure-track. Applicants will be evaluated on basis of their creativity, background and ability to understand and discover underlying physical phenomena, ability to develop and lead an independent research program, potential or demonstrated ability to motivate and guide students and to teach, and excellence of performance to date. Review of applications will begin June 1993. Please send a letter of application, complete résumé, publication list, and the names of at least five references to: Prof. Leonard Tyler, Search Committee Chairman, Department of Electrical Engineering, Stanford University, CA 94305-4055.

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

SCIENCE welcomes placement of line classified ads by FAX. Please include name and telephone number for our confirmation call when transmitting ad to:

FAX NUMBER: 202-682-0816

POSITIONS OPEN

BATES COLLEGE DEPARTMENT OF BIOLOGY

Bates College has a one-year opening for a leave replacement faculty member in **VERTEBRATE ANIMAL PHYSIOLOGY** (fall 1993) to teach an upper-level course in Animal Physiology (including topics in neuro- and organ systems physiology), to participate in a large, team-taught, introductory-level Biology course to majors and non-majors, and to offer upper-level elective courses in her/his primary areas of expertise. **The position begins 31 August 1993.** Ph.D. is required, and previous college-level teaching is preferred. Salary is commensurate with degree, rank, and previous experience. Please forward a letter of application by 17 April 1993 accompanied by curriculum vitae, graduate and undergraduate transcripts and three letters of recommendation to: Vertebrate Animal Biology Search, Department of Biology, c/o Secretarial Services, #7 Lane Hall, Bates College, Lewiston, ME 04240.

Bates College is an Affirmative Action/Equal Opportunity Employer. Women and Minorities are encouraged to apply.

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.

OPHTHALMOLOGY

DIRECTOR, REFRACTIVE SURGICAL SERVICE. We seek assistant professor to assume responsibilities and authority to direct refractive surgical service and conduct basic or clinical research at the Brigham and Women's Hospital. The appointee will also participate in resident and fellowship teaching programs. Post-residency fellowship training in refractive surgery, medical-surgical diseases of cornea required, and candidates must be board-certified or board-eligible. Applicants must be able to document refractive surgical experience and ability to compete successfully for independent research funding at RO1 level. Excellent clinical and research facilities are available. *Harvard University and Brigham and Women's Hospital are committed to increased representation of women and members of minority groups on faculty and particularly encourage applications from such candidates.* Please send curriculum vitae and names of three referees to: Leo T. Chylack, Jr., M.D., Professor and Chief of Ophthalmology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.

THE SCRIPPS RESEARCH INSTITUTE



POSTDOCTORAL POSITION IN CELLULAR AND SYSTEMS NEUROBIOLOGY. The newly established Department of Neurobiology has postdoctoral positions for Cellular and Systems Neurophysiologists interested in studying problems related to the analysis of reentrant pathways in the brain, studies of diffusible signals such as nitric oxide in brain development and control of molecular processes by signalling events. Other ongoing studies include: analysis of modification of signal transduction pathways motivated by adhesion molecule binding; control of expression of adhesion molecules, particularly by pattern-forming genes such as *hox* and *pax*; and studies of overexpression or deletion of adhesion molecules in transgenic mice. Send curriculum vitae and three letters of reference to: Dr. Gerald M. Edelman, Department of Neurobiology, SBR14, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, CA 92037. *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL RESEARCH SCIENTIST

Regulated Exocytosis in Endothelial Cells

The Upjohn Company, a leading pharmaceutical company with a strong commitment to research, is seeking a new or recent doctorate in science for the following appointment.

The successful candidate will participate in a basic research project exploring the molecular details of fusion of secretory granules with the plasma membrane in endothelial cells. The aim of the project is to identify and characterize new proteins which mediate regulated exocytosis. This laboratory, operating under the direction of Binks Wattenberg, has an extensive background in vesicular transport and is well-supported to pursue this project. Experience in biochemistry and cell biology is required. Molecular biology techniques would be advantageous.

The postdoctoral program at the Upjohn Company offers a competitive salary and a generous benefits package. Our Kalamazoo headquarters (located midway between Detroit & Chicago) features many cultural and outdoor attractions. For consideration, please send your resume to **THE UPJOHN COMPANY, Corporate Recruiting, Position Code #150, 7000 Portage Road, Kalamazoo, MI 49001**. Equal Opportunity Employer.



■ Scientists

Miles Inc., Diagnostics Division, a worldwide developer of clinical laboratory instruments, is expanding its research and development activities in the fast-growing and challenging area of automated, high sensitivity immunoassays.

There are immediate positions available for forward thinking R&D scientists, at the Ph.D. level, with solid academic training and 3-4 years' industrial or postdoctoral experience in immunochemistry, protein chemistry, or immunoassay development.

Challenging career opportunities are also available for highly motivated scientists at the BS/MS level with immunoassay product development experience.

The Diagnostics Division offers an environment conducive to professional growth as well as an excellent compensation and benefits program. Send CV in confidence to:

Manager of Human Resources, Technical Staffing, Miles Inc., Diagnostics Division, 511 Benedict Ave., Tarrytown, NY 10591. An Equal Opportunity Employer M/F/H/V.



MILES
Diagnostics Division

**We offer challenges
in exciting research
areas and in
innovative new
technologies.**

**Exciting opportunities to become
involved with the NIH-funded
National Flow Cytometry Resource
and Human Genome project.**

Postdoctoral Fellowships Life Sciences Division

- Applications of flow cytometry to chromosome analysis and sorting and development of new techniques, including methods based on photo-induced damage;
- Applications of stopped-flow cytometry in kinetic analysis of ligand binding and cell activation, including development of a stopped-flow sample injection system;
- Applications of newly developed flow cytometric spectroscopic measurement techniques in cell biology, including measurement of fluorescence lifetimes and measurement of emission spectra of individual cells;
- Research in chromosome mapping and nuclear organization using image analysis and fluorescence in situ hybridization;
- Basic cellular and molecular research in the role of chromosomal instability in neoplastic transformation and the use of YAC and FISH technologies for isolating relevant genes;
- Research on the role of protein phosphorylation in kinase-mediated control of cell cycle progression; and
- Development and/or application of a new DNA sizing capability based on flow cytometric analysis of individual DNA fragments.

Annual starting salaries range from \$39,660 to \$42,860 plus a generous and comprehensive benefit package. Positions commencing Fall 1993. A Ph.D. completed within the last 3 years or soon to be completed is required. For consideration: submit **two copies** of a curriculum vitae and publication list to Mary Anne With, MS P290, PD-93-128, Los Alamos National Laboratory, Los Alamos, NM 87545. Affirmative Action/Equal Opportunity Employer. Los Alamos National Laboratory is operated by the University of California for the U.S. Department of Energy.

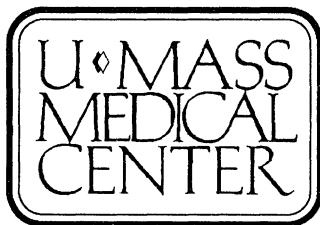
Los Alamos
NATIONAL LABORATORY

Chairperson, Department of Molecular Genetics and Microbiology

Applications and nominations are invited for the Chair of the Department of Molecular Genetics and Microbiology at the University of Massachusetts Medical School in Worcester. We seek a candidate with a record of academic leadership, an internationally recognized research program and a continuing commitment to graduate and medical education. Researchers in any field of microbiology or molecular genetics or immunology will be considered.

Letters of application or nomination should be sent to: H. Maurice Goodman, Ph.D., Chairman, Molecular Genetics and Microbiology Search Committee, Department of Physiology, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655.

Candidates should include a curriculum vitae; description of research interests and the names of three references.



Women and minorities are encouraged to apply. The University of Massachusetts Medical Center is an Equal Opportunity/Affirmative Action Employer.

THE SCRIPPS RESEARCH INSTITUTE

La Jolla, California



POSTDOCTORAL POSITIONS

The Scripps Research Institute currently has two postdoctoral positions available immediately. Both positions are recently funded by the NIH.

One fellow will evaluate the potential of ribozymes in prevention and treatment of RNA virus infection and disease. Requires training in molecular biology, virology and transgenic mouse techniques.

The other fellow will work in the area of antiviral vaccination. Prefer prior training in molecular biology, virology and immunology.

Send curriculum vitae and three letters of reference to: Dr. J.L. Whitton, The Scripps Research Institute, Dept. 32693, 10666 N. Torrey Pines Rd., TPC-11, La Jolla, CA 92037. An Affirmative Action/Equal Opportunity Employer.

VICE PRESIDENT, R&D AND SCIENTISTS

(Anti-Viral Drug Discovery)

AVID THERAPEUTICS INC. is a new, venture-capital financed biotechnology company focusing on antiviral drug discovery using novel and proprietary technology. AVID's Scientific Advisory Board includes world leaders in antiviral research. There are immediate career opportunities for Ph.D. scientists with relevant experience in molecular virology (identifying and expressing new antiviral targets), developing and validating high throughput screening assays for viral specific target molecules, antiviral drug characterization and medicinal chemistry.

*** VICE PRESIDENT, R & D—Requires a Ph.D., 5 to 10 years of relevant experience, a record of independent scientific leadership, an accomplished supervisory background and excellent communications skills.**

*** SCIENTISTS—Ph.D.'s with Postdoctoral or equivalent industrial experience.**

AVID offers exciting opportunities for professional growth in an entrepreneurial setting, with a competitive compensation and benefits package. Please send resume and salary history to: AVID Human Resources, A1, University City Science Center, 3401 Market St., Suite 300, Philadelphia, PA 19104. EOE.

AVID THERAPEUTICS INC.
Antiviral Drug Discovery

SENIOR RESEARCH SCIENTIST — IMMUNOLOGY/PROCESS DEVELOPMENT

EMBREX, INC. is a world leading biotechnology company which develops and markets *in ovo* products to increase the productivity and profitability of the poultry industry. We have an immediate opening for a Senior Research Scientist in Immunology/Process Development to develop and optimize a large scale cell culture process.

Qualifications include:

- Ph.D., Immunology, Microbiology, or Biochemistry.
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- Five years cell culture/tissue culture experience.
- Bioassay experience.
- Large scale cell culture experience preferred.
- Supervisory experience a plus.

EMBREX offers competitive benefits and salary commensurate with experience. Resumes may be sent in confidence to:

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Short Term Research Fellowships in Economics or Social Sciences

To foster scholarly interest in the economic and social benefits of basic laboratory research in the biomedical sciences, the Federation of American Societies for Experimental Biology (FASEB) will award three fellowships of up to three months duration during the summer of 1993. The value of each award will be \$5000, which may be used for stipend or any necessary expenses. Successful applicants will be Ph.D. candidates in economics or related disciplines at an accredited institution. Applications will include description of a project that can be accomplished during the fellowship period, and that is directed to examining economic or social outcomes of laboratory research in the basic biomedical sciences. Projects directed to methodologies for assessing outcomes are acceptable. Applications should include a brief resume for the applicant, and a statement of concurrence from an appropriate mentor. Enquiries and applications should be submitted to: Michael J. Jackson, Ph.D., Executive Director, FASEB, 9650 Rockville Pike, Bethesda, Maryland 20814-3998. Telephone (301) 530-7090 FAX (301) 530-7049.

FASEB is an
Equal Opportunity Employer.

Postdoctoral 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.

Cognitive Neuroscience **Jordan Grafman, PhD**

Patients with a variety of CNS disorders are being evaluated using cognitive science methodology and state-of-the-art neuroscience techniques such as PET, functional NMR, transcranial magnetic stimulation, and eye-tracking. Areas being investigated include prefrontal cortical functions, memory and amnesia, the underlying cognitive architecture of knowledge components and their dissolution in neurological disease, visual attention and object recognition, and social cognition. Medical Neurology Branch (OE-30), NINDS, Building 10, Room 5S209.

Computational Molecular Biology **Jacob V. Maizel, Jr., PhD**

Computational methods for nucleic acid and protein sequence analysis are being developed and then applied to important problems in cancer, AIDS and other areas of biomedical research. Background in computational molecular biology, FORTRAN, C, VMS, UNIX and 2- and 3-D RNA structure determinations, as well as U.S. citizenship and/or permanent residency, are required. Laboratory of Mathematical Biology (OE-30), NCI-FCRDC, P.O. Box B, Building 469, Room 151, Frederick, MD 21702-1201.

DNA Mutagenesis **Roger Woodgate, PhD**

The molecular mechanisms of mutagenic DNA repair in prokaryotic and eukaryotic cells are being investigated. Prokaryotic research is focused on the roles of the Umu-like family of mutagenesis proteins. Future projects include the isolation and characterization of genes necessary for mutagenic repair of DNA in eukaryotic cells. Experience in cloning and expression of recombinant proteins in eukaryotic cells is desirable. Section on DNA Replication, Repair and Mutagenesis (OE-30), NICHD, Building 6, Room 1A13.

Molecular Embryology **Yun-Bo Shi, PhD**

During metamorphosis, the simple structure of the tadpole intestine is remodeled into a more complex structure similar to the fully differentiated mammalian intestine. This process is controlled by thyroid hormone and involves both specific cell death and selective cell proliferation and differentiation. Many thyroid hormone response genes have been identified in the intestine and their regulation and function during the remodeling process are being studied. Laboratory of Molecular Embryology (OE-30), NICHD, Building 6, Room B1A02.

Molecular Endocrinology **Sheue-yann Cheng, PhD**

The effects of thyroid hormones on the growth and development of tumors are being studied with particular emphasis on the role of thyroid hormone nuclear receptors in the carcinogenesis of breast cancer. A strong background in cell biology, biochemistry and/or molecular biology is preferred. Laboratory of Molecular

Biology (OE-30), NCI, Building 37, Room 4B09.

Molecular Genetics **David A. Nielsen, PhD**

The regulation of genes involved in serotonin metabolism and function in the CNS of mammals, and their influence on behavior, are being investigated using modern molecular biological techniques. Background in molecular biology (gene expression, *in vitro* transcription, transgenic animals) and biochemistry (protein phosphorylation) are highly desirable. Applicants should have less than five years postdoctoral experience. Laboratory of Neurogenetics (OE-30), NIAAA, Building 10, Room 3C102.

Papillomavirus Replication and Gene Regulation **Alison A. McBride, PhD**

In order to better understand virus-associated transformation and carcinogenesis, the mechanism by which the papillomavirus E1 and E2 proteins regulate viral transcription and DNA replication are being studied. Candidates should have experience in molecular biology, biochemistry or cell biology and less than five years of postdoctoral experience. Laboratory of Tumor Virus Biology (OE-30), NCI, Building 41, Room D704.

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 (1,3014922221 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.

The Postdoctoral Research Fellowship Opportunities catalog may be requested from the address below. An electronic version of the catalog 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

Office of Education
9000 Rockville Pike, Bethesda, MD 20892
Equal Opportunity Employer

POSITIONS OPEN

FIELD DIRECTOR, CENTER FOR SUSTAINABLE DEVELOPMENT—COSTA RICA. The School for Field Studies, in conjunction with Northeastern University, seeks an Educator/Administrator with a strong background (including research and teaching) in field-based education. Lead faculty team as they teach case studies, an integrated curriculum addressing sustainable development in relationship with conservation, economics, resource management, ecology and culture. Oversee semester programs (30 students each) and several one-month summer programs. Responsibilities include: supervising faculty, risk management, curriculum development, budgets, logistics and creation of goals for the center. **QUALIFICATIONS:** Ph.D. in environmental education, ecology, resource management, planning or international development; relevant teaching/research experience (preferably in Costa Rica); fluency in Spanish; and ability to work in the field for extended periods under spartan conditions is important. Five years of administrative experience in an equivalent/related position, and 3 years of teaching experience emphasizing curriculum integration and field experience. **TO APPLY:** Send curriculum vitae, and cover letter explaining skills and experience to: **CRFD/S Search, SFS, 16 Broadway, Beverly, MA 01915.** Deadline: **April 15, 1993.**

MARINE BIOLOGIST

Instructor for a one-year **FACULTY POSITION** to teach courses primarily in marine biology and to direct 3000-gallon marine laboratory for undergraduate projects. Ph.D. required. Send curriculum vitae and three letters of recommendation by **May 3, 1993**, to: **Dr. R. Thibault, Marine Biologist Search Committee, Department of Biological Sciences, Bowling Green State University, Bowling Green, OH 43403.** *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR EXPERIMENTAL PSYCHOLOGY

NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY invites applicants for a tenure-track, assistant professor appointment beginning August 1993. Applicants must have a Ph.D. in psychology or a related field at the time of appointment, with college-level teaching experience preferred, and must have demonstrated excellence in scientific thought through peer-reviewed publications. Candidates should be prepared to teach a wide range of experimentally oriented undergraduate courses and to maintain an active research program. Preference will be given to individuals with strengths in physiological and/or animal research. The ability to communicate effectively in written and spoken English is essential.

New Mexico Tech is a scientific and technical institute with 1500 students. The Psychology Department (3 faculty, 30 majors) offers the B.S. Degree and also helps support a teacher training program for high school teachers (primarily science and math). An animal laboratory is shared with the Biology Department. New Mexico Tech is located in the Rio Grande Valley with fine weather and many outdoor recreational opportunities. Send letter of application, résumé, bibliography, a statement of teaching and research interests, and addresses and telephone numbers of 3 or more references to: **New Mexico Institute of Mining and Technology, Human Resources, Wells Hall Box C-031, Socorro, NM 87801.** *Women and minority candidates are encouraged to apply.*

Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

A position is available utilizing biochemical, cellular and molecular biology techniques to identify and characterize endoderm-secreted growth factors that regulate early stages of heart development. Prior experience in cellular biology and experimental embryology/cell culture is desirable. Please mail or **FAX: (414-778-4293)** curriculum vitae with three references to: **Dr. John Lough, Department of Cellular Biology and Anatomy, Medical College of Wisconsin, Milwaukee, WI 53226.**

Equal Opportunity/Affirmative Action Employer, M/F/D.

