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POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY

The Department of Biochemistry at the University of South Alabama College of Medicine seeks applicants for a tenure-track position at the level of ASSOCIATE PROFESSOR or ASSOCIATE PROFESSOR to begin by March 1, 1994. Very competitive salary, start-up funds and laboratory space are available. The successful candidate will join two other new faculty members. Research interests are in carbohydrate biochemistry, molecular biology and other experimental approaches to study mechanisms of human disease are especially encouraged. The candidate is expected to be a research active individual with a current CV that includes contributions to the fields of gene cloning and expression, recombinant DNA technology, and the clinical application of such technologies.

Mail or fax materials to:

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POSITIONS OPEN

EXTENSION NUTRITION POSITION

NUTRITION SPECIALIST (100%) with faculty rank (Extension Associate Professor/Professor). Qualifications: Ph.D. in food and nutrition required, R.D. preferred. Extension or teaching experience preferred. Major responsibilities: Develop, implement, and evaluate education programs emphasizing chronic disease prevention and sound nutrition. Send curriculum vitae, transcript of all course work, and three current letters of recommendation sent directly by the writer to: Associate Professor, University of Kentucky, Department of Agromony, College of Agriculture, University of Kentucky, Lexington, KY 40546-0336.

ASSISTANT PROFESSOR
MOLECULAR GENETICS

THE DEPARTMENT OF GENETICS is seeking candidates for a tenure-track assistant professor position in molecular genetics. The candidate should have a Ph.D. in molecular biology. The successful candidate will be expected to conduct research in the area of mammalian genetics, with an emphasis on chromosome biology and gene expression. The University of Kentucky supports a highly competitive salary and a comprehensive benefits package. Applications are invited and will be accepted until September 15, 1993. Send curriculum vitae, statement of research interests, and three letters of reference to: Dr. G. R. Crow, Department of Genetics, University of Kentucky, Lexington, KY 40546-0336.
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.

Biochemistry and Molecular Biology
Rodney L. Levine, MD, PhD
The molecular response to oxidative stress has been implicated in a remarkable number of physiologic and pathologic processes, including aging, protein turnover, ischemia-reperfusion, and many chronic diseases. Current studies focus on the biochemistry, molecular biology, and cellular biology of protein oxidation. Laboratory of Biochemistry (OE-35), NHLBI, Building 3, Room 106.

DNA-Protein Interaction
Ted Hackstadt, PhD
The roles of Chlamydia trachomatis histone H1 homologs in the establishment of nucleoid structure and regulation of gene expression are being studied. This project complements ongoing basic studies of the interactions between host cells and prokaryotic obligate intracellular parasites. Applicants must be US citizens, possess a strong background in protein chemistry or molecular biology, and have less than five years of postdoctoral research experience. Laboratory of Intracellular Parasites (OE-35), NIAID, Rocky Mountain Laboratories, 903 South 4th, Hamilton, MT 59840.

HIV-C4D Interactions and AIDS Therapeutics
Edward A. Berger, PhD
The molecular mechanisms of HIV entry and tropism for specific CD4+ target cells are being studied. Fundamental understanding of these processes is essential for the design of CD4-based AIDS therapeutic strategies. The expression and functional analysis of recombinant proteins expressed by vaccinia vectors are accomplished using molecular genetic, biochemical, cell biological, and biophysical methods. A National Research Council associateship is available to eligible individuals. Laboratory of Viral Diseases (OE-35), NIAID, Building 4, Room 210.

Mammary Gland Biology and Neoplasia
Richard P. DiAugustine, PhD
Ovarian-steroid regulated proliferation in the mammary gland is being investigated with a goal to identify the estrogen- and progesterone-induced growth factors involved. Transcriptional regulation of growth factor genes and perturbations of growth regulation in mammary cells derived from MMTV-TGF-α transgenic mice are also being studied. Candidates should have a background in molecular biology/biochemistry and less than five years postdoctoral experience. Laboratory of Biochemical Risk Analysis (OE-35), NIEHS, Building 101, Room D425, Research Triangle Park, NC 27709.

Molecular Embryology and Organogenesis
Yun-Bo Shi, PhD
The molecular mechanisms by which thyroid hormone regulates organogenesis during Xenopus laevis metamorphosis are being investigated. The degeneration of larval organs and development of the adult organs are being studied with particular emphasis on the regulation and function of thyroid hormone response genes already isolated, which include transcription factors as well as metalloproteinases that degrade extracellular matrices. Laboratory of Molecular Embryology (OE-35), NICHD, Building 6, Room B1A02.