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. **Classified Advertising telephone: 202-326-6555. FAX: 202-682-0816.**

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR NEUROSCIENCES

The Fort Wayne Center for Medical Education (FWCME)—Indiana University School of Medicine seeks qualified applicants for a full-time, tenure-track position in anatomy-neurosciences. Applicants should have a Ph.D. in anatomy or neurosciences and postdoctoral research experience. Some teaching experience at medical or graduate school level is preferred. The successful applicant is expected to participate in directing and teaching neuroscience course to freshmen medical students (45% to 50% effort). Development (or continuation) of an active, fundable research program is expected (45% to 50%). FWCME-IUSM has outstanding research and teaching facilities and can offer the successful applicant start-up funds, half-time technical assistance, and a competitive salary. Qualified applicants should send curriculum vitae and the names, addresses, telephone and/or FAX numbers of three references to: **B. H. Ragatz, Ph.D., Assistant Dean and Director, Fort Wayne Center for Medical Education, 2101 Coliseum Boulevard East, Fort Wayne, IN 46805.** *Indiana University is an Equal Opportunity/Affirmative Action Educator, Employer, and Contractor, M/F.*

POSTDOCTORAL POSITION IN MOLECULAR BIOLOGY

Study of mammalian cellular and HIV DNA replication proteins with respect to mechanism of action, response to antiviral agents and cellular regulation. Viral proteins are generated by expression in bacteria. Procedures involve preparation of model DNA and RNA substrates, monoclonal antibody production, polymerase chain reaction and active site photolabeling. Submit complete curriculum vitae and three references to: **Dr. Robert A. Bambara, Department of Biochemistry, Box 607, University of Rochester Medical Center, Rochester, NY 14642.**

POSTDOCTORAL POSITION available at **ROCKEFELLER UNIVERSITY** to investigate structure-function relationships underlying macromolecular assemblies involved in the processes of transcription and replication. Work in the laboratory involves biomedical, biophysical, and structural investigations of assemblies and sub-assemblies of proteins and nucleic acids isolated at defined stages of the transcription or replication processes. Structural studies include X-ray crystallographic analysis of macromolecules, and electron microscope crystallographic analysis of larger assemblies formed into single-layer thick (two-dimensional) crystals on the surfaces of lipid monolayers. Send curriculum vitae and the names of 3 references to: **Dr. Seth A. Darst, The Rockefeller University, Box 89, 1230 York Avenue, New York, NY 10021; FAX: 212-327-7477.** *An Equal Opportunity/Affirmative Action Employer.*

DOCTORAL PROGRAM IN MOLECULAR & CELLULAR BIOLOGY AND PATHOBIOLOGY. Interdisciplinary program seeks qualified candidates interested in fundamental molecular and cellular biology and its application to disease. Stipends of \$10,000 to \$15,000 available on a competitive basis. Contact: **Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.**

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.*

POSITIONS OPEN

CARDIAC MEMBRANE STRUCTURE AND FUNCTION NIH-funded POSTDOCTORAL TRAINING POSITION available July 1, 1993, for 2 or 3 years of research training in cardiac physiology, pharmacology, biochemistry and biophysics at NIH stipend levels. Minimum requirements: Ph.D. or M.D. degree. *U.S. citizen or permanent resident. Qualified minority candidates are encouraged to apply.* For further information contact: **Dr. James Watras, Cardiology Division, MC-1305, University of Connecticut Health Center, Farmington, CT 06030-1305.** *An Affirmative Action/Equal Opportunity Employer, M/W/H.*

POSTDOCTORAL POSITIONS available to study the structure and function of *Xenopus* Transcription Factor IIIA (TFIIIA), the biochemistry of transcription termination by RNA polymerase III, or other aspects of the RNA polymerase III transcriptional apparatus. Experimental approaches emphasize quantitative *in vitro* biochemistry but also make use of genetic screens of mutant forms of *Xenopus* TFIIIA expressed in yeast. Previous experience in nucleic acid manipulations, protein biochemistry, or yeast genetics desirable but not absolutely necessary. Send curriculum vitae and three letters of reference to: **David R. Setzer, Department of Molecular Biology and Microbiology, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4960.**

HARVARD MEDICAL SCHOOL JOSLIN DIABETES CENTER

A **POSTDOCTORAL POSITION** is available immediately and another starting July 1, 1993, to study mechanisms of tyrosine kinase signal transduction, with emphasis on SH2/SH3 domain structure-activity correlations and insulin receptor/IRS-1 signaling pathways. Experience in protein or peptide chemistry and/or recombinant DNA techniques is required. *Applications from U.S. citizens and permanent residents are encouraged.* Send curriculum vitae and three references to: **Steven E. Shoelson, M.D., Ph.D., Joslin Diabetes Center, One Joslin Place, Boston, MA 02215.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION AVAILABLE IN MOLECULAR BIOCHEMISTRY OF HUMAN TRANSLUTAMINASE.

A postdoctoral-level position is available July 1993 in the Molecular Biochemistry Department at the Oklahoma Medical Research Foundation. The position offers excellent laboratory facilities in a well-equipped new building. Prefer candidates have experience with molecular biology and protein engineering techniques. Research interests include the regulation of transglutaminase and transglutaminase homologues including transfection of the cDNA's into human cells, the involvement of transglutaminase in human disease, protein engineering and purification of the expressed protein product, involvement of transglutaminase in apoptosis, tumor growth and cell differentiation, substrates for transglutaminase in plasma of healthy and diseased individuals, and transglutaminase and extracellular matrix interactions. Interested individuals should submit curriculum vitae and a brief description of their research interests to: **Dr. Paul Birkbichler, Molecular Biochemistry Department, Oklahoma Medical Research Foundation, 825 Northeast 13th Street, Oklahoma City, OK 73104.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS IN MOLECULAR HEMATOPOIESIS

Three postdoctoral positions are available immediately for scientists interested in working in a stimulating and challenging research environment. Primary research emphasis will be on stem cell proliferation factor (SCPF), a novel cytokine which proliferates human bone marrow progenitor cells without inducing differentiation. Postdoctoral fellows will participate in cloning, expressing and characterizing SCPF and will receive training in a wide variety of molecular biology and immunology techniques. Candidates should have a strong background in biochemistry/molecular biology, be self-starters, and be creative thinkers. Salaries are extremely competitive. *We especially invite applications from women and minorities.* Please send curriculum vitae, three letters of reference, and a letter of application to: **Michael J. P. Lawman, Department of Immunology and Medical Microbiology, Box 100266 JHMHC, University of Florida, Gainesville, FL 32610.**

SR. RESEARCH INVESTIGATORS, Ph.D.

Department of Cardiovascular Biochemistry Princeton, New Jersey

The Department of Cardiovascular Biochemistry of Bristol-Myers Squibb has two immediate openings at the level of Sr. Research Investigator for an Enzymologist and a Protein Chemist. The research areas of interest include enzymes, receptors and other protein targets relevant to the discovery of novel cardiovascular therapeutic agents. The Department of Cardiovascular Biochemistry has state-of-the-art facilities for high-throughput enzyme and receptor binding assays, tissue culture and protein purification and characterization with access to protein and gene sequencing, oligonucleotide synthesis and other molecular biological techniques.

Successful candidates will hold a Ph.D. in Chemistry or Biochemistry and have two or more years of postdoctoral or industrial experience in a related research area.

ENZYMOLOGIST – Candidates should have demonstrated abilities in protein purification, assay development and wide range of steady-state enzyme kinetic techniques. Fundamental skills in molecular biology, including site-directed mutagenesis, are highly desirable. Please reply to **PRI-JW-055**.

PROTEIN CHEMIST – Candidates should have extensive experience in protein purification, (particularly, membrane-bound proteins), affinity and photoaffinity labelling of proteins and protein microsequencing. Fundamental skills in molecular biology, including bacterial or mammalian protein expression, expression cloning and site-directed mutagenesis are highly desirable. Please reply to **PRI-JW-102**.

RESEARCH INVESTIGATOR, Ph.D.

Department of Biochemistry Dermatological Discovery Research Buffalo, New York

BIOCHEMISTRY – This position will involve identifying/characterizing enzyme inhibitors as drug candidates. The focus of the research will be on therapeutic targets within the area of inflammation with specific emphasis on phospholipase and the production of lipid mediators.

Major responsibilities include providing research direction to associate scientists, preparing scientific reports and publications, identifying new approaches and targets for drug discovery, and developing internal and external research collaborations. The successful candidate will have a Ph.D. in Biochemistry with experience in enzymology and enzyme assay development. At least two years of postdoctoral experience with a good record of demonstrated accomplishments (publications) is required. Experience in lipid biochemistry and phospholipase is a definite plus. Please reply to **PRI-RP-108**.

RESEARCH INVESTIGATOR, Ph.D.

CNS Cellular & Molecular Biology Wallingford, Connecticut

Join a research team involved in basic/applied research on the structure and function of key proteins in the nervous system. Primary responsibilities include cloning and characterization of novel G-protein coupled receptors and/or ion channels. Requires a Ph.D. and 2 years of postdoctoral experience in molecular neurobiology. Strong theoretical training in the pharmacology of neurotransmitter receptors and/or ion channels is desirable. Please reply to **PRI-MH-58**.

RESEARCH SCIENTIST, BS/MS

Cardiovascular Pharmacology Princeton, New Jersey

This position involves experimentation with animals with specific responsibility for organizing data, providing statistical analysis and performing surgery. Requires a BS with 5 - 7 years or an MS with 2 - 4 years research experience in cardiovascular/renal physiology or pharmacology. Please reply to **PRI-JW-054**.

RESEARCH SCIENTIST, BS/MS

Molecular Biology Princeton, New Jersey

Conduct basic research on molecular mechanisms of signal transduction. Experiments will require extensive experience in molecular cloning, DNA sequencing, mutational analysis, expression in eukaryotic and prokaryotic cells, protein purification and cell culture techniques. Requires an MS with 3 - 5 years experience or a BS with 5 - 7 years experience. Please reply to **PRI-BM-124**.

RESEARCH SCIENTIST, BS/MS

CNS Cellular & Molecular Biology Wallingford, Connecticut

Participate in studies of the structure and function of neurotransmitter receptors. Responsibilities include screening genomic and cDNA libraries, polymerase chain reaction techniques, site-directed mutagenesis, DNA sequencing and expression of cloned receptors in eukaryotic cells. Requires experience with molecular neurobiology cloning techniques, eukaryotic cell culture, tissue culture and transfection of eukaryotic cells. Please reply to **PRI-MH-59**.

Please send resume with salary requirements (indicating dept. code) to: **Human Resources Dept., Bristol-Myers Squibb Pharmaceutical Research Institute, P.O. Box 4000, Princeton, NJ 08543-4000**. Equal Opportunity Employer, M/F/D/V.



Bristol-Myers Squibb Company

POSITIONS OPEN

POSTDOCTORAL POSITIONS in molecular-cellular biology and drug discovery available immediately. Challenging working environment and competitive salaries. Send curriculum vitae and three references to: **James W. Larrick, M.D., Ph.D., Palo Alto Institute of Molecular Medicine, 2462 Wyandotte Street, Mountain View, CA 94043. FAX: 415-851-3959.**

PROTEIN THERAPY OF CF

POSTDOCTORAL POSITIONS are available for research on a protein therapy approach to treating cystic fibrosis. Experiments will involve purification of the CFTR and the development of effective means for introducing it into CF cells. Send curriculum vitae and names of three references to: **Dr. Gene A. Scarborough, Department of Pharmacology, CB #7365, F.L.O.B., University of North Carolina, Chapel Hill, NC 27599. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available summer 1993 to study control of cell signaling by extracellular matrix composition and organization. Applicants should have a Ph.D. or M.D. degree and training in cell and molecular biology. Send curriculum vitae and names of 3 referees to: **Dr. Fred Grinnell, Department of Cell Biology and Neuroscience, UT Southwestern Medical Center, Dallas, TX 75235.**

An Equal Opportunity Employer.

Ph.D. PROGRAM IN BIOLOGY

Doctoral training positions with full support are available in the Biology Department at Wesleyan University. The Ph.D. program is characterized by close faculty-student interactions and opportunities for interdisciplinary research. Active research programs are in cell and developmental biology, genetics, evolution and neurobiology. Graduate students are supported by a 12-month stipend of \$12,538 plus tuition waiver and dependency allowance.

Contact: **Graduate Admissions, Department of Biology, Wesleyan University, Middletown, CT 06459; (FAX: 203/344-7952), or call 203/347-9411, extension 2656.**

POSTDOCTORAL POSITIONS UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER (UCHSC)

Several postdoctoral positions are available immediately for individuals interested in pulmonary and neuropharmacology research.

PULMONARY RESEARCH. Candidates are sought to join an ongoing program investigating regulation of lung function with emphasis on neural control mechanisms. Areas of research include *in vivo* and isolated tissue studies, cell culture, biochemical and molecular studies of neurotransmitter function, intracellular transduction mechanisms and models of airway inflammation. Send curriculum vitae, statement of research goals and names of 3 references to **Dr. Ralph J. Altieri** at the address below.

NEUROPHARMACOLOGY. Individuals are sought with interests in neuropharmacology, including genetic, biochemical and molecular approaches to the study of alcohol and substances of abuse. Send curriculum vitae, statement of research goals and names of 3 references to **Dr. V. Gene Erwin** at the following address: **University of Colorado Health Sciences Center, School of Pharmacy, Campus Box C238, 4200 East Ninth Avenue, Denver, CO 80262. UCHSC is committed to Equal Employment Opportunity and Affirmative Action.**

POSTDOCTORAL POSITION available to develop preclinical/laboratory program in vaccine development with emphasis on anti-idiotype vaccines. Expertise in basic immunology and immunochemistry required. Previous work in development of anti-idiotype 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.

POSITIONS OPEN

POSTDOCTORAL ASSISTANT for research within a medical college in southwest Ohio related to biosynthesis and metabolism of distinctive carbohydrate metabolites by a human pathogenic fungus. Use biochemical approaches to isolate, purify, and characterize enzymes; use molecular genetic techniques to clone, sequence, and analyze genes that encode these enzymes; use mutagenesis and gene disruptions to generate mutants and characterize their physiological properties; study the ability of mutants to resist killing by phagocytic cells and to cause experimental disease in animals. The overall goal of this research is to identify potential therapeutic targets. Must have Ph.D. in Medical Mycology, Microbiology, or Molecular Biology. No experience required in above duties, but applicants will qualify with one year of postdoctoral experience and research publication in any of the following areas: morphological and physiological characterization of human pathogenic fungi including animal modelling of fungal disease, immunochemical characterization of fungal proteins, cloning, sequencing, and expression of genes of fungi causing human and animal diseases. Forty hours per week, 8:00 am to 5:00 pm, Monday through Friday; \$25,000 per year. *Must have proof of legal authority to work indefinitely in the United States.* Send résumé in duplicate (no calls) to: **J. Davies, JO#1230899, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.**

POSTDOCTORAL POSITION available for the study of mechanisms of metabolism, DNA adduct formation, and carcinogenicity of polynuclear aromatic hydrocarbons and their derivatives. A Ph.D. degree is required; research training in chemistry, biochemistry and/or pharmacology is preferred. Applicants should submit curriculum vitae and names of three references to: **Dr. James W. Flesher, Department of Pharmacology, University of Kentucky, College of Medicine, Lexington, KY 40536. The University of Kentucky is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS to study microvascular transport in the renal medulla. Projects: (1) Microperfusion and videomicroscopy to determine microvessel transport properties. (2) Fluorescent videomicroscopy to study signal transduction in endothelial cells. (3) Mathematical simulations of microvascular function. Background in Physiology, Pharmacology, Engineering or Biophysics. Send curriculum vitae and names of references to: **Thomas L. Pallone, Division of Nephrology, Hershey Medical Center, Hershey, PA 17033. The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.**

A **POSTDOCTORAL POSITION** is available for a recent Ph.D. (Biochemistry/Pharmacology/molecular Biology) to study the function and regulation of G-protein coupled receptors (substance P receptor/adrenergic and muscarinic receptors). Interested applicants should submit curriculum vitae and three letters of reference to: **Drs. M. M. Kwatra/D. A. Schwinn, Box 3094, Duke University Medical Center, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS: MOLECULAR BIOLOGY AND ENZYMOLOGY. One project involves determining the mutation spectra of site-specific photoproduct-containing viruses in *E. coli* and human cells and requires experience with cloning, sequencing, and hybridization techniques. The other project involves determining the origin of the sequence-specificity of DNA synthesis past photoproducts and requires experience with nucleic acids and enzyme kinetics. Send curriculum vitae and references to: **Dr. John-Stephen Taylor, Department of Chemistry, Washington University, One Brookings Drive, St. Louis, MO 63130. Washington University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available immediately to study the role of forebrain serotonin receptor subtypes in cardiovascular and neuroendocrine regulation. Ph.D. in pharmacology or physiology with experience in neuroanatomical techniques preferred. Send curriculum vitae and 3 letters to: **Dr. Richard H. Alper, Department of Pharmacology, 3901 Rainbow Boulevard, University of Kansas Medical Center, Kansas City, KS, USA 66160-7417 or contact me at the FASEB meeting.**

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** available immediately to study (1) structure of T cell fibronectin and (2) mechanisms of interaction of T cell fibronectin with endothelial cytokines, and arachidonic acid metabolites during the initiation of delayed hypersensitivity inflammatory reactions. Experience in molecular biology, protein biochemistry and/or tissue culture is desirable. Send statement of research interests, curriculum vitae and names of three references to: **Dr. Henry P. Godfrey, Department of Experimental Pathology, New York Medical College, Basic Science Building, Valhalla, NY 10595. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

A postdoctoral position is available July 1, 1993, for examination of the regulation and function of a new family of recently cloned human B cell growth factors. Experience in molecular biology and/or cellular immunology is advisable. The laboratory is located in the Clinical Sciences Building of Washington University School of Medicine. Send curriculum vitae, names and addresses of 3 references, and a short letter describing research experience to: **Dr. Julian Ambrus, Division of Rheumatology, Washington University School of Medicine, 660 South Euclid, Campus Box 8045, St. Louis, MO. FAX: 314-454-1621.**

The University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION (M.D. or Ph.D.) is available in a research group working on the pulmonary circulation with a particular interest in gene expression of components of extracellular matrix of capillaries. Some background in molecular biology preferred. Salaries according to the NIH guidelines with possibility of supplementation. Position available immediately. *Only U.S. citizens or permanent residents are eligible.* Send curriculum vitae to: **John B. West, M.D., Ph.D., Department of Medicine 0623, University of California, San Diego (UCSD), 9500 Gilman Drive, La Jolla, CA 92093-0623. UCSD is an Affirmative Action/Equal Opportunity Employer.**



POSTDOCTORAL POSITION available immediately to study the role of MITOCHONDRIAL LIPIDS in regulation of organelle biogenesis in yeast. A strong background in molecular biology and/or protein purification is preferred. Send curriculum vitae, summary of research experiences, and names, addresses, and telephone numbers of references to:

**Dr. Miriam L. Greenberg
Department of Biological Sciences
Wayne State University
Detroit, MI 48202
FAX: (313) 577-6891**

Wayne State University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Available for a molecular biologist to work in close collaboration with X-ray crystallographer to elucidate the 3-dimensional structure of cytokine receptor binding domain (*J. Biol. Chem.* 267, 24069-24075, 1992), and to participate in signal transduction studies. Experience in mammalian tissue culture and protein purification desirable. Send curriculum vitae, names and telephone numbers of 3 references to: **Mann-Jy Chen, Ph.D., Jefferson Cancer Institute, Jefferson Medical College, Thomas Jefferson University, 10th and Locust Streets, Philadelphia, PA 19107. FAX: (215) 923-4498. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available July 1, 1993, to study nuclear transport and function of novel lung macrophage enzyme (*J. Biol. Chem.* 1992; 267:570). Required: Ph.D. degree, general experience in biochemistry and cell and molecular biology, and demonstrated experience in transport or function of nuclear proteins. *U.S. citizen or permanent resident preferred.* Send curriculum vitae, letter of intent, and names of references to: **Dr. Marc Peters-Golden, Pulmonary Division, 3916 Taubman Center, University of Michigan, Ann Arbor, MI 48109-0360. FAX: (313) 764-4556.**

SENIOR BIOCHEMIST/ MOLECULAR BIOLOGIST

The Plant Biotechnology Department is seeking an innovative biochemist to study a signal-receptor system in plants. This position will analyze the structure of a receptor protein relative to its function.

Requires a PhD in Biochemistry or related field and relevant postdoctoral experience. Experience in current methods of protein purification and protein expression systems is essential. Signal-receptor systems experience desirable.

Sandoz Agro, Inc. is a division of Swiss-based Sandoz Ltd., with a commitment to agricultural research in North America and the crop protection business worldwide. Our innovative biorational approach to research offers a stimulating and challenging work environment.

For consideration, send curriculum vitae to:

Sandoz Agro, Inc.
Human Resources Department
975 California Avenue
Palo Alto, CA 94304 - 1104



SANDOZ

An Affirmative Action/Equal Opportunity Employer

NYU
Medical
Center

Assistant Research Scientist

POSTDOCTORAL FELLOWSHIP IN TUBERCULOSIS RESEARCH

The Division of Pulmonary and Critical Care Medicine at NYU Medical Center is seeking Postdoctoral Fellows interested in research topics including isolation and structure/function studies of genes for mycobacterial drug resistance, mechanisms of transcriptional regulation of cytokine genes and adhesion molecules in granuloma formation, and clinical trials of new therapies. You'll be working at Bellevue Hospital's Chest Service which admits over 500 new patients with active tuberculosis yearly.

Please send curriculum vitae to Maha Singh, Human Resources Department, NYU Medical Center, 550 First Ave., New York, NY 10016. CVs must be received by April 19, 1993. EOE, M/F.

MILES

Pharmaceutical
Division

Preclinical Drug Development *Ph.D. Level Positions*

New expansion at the Miles Research Center in West Haven, CT has created the following opportunities:

SENIOR RESEARCH SCIENTIST

PHARMACOKINETICS OF PROTEINS/PEPTIDES

Responsibilities include validation of bioanalytical methods and the supervision, interpretation and reporting of preclinical ADME studies to support IND/NDA and international filings for protein and peptide drugs. The candidate will supervise technicians engaged in ADME studies, participate in the implementation of GLP, participate in the evaluation of LIMS, represent Pharmacokinetics on interdisciplinary project teams, and serve as study director on preclinical studies and scientific monitor of contract laboratory work.

Ph.D. in pharmacokinetics, immunology/medicinal chemistry, or related discipline required with a minimum of 4 years' industrial or postdoctoral experience in drug research and development. Thorough knowledge of bioanalytical techniques and interpretation of the pharmacokinetics of biologicals is required. Demonstrated experience in the design, supervision, execution and reporting of preclinical pharmacokinetic and ADME studies for protein and peptide drugs in the drug development process is essential.

S T A F F S C I E N T I S T

DRUG METABOLISM

Responsibilities include the design, conduct, supervision, and reporting of drug metabolism/pharmacokinetics studies in the discovery and development of new drugs. The candidate will be responsible for the development and validation of analytical methods for the detection of drugs and metabolites from preclinical ADME studies, establishment of in vitro and in vivo drug metabolism techniques (e.g., microsomal and hepatocyte assay), isolation and identification of metabolites, and the supervision of technicians. Additionally, the candidate will represent Pharmacokinetics on interdisciplinary project teams, serve as study director on preclinical studies and scientific monitor of contract laboratory work.

Ph.D. in medicinal/pharmaceutical chemistry or related discipline required with 6+ years' experience in drug metabolism research and development. Experience in the design, supervision, interpretation, and reporting of in vitro and in vivo drug metabolism studies required. Thorough knowledge of biotransformation pathways, state of the art in vitro metabolism models, and the ability to interpret and correlate interspecies metabolism data in the context of pharmacokinetics and toxicokinetics is required. A strong background in chemistry, pharmacokinetics analytical techniques related to drug metabolism is essential, as is experience with radionuclide and isolation/identification of metabolites.

SENIOR RESEARCH SCIENTIST

BIOANALYTICS/TOXICOKINETICS

The successful candidate will have primary responsibility for the development, supervision, validation and reporting of analytical/bioanalytical methods to support preclinical pharmacokinetics and toxicokinetic studies for IND/NDA and international filings. The candidate will establish a bioanalytical laboratory (HPLC, GC, GC/MS) for analytical methods development and validation in the trace analysis of drugs and metabolites in biological fluids. Candidate will also be responsible for introduction of new technology (CZE, SFC) and evaluation of LIMS systems. The candidate will supervise technicians, participate in the implementation of GLP, represent Pharmacokinetics on interdisciplinary project teams, and serve as study director on preclinical studies and scientific monitor of contract laboratory work.

Ph.D. in analytical/pharmaceutical chemistry or related discipline required with a minimum of 4 years' industrial or postdoctoral experience in the development and validation of methods of the trace analysis of xenobiotics in biological matrices. Demonstrated strong theoretical and practical knowledge of HPLC, GC and GC/MS required. Strong background in method development and validation, derivatization, robotics and proven ability to meet new challenges such as chiral separations and analytics for proteins and peptides required.

These positions offer attractive compensation commensurate with qualifications, generous benefits, and an excellent opportunity for personal growth and professional satisfaction. Resumes including salary history should be forwarded to: **Department AAWB, Miles Inc., Pharmaceutical Division, 400 Morgan Lane, West Haven, CT 06516.**

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



Professorship of Microbiology

Applications are invited for a Professorship of Microbiology in the Department of Microbiology, School of Animal and Microbial Sciences. This is a newly established chair in the Department, there being one other held by Professor J.W. Almond.

Candidates should have an established international reputation for research and will be expected to provide intellectual and academic leadership in both research and teaching in the Department of Microbiology, the School of Animal and Microbial Sciences and the University as a whole. As well as stimulating research in his or her own field, the successful candidate will be encouraged to initiate collaborative work with other members of the School and with colleagues elsewhere in the Faculty of Science and across the University.

Applications from candidates with research expertise in the areas of Molecular Bacteriology or Molecular Immunology will be especially welcome although applications from candidates whose interests lie in other areas of Microbiology will also be considered.

A Research Fellowship for a fixed term of five years will be assigned to the Professorship.

Further information may be obtained from the Registrar, Room 213, Whiteknights House, PO Box 217, The University, Reading RG6 2AH. Tel: (0734) 318115. Fax: (0734) 874722.

The closing date for applications is 3 May 1993.



Pierre Fabre

CHIEF OF EXPERIMENTAL CANCEROLOGY DIVISION

The Centre de Recherche PIERRE FABRE, located in the south of France, is recruiting a head of its Experimental Cancerology Division.

Applicants should have received an academic training at the Ph.D. level and at least 7 years of post-doctoral experience relevant to experimental cancerology. The curriculum should preferably include drug discovery work in the pharmaceutical industry.

The post involves defining and developing research projects with the collaboration of medicinal chemists and implementing these projects with the support of an expanding group of currently twelve staff researchers and technicians.

Please send your CV, coordinates of three referees and list of publications under reference G 384/S to **PIERRE FABRE S.A.** - Direction des Ressources Humaines - 11, rue Thérion Périé - 81106 CASTRES CEDEX FRANCE.

Pharmaceutical Company
(5 300 staff
annual turnover
5 Billion FF)

MEDIA PA

HEAD OF MOLECULAR BIOLOGY

To establish new group Competitive Salary

Wyeth Research (UK) is part of the R&D Division of the Wyeth-Ayerst organisation, a major International Pharmaceutical Company whose drug discovery activities in the UK are targeted on CNS.

Recognising the importance of molecular biology to the discovery process, applications are sought for a newly created position of Head of Molecular Biology within the Biomedical Research Department. This is a senior position and candidates should have at least ten years postdoctoral experience, some of which should preferably have been in the pharmaceutical industry. The successful applicant will assemble a team of first-class scientists who will apply the principles and practice of molecular biology to generate novel drugs for the treatment of central nervous system disorders. Team leadership skills and the ability to collaborate effectively with fellow Biologists and Chemists will be important features of the job.

The Head of Molecular Biology will be responsible for the introduction of in-house molecular biological techniques into the drug discovery process at Wyeth Research (UK) and for integrating them into the output of a dedicated, highly motivated team of researchers. Accordingly, he or she will have highly developed communication skills as well as an outstanding track record of innovative research.

The starting salary will be commensurate with the senior status of the position, together with a competitive associated benefit package, and assistance with relocation where appropriate.

To apply please write with full career details, including current salary and benefits to the Personnel Officer, Wyeth Laboratories, Huntercombe Lane South, Taplow, Nr Maidenhead, Berkshire SL6 0PH. Tel: (0628) 604377 Ext. 4748.

Wyeth Research (UK)

CATHCART CHAIR OF BIOCHEMISTRY



The University intends to proceed to make an appointment, with effect from 1st October, 1993, to the Cathcart Chair of Biochemistry. This is one of two endowed

Chairs within a large, well-resourced Department which is committed to excellence in research and teaching. As part of the recruitment process, applications are invited from suitably qualified persons.

The holder will be offered the resources and opportunity needed to establish a high profile research group in an area which complements existing Departmental activities. The post will be underpinned by technical, administrative and secretarial support, and there will be an opportunity to fill an associated academic post in October, 1994.

Informal enquiries should be directed to either Professor Miles Houslay or Professor Charles Fewson (telephone: 041-330 5903; fax: 041-330 4620).

Further particulars may be obtained from the Academic Personnel Office, University of Glasgow, Glasgow G12 8QQ where applications (3 copies; 1 copy in the case of overseas applicants), giving the names and addresses of three referees, should be lodged on or before 5th May, 1993. In reply please quote Ref. No. 7853/S.

The University is an equal opportunities employer.



UNIVERSITY COLLEGE LONDON

Chair of Geography

Applications are invited for an established Chair of Geography which will be vacated by Professor R U Cooke on his appointment as Vice-Chancellor, University of York. Candidates should have an established international research reputation in any area of physical geography or environmental analysis. The chair is available from 1 October 1993.

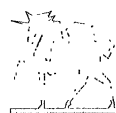
Those wishing to apply should send a full *curriculum vitae* (ten copies for UK candidates, one copy for overseas candidates), including details of three referees, to the Provost, University College London, Gower Street, London WC1E 6BT.

Informal enquiries may be made to and further particulars obtained from Professor Richard Munton (Department of Geography, University College London, 26 Bedford Way, London WC1H 0AP, tel: 071-380 7562, fax: 071-380 7565, e-mail - rmunton @ uk.ac.ucl.geog). (Professor Munton will be attending the AAG meeting in Atlanta from 6-9 April).

The closing date for receipt of applications is 7th May 1993.

Salary is negotiable within the professorial range.

Working Toward Equal Opportunity



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HIV Virologist Antiviral Therapeutic Research Unit

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Wellcome is an international pharmaceutical company dedicated to the discovery and marketing of products that promote human health and the quality of life.

Working in the areas of drug resistance and virus quantitation you will be in a research-based environment, but with substantial involvement in the clinical trial programme, including virological analysis of clinical trial material. Your work will soon make you part of an established research group which is expanding to form an independent unit in antiviral therapeutic research.

Preferably qualified to PhD level with experience in this field, you should be prepared to work with HIV and should already have experience in virology and molecular biology, ideally with HIV itself. It is however essential that you have knowledge of virus handling and recombinant DNA technology.

In addition to an attractive salary, we offer excellent benefits including 5 weeks' holiday, pension and profit share schemes, first-class sports and social facilities and a subsidised restaurant.

Please send full career details, quoting reference JAL/378, to Jacqui Lodge, Personnel Officer, The Wellcome Research Laboratories, Langley Court, Beckenham, Kent BR3 3BS.

- The Wellcome Foundation Limited
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GENETHON

Genexpress/Généthon system and database specialists

The Genexpress large-scale cDNA analysis program is recruiting COMPUTING SPECIALISTS to ensure the smooth and autonomous running of its sequence analysis and database management systems in close interaction with local and international computing resource centres.

Genexpress is a joint program of the Association Française contre les Myopathies (AFM; French Muscular Dystrophy Association) and Centre National de la Recherche Scientifique (CNRS; National Scientific Research Centre) and is run largely at the Genethon Laboratory near Paris in Evry, France.

At a minimum, applicants should have a B.Sc. or equivalent in computer science with 2-3 years of experience in the management of networked SUN servers running UNIX/X-window. Ideally, candidates will also have biological research experience, preferably at the post-graduate level. A working knowledge of both French and English is necessary. Because the Genexpress program is in constant evolution, it will be imperative that the candidates be equally flexible in their management styles.

CV and list of publications should be sent to:

Analyse bio-informatique Genexpress
Programme Genexpress
Laboratoire Généthon
1, rue de l'Internationale—BP 60
91002 Evry cedex—France



Lecturers in Psychology

(Ref. 92/93-71-78)

Applications are invited for the following Lectureships in the Department of Psychology: (1) Experimental Psychology - Cognitive Science; (2) General Psychology. The filling of the posts is subject to the availability of funds, but it is hoped that appointments can be made with effect from September 1993.

Applicants for both posts should possess a PhD degree and have research, teaching and practical experience in the relevant field. Familiarity with Hong Kong society and fluency in Chinese are preferred though not essential. Teaching at both postgraduate and undergraduate levels will be required. Applicants should state clearly which post they wish to apply for.

Annual salary is on an 11-point scale: HK\$343,680 - HK\$574,140 (US\$44,634 - US\$74,564; US Dollar equivalent as at 5 March 1993). Starting salary will depend on qualifications and experience. At current rates, salaries tax will not exceed 15% of gross income. Children's education allowances, leave, and medical benefits are provided; housing or tenancy allowances are also provided in most cases at a charge of 7.5% of salary.

Further particulars and application forms may be obtained from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (fax: (852) 559 2058; E-mail: APPTUNIT@HKUVM1.HKU.HK).