Molecular Genetics of HIV Replication
Sundararajan Venkatesan, MD
HIV-1 is being used to study post-transcriptional mechanisms of mRNA processing, transport, and translation and the role of cellular RNA binding proteins in modulating HIV gene expression. Other studies pertain to the HIV life cycle and address basic mechanisms of retroviral DNA integration, viral mRNA encapsidation, particle formation, and the effects of the Nef protein on T lymphocyte receptors. Laboratory of Molecular Microbiology (OE-35), NIAID, Building 10, Room 6A05.

Molecular Neurophysiology of Potassium Channels
Chris J. McBain, PhD
Potassium channel expression during development and in pathophysiological conditions is being studied using in situ hybridization. Complementary studies of their role in the regulation of hippocampal excitability use patch-clamp electrophysiological techniques to record from both hippocampal interneurons and cell lines transfected with subunit combinations of cloned potassium channels. Strong background in molecular biology and less than five years postdoctoral experience are required. Laboratory of Cellular and Molecular Neurophysiology (OE-35), NICHD, Building 49, Room 5A78.

Additional Postdoctoral Fellowship Opportunities
For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference by Internet (cu.nih.gov) or via modem (1,301-402-2221 or 1,800-358-2221). The settings for modern access are "7,Even,1". When connected to NIH, type in "vr100" at the connect message, "F5E" at initial, and "AJLI" 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.um.edu") must be running on your computer and configured to point to "gopher.nih.gov", port "70". Select Information for Researchers 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 any 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.
**POSITIONS OPEN**

The Department of Chemistry at Michigan State University invites applications from NMR spectroscopists with research interests in applying the techniques to biomolecules. This position is available immediately and the appointment will be filled by the ASSISTANT PROFESSOR level. The appointee is expected to establish a strong research program and to be committed to excellence in teaching at both the undergraduate and graduate levels. We would appreciate receiving curriculum vitae, a list of publications, a current research plan, and three letters of recommendation by November 1, 1993. Please send them to: Professor Gerald T. Babcock, Chairperson, Department of Chemistry, Michigan State University, East Lansing, MI 48824-1322. M.S.U. is an Affirmative Action, Equal Opportunity Institution.

**NEUROSCIENTIST/DIRECTOR, NEURAL INJURY LABORATORY**

Ph.D. required. Non-tenure-track Assistant Professor position with a joint appointment in the Departments of Surgery and Physiology. Requirements include: familiarization with the role of neural injury and its impact on the traumatic CNS injury, administrative and management skills required to establish and direct a brain and spinal cord injury research laboratory, and documented teaching skills. Applicants should send curriculum vitae, representative publications and 3 letters of reference to: Edward Benzel, M.D., Division of Neurosurgery, University of California, San Francisco, SOM, 2211 Lombard Boulevard, NE, Albuquerque, NM 87131. University of New Mexico is an Equal Opportunity/Affirmative Action Employer.

**DIRECTOR OF MOLECULAR BIOLOGY JOHN WAYNE CANCER INSTITUTE**

The John Wayne Cancer Institute is seeking to recruit an internationally recognized molecular biologist to serve as the Institute's Director of Molecular Biology. Salary commensurate with qualifications and experience. The successful candidate is expected to have an ongoing research program, and to be able to attract and maintain substantial funding. The individual will be expected to continue to attract competitive grants. The Institute provides a stimulating scientific and clinical environment. Our focus is the application of basic science research to the diagnosis, treatment, and prevention of cancer. An active and diverse program is in place to support these efforts.

Letter, curriculum vitae, and list of three references should be sent to: Donald L. Morton, M.D., President, John Wayne Cancer Institute 2200 Santa Monica Boulevard Santa Monica, CA 90404 Equal Opportunity/Affirmative Action Employer.

Candidates are solicited for the position of the CHAIR of the Chemistry Department at Florida State University. We seek an individual committed to strong leadership in both the undergraduate and graduate/research missions of the department. Applicants should be at the Full Professor level, have demonstrated excellence in teaching and be committed to fostering the educational and research goals of the Department of Chemistry.

The Department currently has 39 faculty and 42 non-tenure-track instructors. The chemistry department is a strong and growing group with a large number of students. Applicants should be at the Full Professor level, have demonstrated excellence in teaching and be committed to fostering the educational and research goals of the Department of Chemistry.