Closes 4 June 1993.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

NIH-funded postdoctoral positions available in two areas: (1) Protein oxidation and proteolysis, and (2) Regulation of gene expression in response to oxidative stress. Both positions require strong training and background in modern methods of Biochemistry and Molecular Biology. You will join a laboratory group of some 12 researchers involved in the above areas, but will have your own project. Our college has great interdisciplinary strength in the areas of oxidative stress, protein degradation, and regulation of gene expression, and offers an excellent environment and facilities. Send curriculum vitae and the names of 3 references to: **Prof. Kelvin J. A. Davies, Chairman, Department of Biochemistry & Molecular Biology, The Albany Medical College, Albany, NY 12208. Telephone: 518-262-5364, FAX: 518-262-5689.**

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.**

FIVE POSTDOCTORAL POSITIONS: Available June 1993. The **PUERTO RICO TROPICAL MARINE BIOTECHNOLOGY CENTER** consists of three "core areas": Molecular Biology and Pharmacology, Natural Products Chemistry and Marine Metabolites. Positions are available to study: (1) the role of microbial symbionts in the production of bioactive products by host-symbiont consortia, (2) the origin, chemical nature and pharmacological activities of marine toxins, and (3) the isolation of new bioactive compounds from coastal marine biota. Applications including a statement of research interests, curriculum vitae and three letters of reference must be received by 23 April 1993. **T.R. Tosteson, Ph.D., Acting Director, Puerto Rico Tropical Marine Biotechnology Center, c/o Marine Station, Department of Marine Sciences, University of Puerto Rico, P.O. Box 908, Lajas, Puerto Rico. An Equal Opportunity Employer.**

POSTDOCTORAL/RESEARCH ASSOCIATE position available for molecular biologist with recent Ph.D. to investigate the structure and function of human glycoprotein hormones by site-directed mutagenesis. Studies are planned to examine the alpha and/or beta subunits of luteinizing hormone and choriongonadotropin; however, either follitropin or thyrotropin may be included. Applicants should have experience in molecular cloning techniques, tissue culture and DNA sequencing. Some experience in polymerase chain reaction is desired but not required. Candidates can be trained in protein isolation, purification, chromatography including HPLC, mass spectrometry and general techniques in protein chemistry, Edman sequencing and peptide synthesis. Salary competitive depending on years of experience. Position available for a minimum of 2 years of support. Please submit curriculum vitae, current research interests and names of two references to: **Dr. Daniel J. McCormick, Associate Professor, Department of Biochemistry and Molecular Biology, Mayo Clinic/Foundation, Rochester, MN 55905. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.**

POSTDOCTORAL POSITION

Available May 1, 1993, to study the molecular biology of retina development and visual function. Research involves study of genes that regulate the gene for interphotoreceptor retinoid-binding protein. Ph.D. or similar professional degree; experience in molecular biology. Please send (or FAX: 706-721-7913) curriculum vitae, a cover letter and three references that include names, addresses and telephone numbers to: **Gregory I. Liou, Ph.D., Associate Professor, Department of Ophthalmology, Medical College of Georgia, Augusta, GA 30912-3400. MCG is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION in the Hearing Sciences. The Parnly Hearing Institute of Loyola University of Chicago has a postdoctoral position (maximum of three years) for a Ph.D., M.D., or Ph.D./M.D. with interests in the Hearing Sciences. The Parnly Hearing Institute conducts research in areas of auditory perception; psychoacoustics (including human and animal psychophysics); auditory physiology (peripheral and central in fish and chinchilla); and lateral-line behavior, anatomy, and physiology. We are seeking people with interests in these or related areas. Salary will be based on the NIH postdoctoral scale and the job could begin anytime between now and the fall of 1993. Please send a letter expressing your interest in the job, along with curriculum vitae, and two letters of reference to: **William A. Yost, Director, The Parnly Hearing Institute, Loyola University of Chicago, 6525 North Sheridan Road, Chicago, IL 60626; Telephone: (312) 508-2710; FAX: (312) 508-2719; Email: YPARMLY@LUCCPUA.BITNET. Loyola University of Chicago is an Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS in bacterial pathogenesis. Two positions available to study the molecular pathogenesis of *Chlamydia trachomatis* for NIH-funded projects. Molecular genetic focus to investigate host-microbial interactions including attachment and invasion of mammalian cells and role of host immune response in immunity and disease. Recent Ph.D. or M.D. graduates with productive research background in microbiology, cell biology and/or immunology are encouraged to apply. Send curriculum vitae and names of references to: **Dr. Richard S. Stephens, Box 0412, University of California—San Francisco, San Francisco, CA 94143.**

POSTDOCTORAL POSITIONS

Gladstone Institute of Cardiovascular Disease, University of California, San Francisco. Available immediately in the laboratories of:

Robert E. Pitas, Ph.D.: Study the molecular basis of Alzheimer's disease. Studies will include analysis of cell culture systems to examine the normal and aberrant processing of amyloid precursor protein as well as production and analysis of transgenic models of the disease. Experience in molecular biology and cell culture is desirable.

Karl H. Weisgraber, Ph.D.: Studies on the effect of overexpression of human genes on lipoprotein metabolism in transgenic mice.

Candidates should possess a Ph.D. in molecular biology or biochemistry. Competitive salary and benefits. Send curriculum vitae and names of three references to: **Human Resources; The Gladstone Institute of Cardiovascular Disease, University of California, San Francisco; P.O. Box 419100; San Francisco, CA 94141-9100. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available to study the molecular basis of cell differentiation in *Aspergillus nidulans*. Classical and molecular genetic approaches will be used to investigate spatiotemporal expression of essential regulatory genes and biochemical functions of gene products (*Genes & Dev.* 6: 1770-82). Experience in molecular biology and/or genetics is desirable. Salary \$25,000. Send curriculum vitae and three letters of reference to: **Dr. Bruce L. Miller, Department of Bacteriology & Biochemistry, University of Idaho, Moscow, ID 83843. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOW

Position open to study the role of IgD-receptor⁺ T cells in the regulation of antibody production. Work will focus on the mechanism by which such T cells augment antibody responses. Participation in several AIDS-related research projects including the study of cytokine regulation of neurotransmitter release and the study of T cell membrane gangliosides and their role in the expression of the HIV receptor (CD4). Applicants should have experience in cell culture and molecular cloning techniques. Send curriculum vitae, personal statement, and list of references to: **Dr. Richard Coico, Department of Microbiology and Immunology, CUNY Medical School, Convent Avenue and 138th Street, New York, NY 10031. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Two postdoctoral positions are available in the Department of Medicine, University of British Columbia. **Position #1) Tumor Biologist.** The candidate should have experience in cell culture of human and animal tumors *in vitro*, tumor growth in mice (nude, SCID) or rats *in vivo*. **Position #2) Cardiovascular pharmacologist.** The candidate should have experience in animal work, assessment of EKG, BP, HR, etc., to drugs and development of ischemia, arrhythmia, etc., *in vivo* and *in vitro*. Stipend \$27,000 to \$35,000 per annum. Positions are for two years with possibility of renewal. Please send résumé to: **Dr. H. Salari, 2660 Oak Street, Vancouver, British Columbia, V6H 3Z6, Canada.**

MEDICAL UNIVERSITY OF SOUTH CAROLINA offers programs leading to Ph.D. and M.D./Ph.D. degrees in each of the basic Biomedical Sciences (Anatomy, Biochemistry, Microbiology/Immunology, Pathology, Pharmacology, Physiology), Biostatistics/Epidemiology/Systems Science, Pharmaceutical Sciences, and Molecular & Cellular Biology. Stipends (\$10,000 to \$15,000) available to qualified students. Contact: **College of Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425.**

Laboratory of Retrovirus Research, Division of Virology, CBER, FDA (on NIH campus): **STAFF FELLOW** (Postdoctoral) or **SENIOR STAFF FELLOW** positions to study molecular aspects of HIV-1 viral-cell interactions, and anti-HIV immunity and vaccine development. Applicants with Ph.D. or M.D. degrees and experience in the areas of molecular immunology or molecular Virology of HIV infections, send applications to: **Dr. Hana Golding, Chief, Laboratory of Retrovirus Research, Division of Virology, CBER, FDA, Building 29A Room 2C22, 8800 Rockville Pike, Bethesda, MD 20892. Telephone: 301-496-2426. FAX: 301-496-1810.**

POSTDOCTORAL FELLOWSHIPS IN CARDIOVASCULAR RESEARCH

Fellowships available for research on molecular, cellular, and intact animal physiologic cardiovascular research. Faculty interests include pathophysiology of myocardial injury, myocardial cellular electrophysiology, neurohumoral circulatory control, and myocardial Ca²⁺ signaling. Candidates must have a Ph.D., M.D., or D.V.M. degree, and be U.S. citizens or permanent residents. Send curriculum vitae and names and telephone numbers of three references to: **William B. Hood, Jr., M.D., Box 679, University of Rochester Medical Center, Rochester, NY 14642. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIP: Available immediately to study the molecular biology of the arterial wall. Studies involve a collaborative effort between investigators at Mt. Sinai School of Medicine and the Bronx VA Medical Center. Applicants should have experience in molecular and cloning techniques and cell culture. A faculty appointment could be made available to a suitably qualified person. Send curriculum vitae and the names and addresses of three references to: **Clive Rosendorff, M.D., Ph.D., Associate Chairman, Department of Medicine, Mount Sinai Medical School and Chief, Medical Service, VA Medical Center, 130 West Kingsbridge Road, Bronx, NY 10468.**

Department of Energy Distinguished Postdoctoral Research Program offers **POSTDOCTORAL FELLOWSHIPS** in physical and computer sciences, and engineering. Stipend: \$52,800. Tenable at various Department of Energy laboratories. Eligibility: Ph.D. within 3 years of start; U.S. citizens or permanent residents only. Application deadline: July 1, 1993. For application materials: **DOE Distinguished Postdoctoral Research, ORISE/SEED, P.O. Box 117, Oak Ridge, TN 37831-0117. Telephone: (615) 576-9934.**

POSTDOCTORAL FELLOWS

Positions available immediately to study the genetic and physical structures of human chromosomal regions with highly repetitive DNA sequences by using and developing innovative techniques in the laboratory of **Dr. Honghua Li.** Excellent Benefits. Send curriculum vitae, statement of research, interests, and names of three references to: **Charlotte Tule, Personnel Office, Coriell Institute for Medical Research, 401 Haddon Avenue, Camden, NJ 08103. An Equal Opportunity/Affirmative Action Employer.**

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IMMUNOASSAY DEVELOPMENT

In this position, you will develop immunoassays for environmental compounds. Responsibilities include assay design, optimization of reagents, stability testing and field trial design. Familiarity with immunoassay product development, various solid supports and detection systems is desirable.

HYBRIDOMA DEVELOPMENT

Take this opportunity to perform and/or direct immunizations, fusions, cell culture and design screening assays.

Both positions require a Ph.D. or a BS/MS with 4 years of experience.

At SDI, you can discover an exciting work environment complemented by competitive salaries and comprehensive benefits. For confidential consideration, please send your resume to: **Human Resources, Strategic Diagnostics, Inc., 128 Sandy Drive, Newark, DE 19713.**EOE



IMMUNOGEN, INC.

ImmunoGen is a rapidly growing biotechnology company dedicated to the improved treatment of cancer and immune-mediated diseases. Using innovative technologies, the company is developing immunoconjugates comprised of monoclonal antibodies linked to highly potent toxins and drugs. Three of ImmunoGen's products are in human clinical trials: The lead product is about to enter Phase III testing. We are seeking talented individuals to join us in exploring new approaches to the treatment of life-threatening diseases.

Research Scientist - Analytical Development

We are seeking a Ph.D. Biochemist with 2-5 years' postdoctoral experience in protein purification, characterization, and analysis. A strong background and demonstrated innovation in peptide mapping and protein and peptide separation techniques, especially HPLC, is necessary. Experience in the biochemical characterization of glycoproteins is a plus. Experience with protein compositional analysis and sequencing would also be valuable.

Research Scientist - Biochemistry

We are expanding our new research program in apoptosis (programmed cell death) and are seeking a creative individual with a strong research background. The successful candidate must have a Ph.D. in Biochemistry with a minimum of 2 years' postdoctoral training. Experience in protein biochemistry and/or cellular regulation would be an asset. Qualified candidates should enjoy the challenge of pursuing exciting new areas of research that may lead to new therapeutics.

Research Associate - Pharmacology

The successful candidate must have a M.S. in Pharmacology/Toxicology or related field and 3-5 years' relevant laboratory experience. The individual must have experience in pharmacokinetics and pharmacodynamics of proteins and drugs using in vitro systems such as tumor cell-lines, cells from target organs such as liver and animal models. The applicant must be capable of self-directed research, and be able to collaborate with biochemists and cell biologists on research projects. Candidates with publications in the above areas and tumor biology are encouraged to apply.

ImmunoGen offers an excellent salary and benefits package including 100% paid Health and Dental Insurance and Tuition Assistance. Please send a detailed resume to: **Jeanne Horgan, Personnel Department, ImmunoGen, Inc., 148 Sidney Street, Cambridge, MA 02139.** An Equal Opportunity Employer.

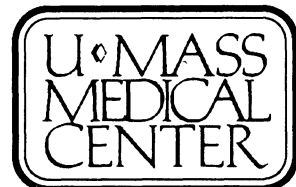
Faculty Positions in Behavioral Neuroscience

Several faculty positions are available in the Laboratory of Behavioral Neuroscience, Department of Psychiatry, University of Massachusetts Medical Center.

Successful candidates will be expected to conduct an active, extramurally funded research program. Particular consideration will be given to scientists with backgrounds in neurochemistry, electrophysiology, and molecular neurobiology. All applicants will be required to develop an integrative approach to examine the biological basis of psychiatric disorders. It is important that prospective candidates have a cooperative attitude and the ability to work in an open laboratory setting. These are primarily research positions with some teaching responsibilities. Faculty rank commensurate with experience.

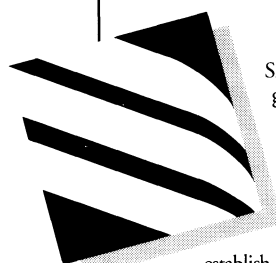
Applications should include curriculum vitae, a statement of research interests, documentation of grant support, and the names and addresses of three references. Send materials to:

Craig F. Ferris, Ph.D.
Director, Laboratory of Behavioral Neuroscience
Department of Psychiatry/S7-823, University of Massachusetts Medical Center,
55 Lake Avenue North,
Worcester, MA 01655



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REGIONAL MEDICAL ASSOCIATE



SmithKline Beecham is a \$9.2 billion global pharmaceutical and health care company. Our world famous products and reputation mean unsurpassed opportunities for individuals to combine their scientific and marketing expertise as a Regional Medical Associate.

Our Regional Medical Associates establish relationships within major medical institutions for the purpose of acting as scientific liaison and providing in-depth information regarding SmithKline Beecham products. This includes the training of representatives and medical professionals. Travel 40%.

To qualify, you must have a Ph.D. in Pharmacology, Toxicology, Microbiology or related life sciences. Ph.D. in Pharmacy preferred. Strong marketing and communication skills and a high degree of initiative are also required. An opportunity currently exists in the Ohio State and West Virginia area where you will work out of your home.

We offer one of the best compensation packages - including a car - in the industry. If you'd like to be a part of our success, send your resume with salary history to: SmithKline Beecham, Central Employment, FP1135, 200U North 16th Street, Philadelphia, PA 19101. We are an equal opportunity employer, M/F/H/V.



SmithKline Beecham

Chairman/Division Head Laboratory Medicine

The University of Texas M. D. Anderson Cancer Center is seeking a Division Head of Laboratory Medicine. The Division of Laboratory Medicine incorporates the Sections of Clinical Chemistry, Special Chemistry, Cytogenetics, General Services, Laboratory Information Systems, Hematopathology, Microbiology, Hematology, Molecular Pathology, Blood Bank, Transfusion Medicine, Laboratory Immunology, Histocompatibility Laboratories, Virology, Stat Laboratory and Satellite Laboratories. Candidates for this position should have significant experience and accomplishments in academic clinical pathology and laboratory medicine and documented progressive evidence of administrative and leadership skills. Certification by the American Board of Pathology is preferred. Dedication to the pursuit of excellence in research, teaching, and clinical service is essential. Applications will be accepted until May 1, 1993.

Qualified applicants should submit a curriculum vitae to: Dr. David C. Hohn, Interim Vice President for Patient Care, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Box 43, Houston, TX 77030 or call (713) 792-7475. An equal opportunity/affirmative action employer. Smoke-free environment.

THE UNIVERSITY OF TEXAS
MD ANDERSON
CANCER CENTER

Staff Fellowship Program. Department of Health and Human Services, Public Health Service, Food and Drug Administration, (FDA) Center for Biologics Evaluation and Research, Bethesda, Maryland. The Center for Biologics Evaluation and Research is searching for outstanding physicians and Ph.D. scientists to conduct biomedical research utilizing radionuclides and toxins conjugated to monoclonal antibodies in order to provide a strong basis for the review and regulation of these biological products. This is a unique opportunity to conduct fully supported independent research while participating and influencing the development and approval of radioimmunoimaging and immunotherapy products.

Candidates for this Senior Staff Fellowship must have completed all requirements for a Medical Degree or Ph.D. from an accredited institution and have 3 to 7 years postdoctoral experience. Candidates must be either U.S. citizens or resident aliens eligible for citizenship within four years.

Appointments are for an initial two-year period and may be extended up to a total of seven years. These are tenure track appointments and may lead to recommendation for conversion to a tenured appointment. Salary range for Senior Staff Fellows with a Medical Degree is from \$39,000 to \$73,472 with a Ph.D. the range is from \$33,504 to \$62,293. Salary range for Staff Fellows with a Medical Degree is from \$28,000 to \$48,196; with a Ph.D. from \$28,000 to \$47,013. Salary research support, and level of responsibility are commensurate with education and experience.

Candidate should send a current curriculum vitae, bibliography, a brief statement of research interest, and names of three references to:

Dr. Robert Kozak, FDA/Center for Biologics Evaluation and Research, Building 29A, Room 2A11, 8800 Rockville Pike, Bethesda, Maryland 20892.

For further information, call Dr. Kozak on (301) 496-4792 or Dr. Kathryn Stein on (301) 496-6916.

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PRODUCTION SCIENTISTS

Modifying Enzyme Group

Must be familiar with protein purification techniques.

Restriction Enzyme Group

Must have experience in enzyme purification and enzyme assays.

Both positions require a BS/MS in Biochemistry, Molecular Biology, or related discipline with 3-5 years of lab experience; 2-3 years of industrial experience; and proven ability for technical problem solving as well as a strong interest to apply these skills to improve production processes.

We are a world leading biotechnology company offering a competitive salary, comprehensive benefits, and a challenging, high-growth environment in our modern Midwestern facilities. To apply, forward a resume with salary requirements to: PROMEGA CORPORATION, Human Resources/PROD, P.O. Box 7879, Madison, WI 53711-7879. Equal Opportunity Employer.



Promega



HARVARD UNIVERSITY-MASSACHUSETTS INSTITUTE OF TECHNOLOGY DIVISION OF HEALTH SCIENCES AND TECHNOLOGY

FACULTY POSITION BIOLOGICAL ENGINEERING/BIOLOGICAL PHYSICS

The Massachusetts Institute of Technology seeks to identify a junior faculty member (tenure track) to work at the interface of cellular/molecular biology and the physical sciences. The candidate's specific research area is flexible, but should represent a blend of modern biology with, for example, physics or engineering. Potential research areas might include molecular biophysics, quantitative cellular physiology, tissue engineering or cell-based artificial organs. The successful candidate must have documented expertise in molecular and cellular biology or physiology as well as in the physical or engineering sciences. Familiarity with the medical sciences and the relevance of research interests to human disease is highly desirable, but an MD degree is not required. In addition to conducting an active independent research program, the individual will have major responsibilities in the education of scientists, engineers, and physicians who expect to work at the forefront of technology and medicine. The appointment will be made in the Harvard-MIT Division of Health Sciences and Technology. A secondary appointment in an MIT department in the candidate's discipline may be possible.