The Department currently has 39 faculty and 42 non-tenure-track instructors. The chemistry department is a strong and growing group with a large number of students. Applications should be submitted by February 1, 1993. Applications should be sent to: Assistant Dean/Chair, Chemistry, Florida State University, Tallahassee, FL 32306-3006.

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

**POSITIONS OPEN**

**DIRECTOR OF ELECTRON MICROSCOPY**

An Academic Professional position is available in the Center for Electron Microscopy, a facility emphasizing integrated microscopy at the Center of Excellence in Chemistry and Molecular Biology. The position will be filled after a search committee has been formed. Initial applications and supporting documentation should be received by December 1, 1993.

**PHYSICAL SCIENCE ADMINISTRATOR**

Applications are invited for Chief, Test Management Division (GM-15), U.S. Army Dugway Proving Ground, Utah. The incumbent will direct defense testing of chemical, biological, and environmental programs. The director will direct all activities performed by civilian, contract and military personnel in the division. These programs are conducted in the field and in the laboratory.

**DIRECTOR—MOLECULAR BIOLOGY**

Carolina Medical Center, an 846-bed academic medical center, is seeking a Director of Molecular Biology for the Department of OB and GYN. Responsible for the development of research program and clinical testing. Candidate will be expected to attract funding and collaborate with the other 10 research sections of the James G. Cannon Research Center. Candidates should possess a Ph.D. and postdoctoral training in molecular biology or biological sciences with extensive experience in molecular biology research; medical, resident and graduate student teaching; clinical laboratory accreditation. Candidates should be knowledgeable in molecular biology and have research interests in the field of molecular biology.

**YALE UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITIONS IN LYME DISEASE PATHOGENESIS**

Postdoctoral positions available to work with Dr. Erol Fikrig, Ph.D., on the immunobiology of the Lyme disease. Preference will be given to applicants with prior experience in molecular biology, microbial pathogenesis or cellular immunology. From July 1, 1993. Send current curriculum vitae and names of three references to Dr. Erol Fikrig, M.D., Department of Microbiology, Yale University School of Medicine, 333 Cedar Street, 610 T.J. Box 3833, New Haven, CT 06510. Yale University is an Equal Opportunity Affirmative Action Employer.

**POSTDOCTORAL POSITIONS VASCULAR CELL ADHESION RESEARCH**

One position requires molecular biology background; expression cloning to be used in identifying molecules that regulate integrin adhesion receptor function. Second position requires background in protein biochemistry to identify adhesion molecules mediating sickle red cell adherence to endothelium and extracellular matrix. Specify position of interest and send curriculum vitae with names of three references to: Dr. Nancy Beckage, Department of Biophysics, Boyce Hall, University of California, Riverside, CA 92521; (Telephone: 909-787-3521; Fax: 909-787-3502). The University of California is an Equal Opportunity/Affirmative Action Employer.

**COLUMBIA UNIVERSITY POSTDOCTORAL POSITION CELL BIOLOGIST**

To Study Homeobox Gene Regulation of Hematopoiesis

The Molecular Hematopoiesis Laboratory has an immediate opening for a cell biologist to characterize the hematopoietic profile of transgenic mice carrying homologous sequences of homeobox genes. Single or double transgenic mice will be generated using procedures based on crosses between mice transfected with an appropriate expression plasmid. Please submit a C.V. and names of three references to: Dr. H. H. Martine, M.D., Department of Medicine (11411), San Francisco VA Medical Center, 4150 Clement Street, San Francisco, CA 94121; (Telephone: (415) 221-4810 x3340; FAX: (415) 386-4357).

**YALE UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITIONS IN LYME DISEASE PATHOGENESIS**

Postdoctoral positions available to work with Dr. Erol Fikrig, Ph.D., on the immunobiology of the Lyme disease. Preference will be given to applicants with prior experience in molecular biology, microbial pathogenesis or cellular immunology. From July 1, 1993. Send current curriculum vitae and names of three references to Dr. Erol Fikrig, M.D., Department of Microbiology, Yale University School of Medicine, 333 Cedar Street, 610 T.J. Box 3833, New Haven, CT 06510. Yale University is an Equal Opportunity Affirmative Action Employer.