Qualified applicants should send a curriculum vitae, a statement of research and teaching objectives, and three letters of reference to:

Faculty Search Committee
Attention: Barbara Jaskela
Room E25-519
Massachusetts Institute of Technology
77 Massachusetts Ave.
Cambridge, MA 02139

The closing date for applications is June 1, 1993. MIT is an Affirmative Action/Equal Opportunity Employer.

Research Scientists

GlycoTech Corporation is a biotech company recently incorporated to discover, develop, manufacture, and market new classes of pharmaceutical compounds based on the biological functions of the interactions between glycoconjugates and their receptors. The company has several proprietary positions in the study of Selctins, a unique library of glycoconjugate reagents, and the stability of a long term corporate alliance with a leading pharmaceutical company.

Immediate research positions are available for Ph.D. level biochemists and cell/molecular biologists interested in applying their expertise to study the functions of carbohydrate-protein interactions. GlycoTech offers the unique opportunity to make substantial contributions to the growing field of Glycobiology and to enjoy the personal and financial rewards of becoming a central part of a new and developing biotech company. Company-paid benefits include comprehensive medical insurance, life insurance, dental benefits program, prescription card, vision care program, adoption assistance program, and a 401(k) tax-deferred employee savings plan. If you would like to participate in the excitement and rewards of a growing company that cares for its employees, please send a curriculum vitae to:

GlycoTech Corp.
14915 Broschart Rd., Suite 200
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An Equal Opportunity Employer

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POSTDOCTORAL POSITIONS Cell and Molecular Biology of Reproduction

Postdoctoral positions are available at the Worcester Foundation for Experimental Biology to study cellular and molecular aspects of reproduction. These positions are supported by an NIH training grant and individual investigator awards. The faculty and their research interests are:

Hagan Bayley, Ph.D. - Signal transduction in sperm and egg; molecular biology of ion channels.

Larry Dangett, Ph.D. - Mechanisms of sperm motility activation and chemolaxis; regulation of guany (y) cyclase/receptors.

Harvey Florman, Ph.D. - Regulation of sperm ion channels; mechanisms of exocytosis; zona pellucida structure and function.

Daniel Kilpatrick, Ph.D. - Regulation of spermatogenic cell development and differentiation at the transcriptional level; male germ cell-specific trans-acting factors.

José Lemos, Ph.D. - The role of second messengers in steroidogenesis in Leydig cells.

John McCracken, Ph.D. - Molecular and cellular mechanisms controlling the reproductive cycle.

Clare O'Connor, Ph.D. - Protein modifications during gametogenesis; mechanism of oocyte maturation.

George Wilman, Ph.D. - Control of sperm motility; sperm maturation and hyperactivation.

David Wolf, Ph.D. - Biophysics of fertilization and the acrosome reaction in mammalian sperm.

The Worcester Foundation for Experimental Biology offers excellent facilities and a stimulating environment for postdoctoral study. The Foundation is a private, non-profit research institute, located on a 100-acre campus in Shrewsbury, Massachusetts, 35 miles west of Boston. Please send curriculum vitae and names of three references to the faculty member(s) of interest, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545, USA.

An Affirmative Action/Equal Opportunity Employer M/F/H



**Worcester Foundation for
Experimental Biology**

RESEARCH OPPORTUNITIES IN BIOTECHNOLOGY

The Department of Biotechnology 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.

POST-DOCTORAL RESEARCH ASSOCIATE (JOB #0309-GRJD) - A post-doctoral position is available immediately in the area of fungal extracellular matrix (ECM) proteins. **EDUCATION/EXPERIENCE:** PhD in biochemistry or related discipline, with experience in protein isolation/characterization and receptor biology. Familiarity with molecular cloning techniques and fungal-plant interactions is desirable.

RESEARCH ASSOCIATE, CORN TRANSFORMATION (JOB #IDR-MSY) - Immediate openings are available to conduct experiments to evaluate agronomic genes in transgenic corn plants and progeny. **EDUCATION/EXPERIENCE:** BS degree or equivalent plus 2 years directly related lab experience; or MS degree. A good understanding of corn transformation and tissue culture is desirable. Knowledge of one or more of the following areas is also desired: genetics, plant physiology, cell biology and biochemistry.

Applications received by **April 23, 1993** will be assured of consideration. However, applications will be considered until the positions are filled.

Pioneer Hi-Bred International, Inc. is an Equal Opportunity employer. Please send **TWO (2)** resumes and indicate in your correspondence the JOB #, the names, addresses and telephone numbers of three references to:



PIONEER HI-BRED INTERNATIONAL, INC.
Plant Breeding Division
Department of Biotechnology Research
Attn: Amy LaMotte JOB #____
P.O. Box 1004
Johnston, IA 50131-1004

THE UNIVERSITY OF CALGARY FACULTY OF SCIENCE Department of Biological Sciences

The University of Calgary Faculty of Science invites applications from highly qualified female researchers for potential nomination to the Natural Sciences and Engineering Research Council (NSERC) for a Women's Faculty Award. In particular, applications are sought from invertebrate zoologists with the ability to contribute to undergraduate teaching in comparative and mammalian physiology. A tenure-track position is potentially available to the successful candidate. Appointment will be at the Assistant Professor level.

Candidates who obtained a PhD degree in the last five years are preferred; however, consideration will be given to more senior PhDs who have had family-related absences from practice.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary has an Employment Equity Program and encourages applications from all qualified candidates, including aboriginal people, visible minorities and people with disabilities. The University offers a Dual Career Employment Assistance Program for spouses.

Interested applicants should apply by sending a curriculum vitae, a statement of research interests, and arrange to have three letters of reference sent directly by May 15, 1993 to:

**Head
Department of Biological Sciences
The University of Calgary
2500 University Drive N.W.
Calgary, Alberta Canada T2N 1N4**

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP HARVARD MEDICAL SCHOOL

Applications are invited for postdoctoral positions in transplantation immunology at the Dana-Farber Cancer Institute. Projects relate to tolerance induction and cytokine dysregulation in graft versus host disease. A strong background in cellular and/or molecular immunology essential. Salary and Harvard appointment commensurate with qualifications and experience. Send curriculum vitae, name and telephone number of three references to: Dr. James Ferrara, Room 1640, Dana-Farber Cancer Institute, Boston, MA 02115.

KENDALL-MAYO FELLOWSHIP IN BIOCHEMISTRY, MAYO FOUNDATION: Seeking highly qualified candidates. Nationally competitive award, in recognition of outstanding promise for a research career, will support up to 2 years of training with any of more than two dozen internationally recognized staff investigators working in modern facilities with state-of-the-art instrumentation. A partial list of research opportunities includes the cell biology of cytoskeletal proteins, molecular biology of schizophrenia, receptors for steroid hormones and other endocrine hormones, cellular peptide growth factors, plasma membrane calcium pumps, computer modeling of protein structure and dynamics, optical and NMR spectroscopic studies of biological molecules, macromolecules, biochemistry of vitamin D, molecular genetics of clotting disorders and coagulation factors, regulation of protooncogenes and mechanisms involved in specific gene transcription. Salary and benefits determined by candidate's experience; competitive with salaries offered by the best fellowships available nationally at the postdoctoral/research associate level; an attractive package of benefits and an institutional allowance to support travel to scientific meetings. Applicants should hold a doctoral degree in one of the life sciences or medicine with some research experience either in a formal graduate program or as a postdoctoral trainee. Please submit application, curriculum vitae, bibliography, 3 letters of recommendation and a statement of research interests and career goals to: Mr. Michael Pfennig, Personnel Subcommittee of the Search Committee, Mayo Foundation, Rochester, MN 55905 by July 1, 1993. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

TWO POSTDOCTORAL FELLOWSHIPS are available immediately to conduct research in the field of lung surfactant biology on surfactant-phagocyte interactions and on regulation of phospholipid synthesis. Fellows will join a multidisciplinary group studying the pathogenesis of acute lung injury with emphasis on surfactant pathology, regulation of phagocyte function, and mechanisms of oxidant-mediated cell injury. Training and demonstrated experience in protein and lipid chemistry, cell biology, and/or molecular biology and advanced degree are required. Send letter of inquiry, curriculum vitae, and names of three references to: R. G. Spragg, M.D., Department of Medicine 9111-J, UNIVERSITY OF CALIFORNIA, SAN DIEGO, CA 92161. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS. Department of Cellular and Developmental Biology/Organismic and Evolutionary Biology, Harvard University. A limited number of postdoctoral research positions become available from time to time. Some appointments are funded through research grants awarded to faculty members and are ordinarily for 1 year, sometimes renewable, other appointments are possible through postdoctoral fellowships. For a list of faculty members who have postdoctoral positions available, write to the respective department office: Harvard University (CDB, 16 Divinity Avenue, OEB, 26 Oxford Street), Cambridge, MA 02138. (Do not send applications.) Harvard University is an Equal Opportunity/Affirmative Action Employer.

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POSITIONS OPEN

THE SCRIPPS RESEARCH INSTITUTE



POSTDOCTORAL POSITIONS FOR TRANSGENIC STUDIES IN CELLULAR AND MOLECULAR NEUROBIOLOGY—

The newly established Department of Neurobiology has postdoctoral positions available to study various aspects of molecular, cellular and developmental neurobiology using embryonic stem cell technology and transgenic mice. Some major areas of interest are cell-cell and cell-substratum adhesion molecules, neurite outgrowth and nerve regeneration. Specific studies include: analysis of overexpression, mutation or deletion of adhesion molecules in transgenic mice generated from embryonic stem cells carrying altered adhesion molecule genes; studies of transgenic mice that express adhesion molecules in ectopic locations; analysis of elements that control the expression of adhesion molecules and their subsequent roles in the formation of morphogenetic pathways during neural development. Applicants should have a strong background in cellular and molecular biology and experience with embryonic stem cells or transgenic mice. Send curriculum vitae and three letters of reference to: Dr. Gerald M. Edelman, Chairman, Department of Neurobiology, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, CA 92037. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION GENETICS AND MOLECULAR BIOLOGY HARVARD

Available immediately to study recombination *in vivo* in mice. Molecular biology experience required, mouse breeding experience preferred. Please send curriculum vitae to: Dr. Robert H. Schiestl, Department of Molecular and Cellular Toxicology, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.

POSTDOCTORAL POSITIONS

Postdoctoral positions available to study molecular retroviruses (HIV and HTLV-1) and herpes simplex virus (HSV) neuropathogenesis. Research involves the use of primary human neuroglial cultures and cell lines to examine (1) retrovirus-specific genes in neuroglial tropism; (2) retrovirus LTRs, viral regulatory proteins, and neuroglial transcription factors in regulating viral gene expression in the nervous system; and (3) HSV and neuronal factors regulating expression of the HSV latency-associated transcript (LAT) during latency. Preference to applicants with strong background in virology and molecular biology with expertise in basic technology to characterize nucleic acids and proteins including site-directed mutagenesis, DNA sequencing, genomic and cDNA libraries, DNA footprinting and electrophoretic shift DNA binding analyses, and protein biochemistry. Please send curriculum vitae and names and addresses of three references: Dr. Brian Wigdahl, Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine, Hershey, PA 17033. The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL POSITIONS in the Regulation of Intracellular Cholesterol Metabolism. Postdoctoral positions are available immediately for recent Ph.D.'s to study cholesterol metabolism in cultured mammalian cells. Our labs are using combined biochemical, molecular, and somatic cell genetic approaches to elucidate pathways of intracellular cholesterol transport, and transcriptional and post-translational regulation of cholesterol homeostasis.

Applicants must be U.S. citizen or permanent resident. For consideration, send curriculum vitae and names and telephone numbers of three references to either: Dr. Jerry Faust, Dr. Laura Liscum, Tufts University School of Medicine, Department of Physiology, 136 Harrison Avenue, Boston, MA 02111. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to characterize a novel family of homeobox genes and study its role in development of the kidney and genito-urinary tract. Background in molecular biology or mouse developmental biology preferred. Applications from women and minorities are encouraged. Send curriculum vitae and names of 3 references to: Dr. Peter Igarashi, Section of Nephrology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510. Telephone: 203-785-7111; FAX: 203-785-7068. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL OPPORTUNITY

Genome sequencing at Cold Spring Harbor Laboratory. Postdoctoral position available to develop new approaches for automated DNA sequencing using the fission yeast *S. pombe* as a model. Genome related experience desired but not essential. Cold Spring Harbor offers an outstanding combination of intellectual environment and facilities. Send curriculum vitae and 3 letters of reference to: Dr. W. Richard McCombie, Cold Spring Harbor Lab, P.O. Box 100, Cold Spring Harbor, NY 11724. Equal Opportunity Employer.

POSTDOCTORAL POSITION available for recent Ph.D. interested in the cloning and expression of mammalian nucleoside transport proteins. Experience in molecular cloning methods and mammalian expression systems required. Send curriculum vitae and the names of three references to: Judith A. Belt, Ph.D., Department of Molecular Pharmacology, ST. JUDE CHILDREN'S RESEARCH HOSPITAL, 332 North Lauderdale, P.O. Box 318, Memphis, TN 38101.

An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION PLANT-PARASITE INTERACTIONS

Applications are invited for a postdoctoral position to study the cellular and molecular events in host plant-pathogen interactions involving parasite angiosperms. Training in cell and molecular biology is required and experience with *in situ* hybridization methods helpful. Start date June 1, 1993. Send curriculum vitae and three letters of reference to: Dr. M. P. Timko, Department of Biology, University of Virginia, Charlottesville, VA 22903.

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

MOLECULAR BIOLOGIST

POSTDOCTORAL POSITION available now to study neuronal-glial interactions. Applicant should have experience in library construction, screening and cloning. Send curriculum vitae and three letters of reference to: Evan B. Dreyer, M.D., Ph.D., Department of Ophthalmology, Harvard Medical School, Massachusetts Eye and Ear Infirmary, 243 Charles Street, Boston, MA 02114.

POSTDOCTORAL POSITION

Large pharmaceutical company offers to an English-speaking Ph.D. a one- to two-year postdoctoral position in Montpellier, France, to develop the Patch Clamp Technique in cardiac and vascular cells.

The candidate should have a background in Physiology, Pharmacology and a good experience in Patch Clamping, and preferably Single Channel Recording. A knowledge of cell culture will be an advantage but is not essential. Mastery of the French language would be useful but is not mandatory.

The laboratory has excellent recording, data acquisition and analysis systems. The Research Fellow will work in close proximity with other electrophysiologists and will have close contact with pharmacologists, biochemists and chemists.

Send applications, including a detailed résumé, a list of publications and the name of two possible references to:

Mélineuse Bart
1899 L Street, N.W., Suite 500
Washington, DC 20036

NUTRITION RESEARCH CENTER DIRECTOR

Wake Forest University's Bowman Gray School of Medicine in Winston-Salem, N.C. is seeking a Director of its Center for Research on Human Nutrition and Chronic Disease Prevention. The Director will be responsible for developing and directing nutritional research into chronic-disease prevention using a new 240,000-square-foot building now under construction.

The Director will be a physician with extensive research, teaching, service and administrative experience in nutrition, at a level of recognition sufficient to qualify for a professional appointment. Research activities may have been either of a basic or applied nature, with funding as the principal investigator by either public or private agencies; participation in multidisciplinary projects is considered essential. Teaching experience desirably includes medical students, house officers and graduate students. Service may have been in connection with patient care, work with academic and professional organizations or both. Experience in the administration of academic units, conduct of research projects and fund-raising is desirable. The Director will have a primary academic appointment in a specific discipline in addition to coordinating the multidisciplinary functions of this institution-wide center to provide a setting for collegial interaction as well as services to investigator-directed activities in nutrition based in other departments of the Medical Center; many such activities already exist. Salary is negotiable.

The Bowman Gray School of Medicine is an affirmative action/equal opportunity employer.

Please send curriculum vitae to the attention of:

Dr. Curt D. Furberg (Interim Director) 919-716-2498
Ms. Joanne C. Ruhland (Interim Executive Director) 919-716-4772
The Bowman Gray School of Medicine
of Wake Forest University
10th Floor Clinical Sciences Building
Medical Center Boulevard
Winston-Salem, NC 27157

Chemistry

We're Committed To Making Our Future As Bold As Our Past.

Last year, while achieving our 21st consecutive year of record growth and earnings, Abbott Laboratories made a \$772 million commitment to R&D. This investment shows the continuing commitment we have to making future innovations and expanding our leadership in the global health care market.

RESEARCH COMPUTER SCIENTIST

A position is available immediately in the Pharmaceutical Products Division R&D Computing organization supporting the Analytical Spectroscopy Laboratories. The selected individual will be responsible for FORTRAN and C programming in support of data acquisition, lab automation and data management for analytical services laboratories. Programming activities are in a mixed UNIX/VMS workstation environment using client/server integration, and includes system analysis, integration and troubleshooting, as well as Oracle and X-Windows programming. Experience in software development methodologies is desirable. We seek entry-level Ph.D. applicants in Chemistry, Physics, Signal Processing, Image Analysis or related disciplines, or applicants with equivalent experience.

Located just 30 miles north of Chicago, Abbott offers an exceptional salary and compensation package, including profit sharing and a stock retirement plan. For consideration, please send your resume to: Nancy Haas, Job# 59946, Dept. 583, AP6D, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke-Free Environment.

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BIOTECH JOB FAIRS

PROJECT MANAGERS

Microbial Genetics Division, Pioneer Hi-Bred International, Inc., is seeking applicants for project managers for new product development. Microbial Genetics currently sells products for forage preservation and for animal inoculants or probiotics.