**UCSF/San Francisco VA Medical Center POSTDOCTORAL POSITION CELL BIOLOGIST**

To Study Homeobox Gene Regulation of Hematopoiesis

The Molecular Hematopoiesis Laboratory has an immediate opening for a cell biologist to characterize the hematopoietic profile of transgenic mice carrying homologous sequences of homeobox genes. Single or double transgenic mice will be generated using procedures based on crosses between mice transfected with an appropriate expression plasmid. Please submit a C.V. and names of three references to: Dr. H. H. Martine, M.D., Department of Medicine (11411), San Francisco VA Medical Center, 4150 Clement Street, San Francisco, CA 94121; (Telephone: (415) 221-4810 x3340; FAX: (415) 386-4357).

**POSTDOCTORAL POSITION POSTDOCTORAL POSITIONS VASCULAR CELL ADHESION RESEARCH**

One position requires molecular biology background; expression cloning to be used in identifying molecules that regulate integrin adhesion receptor function. Second position requires background in protein biochemistry to identify adhesion molecules mediating sickle red cell adherence to endothelium and extracellular matrix. Specify position of interest and send curriculum vitae with names of three references to: Dr. Nancy Beckage, Department of Biophysics, Boyce Hall, University of California, Riverside, CA 92521; (Telephone: 909-787-3521; Fax: 909-787-3502). The University of California is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITIONS COLUMBIA UNIVERSITY**

The Department of Physiology and Cellular Biophysics is soliciting applications for postdoctoral researchers in the following areas of interest: insect molecular biology, membrane biochemistry and biophysics, vascular biology, and cellular immunology. Send curriculum vitae, a brief letter of interest and names of three references to: Dr. S. Silverstein, M.D., Department of Physiology, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITIONS IN LYME DISEASE PATHOGENESIS**

Postdoctoral positions available to work with Dr. Erol Fikrig, Ph.D., on the immunobiology of the Lyme disease. Preference will be given to applicants with prior experience in molecular biology, microbial pathogenesis or cellular immunology. From July 1, 1993. Send current curriculum vitae and names of three references to Dr. Erol Fikrig, M.D., Department of Microbiology, Yale University School of Medicine, 333 Cedar Street, 610 T.J. Box 3833, New Haven, CT 06510. Yale University is an Equal Opportunity Affirmative Action Employer.

**POSTDOCTORAL POSITION UNIVERSITY OF TEXAS HEALTH CENTER, DEPARTMENT OF MICROBIOLOGY**

Two grant-funded postdoctoral positions are available immediately. Candidates must have a Ph.D. in molecular biology and be committed to the functional role of analogs of E. coli RecA, RecBCD and RecF genes in mycobacterial pathogenesis. A second project will focus on understanding RecF protein function in E. coli DNA recombination and repair. Specificity, RecF protein interaction with RecA, RecO and RecP proteins will be studied. Other genetic and biochemical approaches. Experience in microbial genetics and protein/DNA biochemistry with an interest in bacterial pathogenesis and drug resistance is necessary. Please submit current curriculum vitae, a brief letter of interest and names of three references to: Dr. M. R. Mager, Box 887, University of Texas Health Center, Department of Microbiology, P.O. Box 887, Corpus Christi, Texas 78460-1887.

**POSTDOCTORAL POSITION UNIVERSITY OF TEXAS HEALTH CENTER, DEPARTMENT OF MICROBIOLOGY**

Two grant-funded postdoctoral positions are available immediately. Candidates must have a Ph.D. in molecular biology and be committed to the functional role of analogs of E. coli RecA, RecBCD and RecF genes in mycobacterial pathogenesis. A second project will focus on understanding RecF protein function in E. coli DNA recombination and repair. Specificity, RecF protein interaction with RecA, RecO and RecP proteins will be studied. Other genetic and biochemical approaches. Experience in microbial genetics and protein/DNA biochemistry with an interest in bacterial pathogenesis and drug resistance is necessary. Please submit current curriculum vitae, a brief letter of interest and names of three references to: Dr. M. R. Mager, Box 887, University of Texas Health Center, Department of Microbiology, P.O. Box 887, Corpus Christi, Texas 78460-1887. The University of Texas Health Center at Corpus Christi is an Equal Opportunity/Affirmative Action Employer, M/F/V/D.
Scientific Research Opportunities at Pfizer.

Pfizer, a U.S. based multinational pharmaceutical company, has several immediate openings in the following areas for Research Scientists and Assistant Scientists in its expanding Central Research Division Laboratories located in Groton, Connecticut.

**Research Scientists, PhD**

**Atherosclerosis**—Join a multidisciplinary team seeking novel therapeutic agents for treatment of lipid disorders and atherosclerosis. PhD in Cellular or Molecular Biology as well as research experience in lipoprotein synthesis and secretion, reverse cholesterol transport, or arterial wall metabolism are required. Expertise in immunological techniques and/or the molecular biology of lipid metabolism and atherogenesis is desirable. Requires a minimum of 2 years postdoctoral training in a related area.