MICROBIAL GENETICS OFFERS - Competitive salaries, excellent facilities and a highly cooperative environment. Successful candidates will be expected to operate in a matrix management style with other R&D groups. Candidates will also interact extensively with marketing and sales functions, and regulatory groups in bringing new products to the market. Project managers will also be responsible for managing a technical group in their area of expertise. Project managers are expected to have excellent oral and written communication skills as well as demonstrated evidence of productive research ability. Candidates should have demonstrated leadership and administrative skills.

FERMENTATION - Applications are sought from individuals with an M.S. plus experience in fermentation technology or related discipline with expertise in pilot plant management, biomass production and by-product recovery. Formulation knowledge is highly desirable.

MICROBIOLOGY - Applications are also sought from microbiologists having a Ph.D. and a particular expertise in microbial ecology of plants or animals. Expertise in modeling natural habitats, natural strain selection and statistical evaluation of data is also preferred.

Pioneer Hi-Bred International, Inc. is an equal opportunity/affirmative action employer. Send a letter expressing interests, curriculum vitae, names, addresses and phone numbers of three references. Applications should be received by April 30, 1993. Please send to:

Nancy Betz
Human Resources Manager
Pioneer Hi-Bred International, Inc.
Microbial Genetics Division
4601 Westown Parkway
Suite 120
West Des Moines, IA 50266



PIONEER®

DIRECTOR Division of Health Care Technology

The American Medical Association is seeking an experienced health care professional to direct current policy research, as well as develop new programs and initiatives in the area of technology assessment. Management responsibilities will include activities in clinical decision making, outcome measures, cost effectiveness analysis, and the Diagnostic and Therapeutic Technology Assessment (DATTA) program. These assessment issues will be expected to have a major impact on health care reform.

An M.D. degree is preferred, though a Ph.D. will be considered. Respondents must have previous research experience, familiarity with a broad range of technology and biomedical issues, and the ability to deliver effective presentations. Knowledge of clinical epidemiology, medical decision making, statistics, clinical research design and guideline development will be expected. Previous fiscal, staff and project managerial experience required. Familiarity with physician, patient and third-party payor needs desirable.

This individual will be an important member of our staff and will receive an excellent compensation package. CVs may be sent to: **Carol Sprague, Division of Placement, Dept. CS-SBA-2488, AMERICAN MEDICAL ASSOCIATION, 515 N. State Street, Chicago, Illinois 60610.** Equal Opportunity Employer.

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University of California, Santa Barbara Dean of School of Environmental Science and Management Search Reopened

UCSB seeks a distinguished scholar for the position of Dean for a new School of Environmental Science and Management, scheduled to open in Fall, 1994. Will oversee all academic, instructional, and administrative activities including the long-range planning and program development for the school. Will play an instrumental role in the recruitment and selection of academic personnel and the development of an interdisciplinary, research-oriented curriculum which provides professional training in science and management.

The School will emphasize diagnosis, resolution and management of environmental problems on all scales. Its curriculum will serve students with backgrounds crossing traditional academic boundaries, ranging from the natural sciences and engineering through economics and the social sciences. Degrees offered will include a Master's with emphasis in environmental science or management, with applied training in both; and a Ph.D. with three emphases - earth system studies, applied ecology, and environmental policy and management.

The School will have a full-time faculty of 15 and 5 joint appointments. Appropriate technical, computational and administrative support will be provided.

Deadline of May 3, 1993, or open until filled. Send current vita, representative publications, and names of references to:

Dean Search Committee
School of Environmental Science and Management
Office of Academic Personnel,
Cheadle Hall 5109
University of California
Santa Barbara, CA 93106-2030

UCSB is an Affirmative Action/Equal Opportunity employer.



POSTDOCTORAL POSITION

Make a noticeable
contribution in
neuroscience research

Hoechst-Roussel Pharmaceuticals, Inc., a fast growing subsidiary of Fortune 100 Hoechst Celanese Corporation and one of the world's largest pharmaceutical companies, has an outstanding opportunity for a postdoctoral fellow.

You will work with Dr. S. Kongsamut on studies of neuronal cell signalling mechanisms, especially those involving calcium. The post is for one year, but may be extended for an additional year. It involves pursuing independent projects within an industrial, drug development research setting.

You must be a recent Ph.D. in Biochemistry, Physiology, Pharmacology or Neuroscience, and have a solid background in cellular physiology or biochemical pharmacology. Familiarity with intracellular calcium measurement using Fluorimetric techniques would be a plus.

For consideration, send a curriculum vitae, including three references to: Manager, Human Resources, Neuroscience SBU-POSTDOC 1A, Hoechst-Roussel Pharmaceuticals Inc., P.O. Box 2500, Somerville, NJ 08876-1258. An Affirmative Action Employer M/F/D/V.

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Postdoctoral Fellowship Cancer Research

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company has an immediate opening for a postdoctoral fellow to investigate the characteristics of focal adhesion kinase in tumor cells and determine the potential role of this enzyme in transformation, metastatic capacity and the proliferative properties of malignant tissue.

The candidate will join a preclinical cancer research group which is part of a multidisciplinary effort to study the role of tyrosine phosphorylation in cellular proliferation, cell cycle progression and tumorigenesis as well as the therapeutic consequences of intervening at strategic sites along these enzyme pathways.

Candidates should be a recent Ph.D. graduate in biochemistry, cell biology or a related discipline with experience in protein biochemistry and enzymology. Familiarity with the areas of signal transduction or protein phosphorylation would be beneficial.

Interested candidates should send their C.V. and list of references to Box JDM-0019, 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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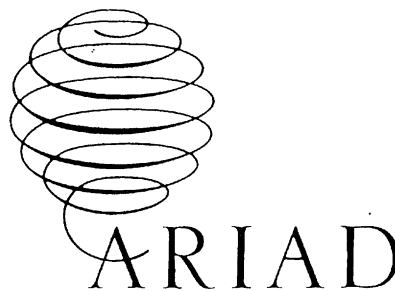
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SENIOR RESEARCH SCIENTIST

PULMONARY PHARMACOLOGY/PHYSIOLOGY

At ARIAD Pharmaceuticals, our aim is to develop biopharmaceuticals that interfere with intracellular signaling and protein trafficking pathways to alter the course of disease. With the biotech industry's largest start-up financing behind us, we're prepared to bring our expertise and creativity to the discoveries ahead. You'll assume a lead role in the design, conduct, interpretation and reporting of *in vivo* pulmonary pharmacologic and physiologic studies for the development of a new generation of small molecule drugs. In addition to developing programs in pulmonary disease, you'll be further challenged with the responsibility of developing appropriate *in vivo* models to support drug discovery programs in immunity and inflammatory diseases. You'll have extensive interaction with our Chemists and Biologists to evaluate and study lead molecules.

To qualify, you should have a Ph.D. in Pharmacology, Physiology or a related field; 3-5 years' academic or industrial experience in pulmonary research, including small and large animal surgery; and excellent communication skills. Along with a fully equipped laboratory suitable for sophisticated small and large animal studies, we offer an outstanding compensation and benefits package that includes incentive stock participation. Please send your C.V. to: Human Resources, Dept. PPP, ARIAD Pharmaceuticals, Inc., 26 Landsdowne Street, Cambridge, MA 02139-4234. We're an equal opportunity/affirmative action employer who supports quality and diversity.



Postdoctoral Position In Computational Biology

A two-year postdoctoral position is available to prototype a Genome Information System using object-oriented artificial intelligence techniques. The system is envisioned as a hybrid database and simulation tool. The objective of this research is to perform a feasibility study on the prediction of phenotypic traits of *Zea mays* from genotypic data and other biomolecular information. The position is available starting June 1993, or later.

The successful applicant will have a strong background in the biological sciences. Experience with one or more of the following computational paradigms and techniques is desired: object-oriented programming, object-oriented database, rapid prototyping, black-board systems, neural networks, and genetic algorithms. Candidates are expected to have experience with UNIX, and preferably with Common Lisp, CLOS, CLIM and/or C.

Applications received by April 15 will be assured full consideration. Send resume to:



Pioneer Hi-Bred International, Inc.
Plant Breeding Division
Department of Data Management
Attn: Kristy McKenna
7250 N.W. 62nd Ave., P.O. Box 1004
Johnston, Iowa 50131

RESEARCH PHARMACOLOGIST/ BIOCHEMIST

Upjohn's commitment to research in neuroscience has created this challenging opportunity at our world headquarters in Kalamazoo.

The successful candidate will screen novel compounds using a receptor binding assay, perform follow-up studies for investigating receptor-mediated functions using enzymatic assay, radioimmunoassays and an HPLC, and report results of these experiments.

We seek an excellent communicator who has a proven ability to work independently. A B.S. or M.S. degree in pharmacology, and experience in biochemistry and neuropharmacology of the second messenger system are required. Additional skills in computer sciences would be desirable.

Upjohn offers opportunities for career growth, a competitive salary and a comprehensive benefits package. Our Kalamazoo headquarters (located midway between Detroit & Chicago) features many cultural and outdoor attractions. For consideration, please send your C.V. and a statement of research interests to:
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POSITIONS OPEN

POSTDOCTORAL FELLOW in Molecular Pharmacology. An immediate opening is available for a postdoctoral position to study (1) the cellular and molecular actions that control the regulation of the Dioxin (Ah) receptor, or (2) the molecular events underlying cytochrome P450 gene regulation. Candidates should have a background in molecular or cellular biochemistry, with exposure to recombinant DNA techniques. This position is available through an NIH training grant, and the applicants must be U.S. citizens. Send curriculum vitae and names of three references to: **Dr. Robert Tukey, UCSD Cancer Center-0812, La Jolla, CA 92093-0812; or FAX: (619) 543-3943.**

POSTDOCTORAL FELLOWSHIPS available in glial cell transplantation studies aimed at investigating aspects of oligodendrocyte biology and the feasibility of repair of the demyelinated or dysmyelinated CNS by transplanted cells. Transplantation is carried out using three different myelin mutants and future directions will be to devise new ways to deliver cells and define the best cells for repair purposes. Background in glial cell biology, tissue culture, neuroanatomy-transplantation, molecular neurobiology or combination of these required. Send curriculum vitae, statement of research interests and names and addresses of three referees to: **Dr. I.D. Duncan, University of Wisconsin-Madison, 2015 Linden Drive, Madison, WI 53706. (FAX: 608-263-6573).**

POSTDOCTORAL FELLOW

**Bioorganic Chemistry
University of Texas**

Southwestern Medical Center-Dallas

A postdoctoral position is available immediately for a scientist with a background in Organic Synthesis and an interest in working at the interface between Chemistry and Biology. Qualified applicants should possess or be a May, 1993 candidate for a Ph.D. in Chemistry or a related field, and have less than three years of postdoctoral experience. Projects will involve the design of semisynthetic macromolecules possessing novel structure and function. Send curriculum vitae and three letters of reference to: **Dr. David Corey, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9050. An Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP IN MEDICAL MOLECULAR BIOLOGY

Position immediately available for identification of mutations in structural proteins of the skin. Methods for detection of polymorphisms emphasized including SSCP and AMD analysis, as well as methods for establishing genetic linkage. Successful candidate will have some previous experience with library screening, DNA sequencing, and PCR. Laboratory in a new research building on campus. Excellent opportunity for recent Ph.D. to utilize molecular biology/genetics background to study underlying mechanisms of disease. Send curriculum vitae, and three letters of recommendation to: **Eugene Bauer, M.D./Warren Hoefler, Ph.D., Department of Dermatology, Stanford Medical School, Stanford, CA 94305. Equal Opportunity Employer.**

POSTDOCTORAL/RESEARCH ASSOCIATE

An NIH-funded position, restricted to American citizens or permanent residents, provides an exciting opportunity to be a member of a team studying the molecular immunopathogenesis of T-cell lymphoma and the role of novel biological response modifiers in treatment. The team currently consists of M.D.'s and Ph.D.'s with specific interests in cytokine biology, T-cell receptor biology and cell-mediated immunity. Outstanding new Howard Hughes research facilities currently in use. Candidate should have Ph.D. with expertise in molecular biology. Reply to: **Dr. Alain H. Rook, Department of Dermatology, University of Pennsylvania School of Medicine, 3400 Spruce Street, Philadelphia, PA 19104-4283. Equal Opportunity/Affirmative Action Employer. FAX: 215-573-2033.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE AND B.S./M.S. RESEARCH SPECIALIST POSITIONS (one each, positions #0012 and #0014).

Must be available for work no later than July 1, 1993. Need hands-on experience in whole-cell molecular biology/microbiology. Need experience in DNA/RNA cloning and expression in prokaryotic and eukaryotic cells. Will develop DNA/RNA/biochemistry strategies to characterize and understand pathogenic bacterial cell surfaces and their attachment to mammalian cell receptors. Experience in developing monoclonal antibodies, tissue culture and animal models a plus. Positions funded by USDA Food Safety Consortium Grant for two years. Respective salaries up to \$30,000 and \$20,000 per 12 months. *Proof of legal authority to work in the United States must be provided.* Send letter, curriculum vitae with list of research publications and names of three persons who know your work with telephone and FAX numbers and addresses and photocopies of all college transcripts no later than April 30, 1993, (or until suitable candidate is identified) to: **Dr. Mike G. Johnson, Professor, University of Arkansas, Department of Food Science, 272 Young Avenue, Fayetteville, AR 72703. FAX: (501) 575-6936. The University of Arkansas is an Equal Opportunity/Affirmative Action Institution.**



The Health Technology Assessment Program of ECRI, a nonprofit health research and publishing agency, seeks outstanding candidates for the following positions:

M.D. Epidemiologist

A clinically competent physician with formal training in epidemiology and strong analytical skills to join a multidisciplinary effort to critique the clinical literature and assess new health technologies.

Ph.D. Biostatistician

A doctoral-level statistician experienced in biomedical applications to assess the statistical validity and methodological designs of clinical studies and new health technologies.

Ph.D. Research Analysts

Doctoral-level life scientists with voracious reading ability to organize clinical literature and write epidemiologically objective critiques of new health technologies.



These appointments offer unusual opportunities to impact significantly on the cost and quality of healthcare, here and abroad. Possibilities to participate in grant-funded research activities are also available. Please send curriculum vitae and reference list to: **Human Resources, ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462.**

POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS in gamete and embryo biology at the University of Wisconsin-Madison. Training faculty and research topics are: **Barry Bavister**—*in vitro* fertilization and early development; **Gary Borisy**—mitosis; **Neal First**—maternal/embryonic transitions; **Jeff Hardin**—gastrulation and embryogenesis; **John Hearn**—implantation; **Henry Lardy**—sperm activity; **Gary Lyons**—gene expression in embryonic stem cells; **John Parrish**—capacitation and acrosome reaction; **Gerald Schatten**—fertilization: Motility, architecture, activation. *Must be U.S. citizen or permanent resident.* Send curriculum vitae, three letters of recommendation, reprints/preprints, and a 2 to 3 page research proposal to: **Dr. Gerald Schatten, Gamete and Embryo Training Program, University of Wisconsin, 1117 West Johnson Street, Madison, WI 53706. FAX: (608) 262-7319. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITIONS DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS CASE WESTERN RESERVE UNIVERSITY

The Department of Physiology and Biophysics at Case Western Reserve University has over 60 faculty with either primary or secondary appointments, and offers unprecedented research opportunities in the area of membrane protein structure and function; membrane transport; molecular biological studies of growth factors, receptors, oncogenes, viruses and cell differentiation; electrophysiological and biophysical studies of cell function. Several NIH-supported training positions are available for individuals who are U.S. citizens or permanent residents. Applicants should send curriculum vitae, the names and addresses of three references, and a brief letter describing past, present and future research activities and interests to: **Christine G. Sciuili, Coordinator, Educational Programs, Department of Physiology & Biophysics, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4970. An Affirmative Action/Equal Opportunity Employer.**

BIOCHEMIST, Ph.D. or M.D.

Research on mitochondrial adenine nucleotide translocase as affected by thyroid hormone. Salary depends on experience and publications. Columbia University appointment possible. Send résumé plus reprints to: **Dr. Kenneth Sterling, Veterans Administration Medical Center, 130 West Kingsbridge Road, Bronx, NY 10468.**

ANIMAL BEHAVIOR

The Smithsonian Tropical Research Institute (STRI) anticipates an entry-level vacancy for a full-time scientist to conduct research in animal behavior from the evolutionary perspective. Based in the Republic of Panama, the STRI provides unique opportunities and excellent support for field and laboratory research in the tropics. Salary: \$33,000 to \$40,000 per year, and may include home leave, housing and educational allowance. Please submit a cover letter with the names and addresses of three referees, curriculum vitae, and a statement of research interests to: **Smithsonian Tropical Research Institute, Behavior Search Committee, Unit 0948, APO AA 34002-0948, USA. STRI is an Equal Opportunity Employer and is able to employ scientists of any nationality.**

POSTDOCTORAL FELLOW: A position is available immediately in a cell biology group for a scientist to conduct virological studies on the mechanisms of sexual and transplacental transmission of HIV. Emphasis is on the means by which epithelia of the genital tract or placenta become infected through contact with HIV-positive lymphocytes and monocytes. Techniques include cell culture, infection assays, ELISA, RT, and PCR. Send curriculum vitae and the names and addresses of three references to: **Dr. David M. Phillips, The Population Council, 1230 York Avenue, New York, NY 10021.**

POSTDOCTORAL POSITION available immediately to study peptide design, structure and molecular dynamics. Research projects will require the use of automated peptide synthesis, magnetic resonance techniques (ESR and NMR), vibrational and optical spectroscopy. Applicants should have experience with two or more of these techniques and have a Ph.D. in Chemistry, Biochemistry or closely related field. Please send curriculum vitae and three letters of recommendation to: **Dr. Glenn L. Millhauser, Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064.**

POSTDOCTORAL FELLOW

The Immunology Laboratory of the Department of Medical Cell Biology at the Alfred I. duPont Institute seeks two (2) individuals to participate in ongoing research concerning immune response mechanisms involved in autoimmune and infectious diseases. One position is currently open and the second should be available in the fall of 1993. Candidates should possess a Ph.D. in immunology or a related field and experience in cellular immunology and/or molecular immunology. Send inquiries to: **Dr. Paul T. Fawcett, Director of Immunology Laboratory #7012, Alfred I. duPont Institute, P.O. Box 269, Wilmington, DE 19899.**

**CHAIR
DEPARTMENT OF NEUROBIOLOGY
UNIVERSITY OF PITTSBURGH
SCHOOL OF MEDICINE**

Nominations and applications are requested for a chairperson to lead the growth and development of a newly created Department of Neurobiology in the School of Medicine. The department will occupy new research space in the recently constructed Biomedical Science Tower. The ideal candidate will hold an advanced degree (Ph.D., M.D. or both) and will have a vigorous research program in molecular and cellular neurobiology with demonstrated leadership ability in fostering faculty development, graduate and medical student education, and bridging basic and clinical sciences. The new chairperson will be responsible for faculty recruitment and for interfacing the department with various University of Pittsburgh Medical center departments, institutes and centers including a well established Neuroscience Center. This twelve-month tenured professor position will have a salary commensurate with the experience of the individual and can be occupied as soon as possible. To ensure full consideration, applications should be received by May 1, 1993.

Interested persons should submit a letter of intent and curriculum vita to: Dr. Joseph C. Glorioso, Chairman of the Search Committee, Department of Molecular Genetics and Biochemistry, E1246 Biomedical Science Tower, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261. (412-648-8106).

Women and minorities are encouraged to apply. The University of Pittsburgh is an equal opportunity/affirmative action employer.

**Postdoctoral
Research
Scientist**

Position available for molecular biologist to work on the role of hepatocyte growth factor/scatter factor and the c-met receptor in biological and pathological processes. Ph.D. in Biological Sciences with experience in molecular biology is required.

Competitive salary and benefits package. Please send resume to: Dr. I. Goldberg, Chairman, Dept. of Radiation Oncology, LIJ, New Hyde Park, NY 11042. An Equal Opportunity Employer.



Long Island Jewish
Medical Center

The Long Island Campus for the
Albert Einstein College of Medicine

MILES

Pharmaceutical
Division

Miles, Inc., Pharmaceutical Division site near Raleigh, NC is a world leader in Biologicals manufacturing. Our Technology department applies modern techniques in biochemistry to large scale purification and characterization of plasma proteins of therapeutic value.

SCIENTISTS

Position #93-20A: We are seeking an individual with experience in peptide synthesis and purification to assist in the development of affinity chromatography ligands. Relevant background should include knowledge and use of manual and automated peptides synthesis techniques and HPLC purification. Knowledge of affinity chromatography support matrices and ligand coupling chemistries highly desirable.

Position #93-20B: This scientist will assume primary responsibility in ongoing screening of random peptide recombinant libraries and chemiluminescent DNA sequencing in direct support and development of affinity chromatography ligands. Experience required in general molecular biology techniques; familiarity with affinity chromatography methods a plus.

Requirements for both positions are recent Ph.D. (Biochemistry or related for #93-20A; Molecular Biology or equivalent for #93-20B), or MS with 2-4 years of experience. Must be able to work with a minimum of supervision within a team-oriented, multidisciplinary group.

*We offer attractive compensation and generous benefits. Please send resume to:
Human Resources Manager, Miles Inc., P.O. Box 507, Clayton, NC 27520.*

An Equal Opportunity Employer M/F/D/V

SUGEN, Inc.

Group Leader -Neurobiology

Biopharmaceutical company located in the San Francisco Bay Area looking for an eager, motivated individual. Applicant should have a background in neurobiology and have a Ph.D., M.D., or an equivalent degree. The successful candidate will have a minimum of three years' postdoctoral experience in an academic or industrial setting. Experience in one or more of the following areas would be an asset: Molecular Biology - Neuroanatomy - Neurophysiology - Neurooncology - In vitro culture of neurons.

The position reports to the Vice President of Research and entails supervising a group of technicians and postdoctoral researchers. Individuals who enjoy working in an application-oriented, competitive, and exciting research area with international collaborators are encouraged to apply.

Group Leader - Development Biology

Applicant should have a background in developmental biology and have a Ph.D. or an equivalent degree. The successful candidate will have a minimum of three years' postdoctoral experience in an academic or industrial setting. Experience in one or more of the following is required:

Mouse anatomy and histology - Mouse pathology - Transgenic mouse technology - Embryonic stem cell technology - In situ hybridization - Embryo manipulation.

The position reports to the Vice President of Research and entails supervising a group of technicians and postdoctoral researchers. Individuals who enjoy working in an application-oriented, competitive, and exciting research area with international collaborators are encouraged to apply.

Group Leader - Protein Chemistry

Applicant should have a background in protein chemistry and have a Ph.D. or equivalent degree. The successful candidate will have a minimum of three years' postdoctoral experience in an academic or industrial setting. Experience in modern protein purification techniques, protein microsequencing, peptide synthesis, peptide modification and analysis is essential. The position reports to the Vice President of Research and entails supervising technicians and postdoctoral researchers. Individuals who enjoy working in an application-oriented, competitive, and exciting research area with international collaborators are encouraged to apply.

Dorian Rinella, SUGEN, Inc., 515 Galveston Dr., Redwood City, CA 94063

POSITIONS OPEN

RESEARCH ASSOCIATE GEORGETOWN UNIVERSITY

Postdoctoral position(s) available immediately to study signal transduction and the regulation of antioxidant enzyme gene expression. Strong background in molecular biology or protein chemistry required. Please send curriculum vitae and names of three references to: **Donald Massaro, M.D., Lung Biology Laboratory, Georgetown Medical Center, 3900 Reservoir Road, N.W., Washington, DC 20007. FAX: 202-687-8538. An Equal Opportunity Employer.**

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW IN MOLECULAR NEUROBIOLOGY

Position available to study the biochemistry and cell biology of the Alzheimer's amyloid precursor protein (APP). Projects include: (1) Characterization of membrane interactions of APP; (2) isolation of proteolytic enzymes involved in APP secretion; (3) investigation of the biological properties of APP; (4) effects of mutations on APP processing and biological function of APP. Candidates should have a strong background in biochemistry of membrane proteins and experience in protein purification and cell cultures. Salary commensurate with experience.

Send curriculum vitae and references to: **Dr. Nikos K. Robakis, Mt. Sinai Medical Center, Department of Psychiatry and Fishberg Research Center for Neurobiology, Box 1229, One Gustave Levy Place, New York, NY 10029.**

RESEARCH ASSOCIATE AT MIT STRUCTURE AND DESIGN OF DNA-BINDING PROTEINS

Postdoctoral position available for scientist interested in the structure and design of DNA-binding proteins. Our group is trying to understand protein-DNA interactions at a level that will allow us to design new regulatory proteins that can be used for research, diagnosis and therapy. We are looking for a talented, motivated scientist with a strong background in biochemistry, molecular biology, or structural biology. Research projects could involve: (1) crystallization and structural analysis of protein-DNA complexes or (2) design and testing of novel DNA-binding proteins. If you're excited about the prospects for designing new regulatory proteins, please send curriculum vitae to: **Carl O. Pabo, Department of Biology, 16-617, Massachusetts Institute of Technology, Cambridge, MA 02139. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH SPECIALIST IN LIFE SCIENCES/FLOW CYTOMETRY

The Biotechnology Center, University of Illinois at Urbana-Champaign has an opening for a Research Specialist in Life Sciences to direct the University's Flow Cytometry Facility. Qualifications include a Master's degree in life sciences, or the equivalent combination of education and experience. The candidate should have extensive experience in operation and maintenance of flow cytometry instrumentation. Duties include: operation, maintenance, and repair of three Coulter flow cytometer/cell sorter systems; development of flow cytometry technology; consultation in the use of the flow cytometers; and training of students in the operation of the flow cytometers.

This is a regular, full-time, 12-month academic professional position. Salary based on qualifications and experience. Position available June 15, 1993, or when a suitable candidate is located.

To ensure full consideration, applications must be received by May 15, 1993. Send application, résumé and three references to: **Dr. Janet H. Glaser, Associate Director, University of Illinois Biotechnology Center, 105 Observatory, 901 South Mathews Avenue, Urbana, IL 61801. (Telephone: 217-333-1695).**

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

POSITIONS OPEN

RESEARCH ASSOCIATE IN FOOT-AND-MOUTH DISEASE VIRUS MOLECULAR BIOLOGY. A postdoctoral position is available to study foot-and-mouth disease virus. Candidates for the position will be expected to engineer new viruses based on infectious clone technology and to use these novel agents to test the role of individual virion structures in virus/cell interactions, immune recognition and pathogenesis.

The researcher will be part of a multidisciplinary group at the Plum Island Animal Disease Center. The Center is located off the northeast tip of Long Island, and USDA ferry services from Orient Point, New York, or Old Saybrook, Connecticut, offer a choice of living on Long Island or in Connecticut.

The position, which is available in September of 1993, is for two or three years, and salaries begin at \$36,313 or \$42,522 (based on qualifications).

Candidates must have obtained a Ph.D. within the last four years. Applicants should send curriculum vitae and names of three references to: **Dr. Peter Mason, PIADC/ARS/USDA, PO Box 848, Greenport, NY 11944. ARS is an Equal Opportunity Employer; women and minorities are encouraged to apply.**

ECOGEN inc.

ECOGEN INC., an agricultural biotechnology company located in the Philadelphia area, has immediate openings for the following Research and Development positions:

RESEARCH ASSISTANT/SENIOR RESEARCH ASSISTANT (REF93-5JL): B.S. or M.S. in Chemistry/Biochemistry with experience in the purification/characterization of proteins, including HPLC and/or ELISA methodologies.

POSTDOCTORAL ASSOCIATE (REF93-8WD): Ph.D. in Biochemistry, Molecular Biology, or related science to pursue the identification of insect receptors for *Bacillus thuringiensis* (BT) insecticidal crystal proteins.

RESEARCH SCIENTIST (REF93-7JB): Ph.D. in Genetics, Biochemistry or related science to pursue structure/function analyses of BT insecticidal proteins. Proficiency in molecular genetic techniques; experience in protein biochemistry preferred.

Interested candidates should submit a current résumé including the names, addresses, and telephone numbers of three references, to:

**Ecogen Inc.
Human Resources Department (REF# . . .)
2005 Cabot Boulevard, West
Langhorne, PA 19047**

CLINICAL INVESTIGATORS, MAYO CLINIC/FOUNDATION. Two recently approved additional clinical investigator faculty positions. Candidates should be NIH-funded clinical investigators whose research requires the resources of a clinical research center. Attractive package of salary, benefits and research support provided. A new NIH-funded clinical research center will open late fall 1993. Please send curriculum vitae in confidence to: **Hugh C. Smith, M.D., Room 1602W, Mayo Clinic, Rochester, MN 55905. Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.**

NEW PRODUCT DEVELOPMENT SCIENTIST

Collaborative Biomedical Products/**BECTON DICKINSON** Labware develops, manufactures and sells innovative products for cell science and seeks individual to develop new products in areas of extracellular matrix, cytokines and *in vitro* cell culture systems; provide support to sales, marketing, manufacturing, QA/QC; and participate in product development strategy, testing and patent applications. Requires advanced degree in life science, preferably cell biology, and 5 to 7 years of related experience. Submit résumé to: **C. Kaminsky, Manager, Human Resources, Collaborative Biomedical Products/Becton Dickinson Labware, Two Oak Park, Bedford, MA 01730. An Equal Opportunity Employer.**

POSITIONS OPEN

ANTIBODY-PHAGE

AFFYMAX RESEARCH INSTITUTE is an innovative venture dedicated to the development of new technology which will accelerate the process of drug discovery. Affymax offers a creative and stimulating environment for talented people.

Currently we are seeking a **STAFF SCIENTIST** to work on the engineering of catalytic and other antibodies using phage display libraries. The project involves the construction of antibody-phage as libraries and as single clones from hybridomas. One goal is to improve antibody catalysis through various types of antibody library engineering combined with library screening or selection tools. The antibody engineering project is part of a catalytic antibody team including chemists, molecular biologists, and a hybridoma laboratory. We have strong collaborative links with leading academic and industrial groups in the fields of antibody catalysis and engineering. Relevant publications in this field include: *Science* **245**, 1104 (1989); *ibid* **252**, 659 (1991); *Proc. Natl. Acad. Sci., USA* **88**, 58 (1991); *J. Biol. Chem.* **267**, 16007 (1992); *J. Amer. Chem. Soc.* **115**, 357 (1993); *Gene* **123**, 1 (1993).

Qualifications: Ph.D. with a strong background in molecular biology and several years of experience in antibody-phage display libraries. Postdoctoral experience and a chemistry background preferred.

Affymax offers many of the benefits of a world class academic environment and the potential to develop new therapeutics. Please refer to Job Code PS117 and send your résumé to: **Affymax Research Institute, Human Resources Department, 4001 Miranda Avenue, Palo Alto, CA 94304. Equal Opportunity Employer.**

RESEARCHERS HAWAII

PROTEIN BIOCHEMISTS (2)

Ph.D. or M.S. in biochemistry. This position involves the purification and characterization of medically important recombinant proteins. You will design and implement innovative strategies for the purification of these proteins. The ideal candidate will have expertise in protein separation techniques and strong communication and interpersonal skills. Knowledge of molecular genetics a plus. (Reference Job Code 301.)

Submit cover letter, full curriculum vitae, and three references to: **HAWAII BIOTECHNOLOGY GROUP, INC., 99-193 Aiea Heights Drive, Aiea, HI 96701; Telephone: (808) 486-5333; FAX: (808) 486-5020.**

Equal Opportunity Employer.

ASSISTANT SCIENTIST position available beginning fall of 1993 for investigation of the cellular mechanisms of neurodegenerative disease. This faculty-level, non-tenure-track position in the University of Florida Brain Institute will include responsibilities for supervision of a modern electrophysiological laboratory devoted to research investigating synaptic neuropharmacology, synaptic plasticity and novel drug actions. Responsibilities will include development of cell culture/tissue slice methods for application to studies of fetal tissue grafts in a spinal cord injury model. Preference will be to applicants with background in cellular/biophysical applications in cell culture/tissue slices and desire to develop an independent program of research. Please send curriculum vitae and three letters of recommendation by June 1, 1993, to: **Bruce E. Hunter, Ph.D., Department of Neuroscience, JHMC Box 100244, University of Florida, Gainesville, FL 32610.**

Equal Opportunity/Affirmative Action Institution.

SCIENCE WRITER—Leading Pittsburgh academic medical center has an immediate opening for a qualified science writer with strong skills in project management, writing about clinical and basic research topics, and editing. Bachelor's degree and minimum 3 years of experience required; background in basic or clinical research or health care setting preferred. Competitive salary and benefits package. Please send résumé and writing samples to: **S.L./Employment Office, UNIVERSITY OF PITTSBURGH MEDICAL CENTER, DeSoto at O'Hara Streets, Pittsburgh, PA 15213. Equal Opportunity Employer.**

**PRESIDENT
THE AMERICAN MUSEUM
OF NATURAL HISTORY**

The trustees of The American Museum of Natural History invite applications for the position of President and Chief Executive Officer of the Museum. The President is responsible for the effective governance of this highly respected museum and related entities.

Reporting to the President are the Vice President and Director, Vice Presidents for Science and Research, Financial Affairs, Development and Public Affairs, and Public Programming as well as the Deputy Director for Administration, the Department of Library Services, Department of Exhibition and Graphics, Department of Education, Natural History, Membership, and the Planetarium.

The annual operating budget of the Museum is \$52 million, there are 700 employees, 23 buildings, a \$220 million endowment, and 2.5 million visitors a year.

Candidates should have the following qualifications:

- Demonstrated leadership accomplishments and ability to work with diverse constituencies.
- A strong interest in the sciences; ability to foster scholarly work and public education.
- Substantial experience in and aptitude for fund raising.

Letters of nomination or application, coupled with resume/vitae and information on current compensation should be submitted in confidence no later than 26 April 1993 to:

SCIENCE

Box 29
1333 H Street, N.W.
Washington, D.C. 20005

Resumes will neither be acknowledged nor returned.

The American Museum of Natural History is an equal opportunity employer.

WYETH-AYERST RESEARCH

We're building on our success

Wyeth-Ayerst Laboratories is a Division of Fortune 100 American Home Products Corporation, a leading manufacturer and marketer of health care products with multi-billion dollar annual sales and an impressive record of growth and profitability. We currently have the following opportunities available at our modern pharmaceutical research facility in Princeton, New Jersey.

CELLULAR IMMUNOLOGIST-Ph.D.

This principal scientist will be an integral part of the cellular interactions and immunoregulation group. The successful candidate must have a Ph.D. in Immunology or a related discipline with at least 5 years of post-doctoral experience emphasizing both *in vitro* and *in vivo* applications. A strong background in molecular biology and/or signal transduction mechanisms is desirable. Individual selected will also participate in an advisory capacity in other discovery programs. (Position #SC-622)

CARDIOVASCULAR/METABOLIC DISORDERS DIABETES RESEARCH-Ph.D.

Join our discovery research efforts focused on mechanisms of insulin resistance and their relationship to non-insulin dependent diabetes mellitus. Primary responsibilities include the use of cellular models of diabetes to obtain insight into mechanisms of insulin resistance in liver and/or muscle and the successful treatment of these defects with novel therapeutic agents. The successful candidate will have a Ph.D. in Biochemistry, Physiology, Pharmacology or related discipline with a minimum of two years relevant post-doctoral experience. Expertise in the use of *in vivo* models of diabetes is also desired. (Position #SC-577)

Please send your resume with salary requirements, indicating Position #, to: **Human Resources Department, Wyeth-Ayerst Research, CN 8000, Princeton, NJ 08543-8000.** An Equal Opportunity Employer M/F/D/V.



Leading The Way for a Healthier World

**NYU
Medical
Center**

Associate Research Scientist

NYU Medical Center is currently seeking an Associate Research Scientist to be a part of a new research program in developmental neurobiology. You'll work in an established laboratory studying mechanisms involved in prenatal effects of stress and psychotropic drugs on postnatal development of brain neurotransmitter systems using molecular approaches. A PhD in Molecular Biology is required with a minimum of one year post-doctoral experience. Background and a keen interest in neurobiology is preferred. Hands-on knowledge of basic molecular biological methods including DNA/RNA analysis, cloning, sequencing, PCR, Western blotting, and Gel Shift analysis are also required.

Please send CVs to Maha Singh, Human Resources Department, NYU Medical Center, 550 First Ave., New York, NY 10016. CVs must be received by April 19. EOE, M/F.

SCIENTISTS/RESEARCH ASSOCIATES

Arris is a drug discovery company employing a synergistic approach that combines advances and expertise in molecular biology, synthetic chemistry and applied mathematics. The company's mission is to develop synthetic therapeutics to address major medical needs through applying proprietary structure based drug design methods.

BIOCHEMISTRY

BS/MS Biochemists with 5-8 years' experience to perform purification and biochemical characterization of rDNA-expressed receptor proteins in studies of structure/function. Experience with prep scale production of rDNA-produced proteins from tissue culture and bacterial sources is required. Relevant techniques include HPLC, FPLC, gel electrophoresis, immunoblotting and protein assays.

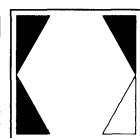
MOLECULAR BIOLOGY

Ph.D./M.D. plus 2-4 years of Postdoctoral experience in Molecular Biology. Research will include cloning, expression & characterization of cytokine/growth factor receptors and their ligands, *in vitro* mutagenesis and expression of recombinant proteins. Experience in DNA cloning, sequencing, PCR, site directed mutagenesis, mammalian cell culture, transfection & expression of recombinant proteins in mammalian systems is required. Working knowledge of cytokines/growth factors and their receptors is desirable, experience with E. coli or Baculo virus expression systems is a plus.

SCIENTIST/ENZYMOLOGIST

Ph.D. or equivalent in biochemistry, biology, or synthetic chemistry with 2-5 years postdoctoral training in enzymology to work on development of enzyme assays compatible with high-throughput screening, characterization of the mechanism of action of enzyme inhibitors, and identification of new therapeutic protein targets. Requires industrial experience in enzyme assay development, mechanism-based inhibitor design. Purification and expression of recombinant proteins is preferred.

Arris offers excellent salaries and benefits including equity participation in a growing company. If you are eager to work in an invigorating scientific environment, please reply to:



**Arris
Pharmaceutical**

C O R P O R A T I O N

Arris Pharmaceutical Corporation
Personnel Manager
385 Oyster Point Blvd., Suite 12
South San Francisco, CA 94080

POSITIONS OPEN

CYTOGENETICIST

The Coriell Cell Repositories has an immediate opening for a Ph.D. cytogeneticist to characterize normal and abnormal human cell cultures, animal cell cultures, and human/rodent somatic cell hybrids, and to conduct research to develop improved FISH methods of cytogenetic characterizations. Experience should include G-banding and recombinant DNA techniques. Salary negotiable; excellent benefits. Candidates should submit curriculum vitae, summary of research interest, and names of three references to: **Personnel Office, Coriell Institute for Medical Research, 401 Haddon Avenue, Camden, NJ 08103. An Equal Opportunity/Affirmative Action Employer.**

The Biotechnology Patent Examining Group of the Patent and Trademark Office is currently recruiting scientists for positions as **PATENT EXAMINERS**. Individuals with advanced degrees and/or equivalent experience in the fields of immunology, molecular biology, gene therapy, transgenic animals, animal science, biochemistry, protein engineering and microbiology are urged to send a résumé or SF-171 to the following address:

Patent and Trademark Office
Office of Personnel
Box 171
Washington, DC 20231
K. Clark (180)

For further information, call (703) 308-1123. U.S. CITIZENSHIP IS REQUIRED FOR EMPLOYMENT.

SENIOR SCIENTIST IN IMMUNOBIOLOGY

Carolinas Medical Center is seeking a Senior Scientist in Immunobiology. The candidate will be involved in basic and clinical research in tumor and cell biology, tumor immunology, trauma and sepsis, transplantation, and physiology. The candidate must have a Ph.D. in immunology, cell biology or biological sciences with experience in immunobiology research and teaching graduate and postdoctoral students. Send curriculum vitae, copies of significant publications, and a statement of research interest to: **CAROLINAS MEDICAL CENTER, Attention: Pam Buennemeyer, Human Resources, P.O. Box 32861, Charlotte, NC 28232-2861, Telephone: (704) 355-2101, (800) 942-6898. An Equal Opportunity Employer.**

SCIENTISTS/SENIOR SCIENTISTS LABORATORY SUPERVISORS

Activated Cell Therapy, Inc., a recently formed biotechnology company located near Stanford University, is developing living cell therapies for the treatment of cancer and chronic infections. We are currently recruiting for several positions including:

SCIENTIST/SENIOR SCIENTIST—Supervise cellular immunology group. Experience with generation and analysis of cytotoxic T cells, manipulation and culture of human T cells, flow cytometry, and antigen presentation. Ph.D. or M.D. required.

SCIENTIST/SENIOR SCIENTIST—Supervise laboratory isolating and manipulating human bone marrow cells for clinical trials. Experience with tumor cell purging, hematopoiesis assays, separation/depletion of leukocyte subsets. Ph.D. or M.D. required.

LAB MANAGER/SUPERVISOR—Experience with separation of lymphocyte subsets, immunostaining and flow cytometry, assays of lymphocyte function and hematopoiesis. Ph.D. and/or medical technician license desirable but not required.

SCIENTIST/TISSUE CULTURE ENGINEER—Experience with mammalian cell culture, including long-term lymphocyte propagation, and hollow fiber or other scale-up techniques.

Activated Cell Therapy offers a competitive salary and benefits package, including stock options. If you enjoy a team-oriented environment and would like to have an impact on the development of a new class of human therapeutics, please send a copy of your résumé and recent salary history to:

Activated Cell Therapy, Inc.
c/o Pennie & Edmonds
2730 Sand Hill Road
Menlo Park, CA 94025

An Equal Opportunity Employer.

POSITIONS OPEN

R. S. DOW NEUROLOGICAL SCIENCES INSTITUTE (RSDNSI) *Basic discoveries of the nervous system leading to innovative patient care.*

The R. S. Dow Neurological Sciences Institute is seeking to recruit outstanding neuroscientists to its staff. Neuroscientists with interests in biochemistry-molecular biology, physiology-pharmacology and systems neuroscience are encouraged to apply.

The RSDNSI has strong interdisciplinary research programs in vision, vestibular function, pain, neuronal development and motor control. Members of the staff are expected to develop independent research programs that complement these strengths. Successful candidates will be appointed to the Institute and to an appropriate clinical department of Legacy Health System. Generous start-up funds, equipment and laboratory space are available. The level of appointment will depend upon research accomplishments.

Candidates should submit curriculum vitae, three letters of reference and a brief statement of research goals, by 15 May 1993 to: **Neuroscientist Search Committee, R.S. Dow Neurological Sciences Institute, 1120 NW 20th Avenue, Portland, OR 97209.**

ANNOUNCEMENTS



ENTREPRENEURIAL SCIENTIFIC/ EMERGING COMPANIES

There are a number of excellent reasons why the Colorado Bio/Medical Venture Center is the place to launch your new bio/medical company:

- We provide you with a research campus, labs, university and business ties, regulatory assistance, fund-raising help and administrative support.

- Locating in Colorado means a superb quality of life, low costs, easy national and international access, and a high quality work force. Plus, you'll be part of a growing community of world-recognized research institutions such as the University of Colorado, Colorado State University and the National Jewish Center for Immunology and Respiratory Medicine, and more than 200 bio/med companies, including high profile Synergen, Ribozyme, Cobe Laboratories and Spectranetics.

- Investigate the possibilities for you and your company today. Call (303) 237-3998, FAX: (303) 237-4010 or write us at: **CBVC, 1610 Pierce Street, Lakewood, CO 80214.**

RESEARCH AWARDS

The Benign Essential Blepharospasm Research Foundation, Inc., (BEBRF, Inc.) announces the availability of \$100,000 for support of research relevant to blepharospasm/Meige syndrome and/or hemifacial spasm. Deadline September 1, 1993. For information and application write: **BEBRF, Inc., P.O. Box 12468, Beaumont, TX 77726-2468.**

RESEARCH INQUIRIES INVITED

The Smokeless Tobacco Research Council, Inc. invites inquiries regarding grant applications.

The Council sponsors independent research into questions of smokeless tobacco and health. Research support is through a program of grants-in-aid.

Grant applications are evaluated by the Scientific Advisory Board to the Council and will be judged solely on the basis of scientific merit and relevance.

Deadlines for submission of grant applications are December 31st for July 1st funding and June 30th for January 1st funding. Address inquiries or requests for applications to: **The Smokeless Tobacco Research Council, Inc., 420 Lexington Avenue, New York, NY 10170, Telephone: (212) 697-3485.**

ANNOUNCEMENTS

INTRODUCING:

The U.S. Biomedical Research EXchange,
(BIOREX)
of interest to

Researchers and Product Developers
Biomedical Researchers
from U.S. Universities, Colleges or Nonprofit
Research Institutes.

Have your research discoveries inspired ideas for applications that you were unable to follow-up? Now, you can write-up your original idea for application (IFA) and submit it to BIOREX. The IFA's will be stored in a protected and anonymous database and viewed under strict rules of confidentiality only by BIOREX clients potentially interested in developing IFA's into patentable innovations. A free, six-month submission period for IFA's will start on May 1, 1993.

Officers, Decision Makers
of U.S. Biomedical, Pharmaceutical, Biotechnology and Venture Capital Companies; of U.S. Colleges, Universities and Nonprofit Institutions with Applied Research Capabilities; Entrepreneurs.

Have you wished you had access to a database with a varied collection of ideas for applications (IFA's) in a useful format, waiting to be developed into protected innovations, and ready for confidential viewing by your staff? BIOREX will enable you to conveniently identify and develop winners.

For more information on BIOREX, on how to prepare IFA's, or how to schedule your first viewing of the IFA database, write or FAX, specifying your interest, to: **Biomedical Technology Transfer Exchange, (BTTE), Attention: Robert Katz, Ph.D., President, 3 Bethesda Metro Center, Suite 700, Bethesda, MD 20814, or FAX: (301) 913-2948.**

COURSES AND TRAINING

A Workshop for Scientists Responsible for TEACHING ETHICS TO BIOLOGY STUDENTS

or the ETHICS COMPONENTS OF TRAINING GRANTS

will be held in **Bar Harbor, Maine, June 12-16, 1993**, to provide scientists with the ability to develop meaningful ways of meeting these ends. Session topics include: Ethics as a Problem-Solving Activity; Ethical Issues in Biological/Biomedical Research; Ethical Dimensions of the Relationships Between Science and Society; Putting the Teaching of Scientific Ethics Into Practice. The workshop will use case studies, lectures and discussions, and is designed to allow maximum interactions between participants and faculty. Faculty include **R. Bulger** (Institute of Medicine), **E. S. Golub** (Pacific Center), **E. Heitman** (University of Texas, Houston), **L. Hood** (University of Washington), keynote; **S. Reiser** (University of Texas, Houston), **C. Sidman** (University of Cincinnati), **P. Silverman** (Beckman), **J. Swazey** (Acadia Institute).

Contact: **Pacific Center for Ethics and Applied Biology, 8380 Miramar Mall, Suite 208, San Diego, CA 92121. Telephone: (619) 625-0734. FAX: (619) 793-3632.**

FOR D.D.S./D.M.D. GRADUATES:

NIH Ph.D. and Postdoctoral Training Opportunities in Connective Tissue and Craniofacial Biology, Neurobiology, Mechanisms of Oral Pathogenesis, and Virology

School of Dentistry,
University of California, San Francisco

For information, contact: **Mr. Paul Riofski, Program Administrator, (415) 476-2944 (Telephone); (415) 476-4204 (FAX).**

COURSES AND TRAINING

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.

THREE SUMMER INSTITUTES ON THE ENVIRONMENT, 1993

June 1-4. Risk Management in Environmental Health and Protection (with Quantitative Risk Assessment).

June 22-25. Environmental Impact Assessment: Process and Procedures.

July 26-30. Environmental Law.

Contact: Prof. R. Zimmerman, Wagner Graduate School, New York University, 4 Washington Square North, New York, NY 10003. Telephone: (212) 998-7432. Graduate credit or non-credit.

COMPUTATIONAL NUCLEAR MAGNETIC RESONANCE WORKSHOP

Pittsburgh Supercomputing Center
6-9 July 1993

Three-day workshop for biomedical researchers covering data reduction, simulated annealing, distance geometry, back calculations and refinements. Prior supercomputing experience is not necessary. NIH National Center for Research Resources workshop grant covers travel and lodging. Application deadline: 14 May 1993. Contact: Nancy Blankenstein, Pittsburgh Supercomputing Center, 4400 Fifth Avenue, Pittsburgh, PA 15213; Telephone: (412) 268-4960; Email: blankens@psc.edu.



METHODS IN COMPUTATIONAL NEUROSCIENCE

August 3-31, 1993, at the Marine Biological Laboratory, Woods Hole, Massachusetts. This is an intensive, four-week course that addresses issues relevant to computational neuroscience; the study of how the biophysical and biochemical properties of neurons and synapses, together with the architecture of neural circuits, produce animal behavior. The program of the course consists of two daily lectures, presented by a faculty of 30 established investigators, computer simulation tutorial projects, and an individualized modeling project. The course is designed for advanced graduate students, post-doctoral fellows, and faculty members who have trained in a variety of disciplines, including neurobiology, physics, electrical engineering, computer science, and psychology. Admission in the course is limited to 23 students. Directors: David Kleinfeld, and David W. Tank, Biological Computation Research Department, AT&T Bell Laboratories, Murray Hill, New Jersey. Tuition: \$1500 (includes room and board). Partial financial aid is available. Application Deadline: May 21, 1993. For information and application forms contact: Dorianne Chrysler, Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543; Telephone: (508) 548-3705, Extension 401.

FLOW CYTOMETRY COURSE JUNE 7-11, 1993—COLORADO SPRINGS

An intensive introductory course covering the theory and practice of flow cytometry will be held at the University of Colorado. Instrumentation, sample preparation, data acquisition and analysis, and hands-on applications are included in this limited enrollment (8) class. \$1,250 includes tuition, instructional materials, housing, breaks, and dinner Thursday evening at the Broadmoor Hotel. For more information, contact:

Dr. Douglas Swartzendruber
Department of Biology
University of Colorado
Colorado Springs, CO 80907
Telephone: 719-593-3181; FAX: 719-593-1239

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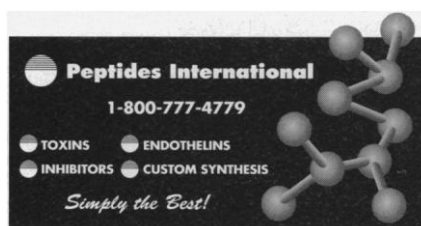
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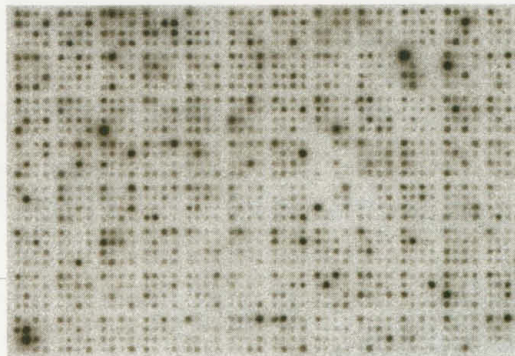
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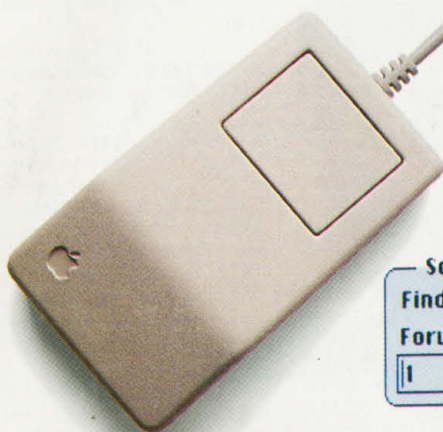
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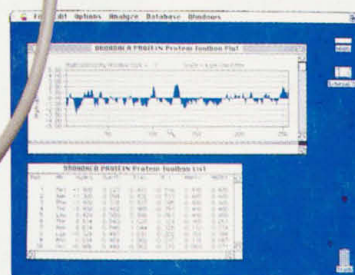
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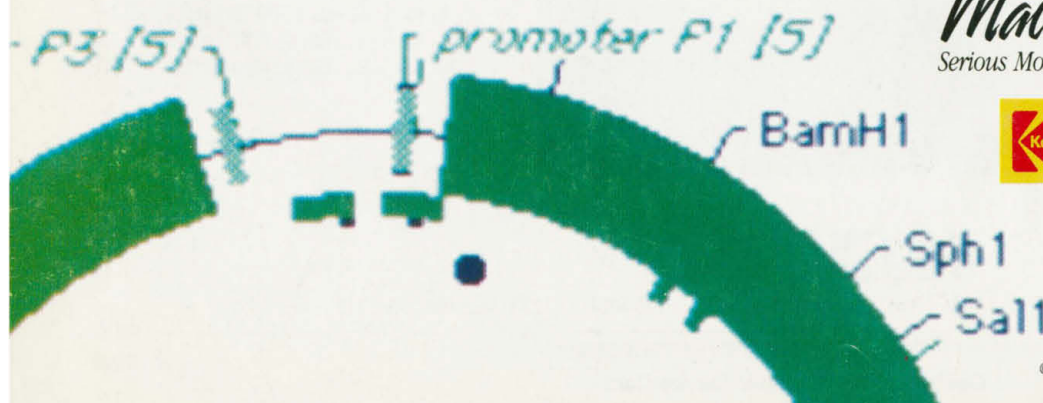
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