**Cardiovascular**—Join an active team of investigators in the discovery of novel therapeutics for the treatment of heart failure. PhD in Pharmacology, Physiology or related discipline as well as experience in the application of pharmacological, biochemical and physiological techniques to assess cardiac and vascular function in isolated tissue bath preparations required. Additional experience in molecular biology and/or use of in vivo models of heart failure desired. Requires a minimum of 2 years postdoctoral training; drug discovery experience highly desirable.

**Assistant Scientists, BS or MS**

**Atherosclerosis**—Study the Biochemistry and Physiology of cholesterol, bile acid and/or lipoprotein metabolism. Experience in the enzymology of key lipogenic enzymes in vitro and in culture cells is desirable. In vivo experience would also be advantageous. Requires 2 years of relevant laboratory experience.

**Osteoporosis**—Participate in the analysis of transgenic mouse models and the development of cell-based assays in order to elucidate mechanisms of hormone and drug action on bone. Experience in DNA/RNA isolation and hybridization techniques, primary cell culture, maintenance of established cell lines, immunohistochemistry, quantitative analysis, in situ hybridization of RNA, and flow cytometry desired. Two years relevant laboratory experience required.

**Inflammation**—Study novel drug therapy for inflammatory disorders by conducting in vitro analyses of drug interactions with specific receptors on white blood cells. Experience with cell fractionation, ligand/receptor binding assays, as well as ligand-mediated functional responses of cells, is desired. Two years relevant laboratory experience and the ability to work independently and summarize/communicate results effectively also required.

**Pulmonary Biology**—Be involved with a team investigating airway disease and dysfunction. Two years relevant laboratory experience required; previous in vivo and in vitro experience desired.

In addition to a stimulating research environment, we offer a competitive compensation and benefits package, including generous relocation assistance to this southeastern Connecticut shoreline community. Qualified applicants may send a resume and cover letter, indicating position desired and the names of three references, to: Ms. E. Buller, Supervisor, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. We are an equal opportunity employer.
POSTDOCTORAL POSITIONS
La Jolla, California

The newly established Department of Neurobiology at The Scripps Research Institute, has available postdoctoral positions in the following areas:

CELLULAR AND SYSTEMS NEUROBIOLOGY
Will study problems related to the analysis of re-entrant pathways in the brain, studies of diffusible signals such as nitric oxide in brain development and control of molecular processes by signaling events. Other ongoing studies include: analysis of morphogenetic pathways during neural development; identification of signal transduction pathways activated 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.

TRANSGENIC STUDIES IN CELLULAR AND MOLECULAR NEUROBIOLOGY
Will 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, Department of Neurobiology, SBR14, The Scripps Research Institute, 10666 N. Torrey Pines Rd., La Jolla, CA 92037. An Affirmative Action/Equal opportunity Employer.
BioGenex offers a competitive salary, stock option plan, and excellent benefits. Send resume to:

BioGenex
Attn: Human Resources
4600 Norris Canyon Rd.
San Ramon, CA 94583

TRANSGENIC TECHNOLOGIST

The Ohio State University Biotechnology Program is seeking a qualified individual to manage the transgenic facility and to provide technical guidance to researchers throughout the campus in generating transgenic animals. Candidates for this staff position should have a minimum of two years experience in the field of transgenic mice, and preferably should have an M.S. or Ph.D. Send curriculum vitae and arrange to have letters of reference sent to: Dr. John Oberdick, Transgenic Technologist Search Committee, Ohio State Biotechnology Center, 206 Rightmire Hall, 1060 Carmack Road, Columbus, OH 43210-1002. Screening of candidates will begin August 15, 1993.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer.

Where Scientific Performance Makes A Difference

POSTDOCTORAL OPPORTUNITIES

Hoffmann-La Roche is world renowned by the scientific community for its outstanding contributions to medical science. Our pharmaceutical and biomedical research teams have created a research-intensive environment where professionals excel.

We are currently seeking recent Ph.D. Scientists to join our Preclinical Research organization, located at our Nutley, New Jersey headquarters. Immediate opportunities exist in the following areas:

ONCOLOGY

- Participate in research into the role of transcription factors and tumor suppressor genes in cell growth and antisense therapeutics for cancer. Requires a Ph.D. in Molecular Biology/Cell Biology. Experience in antisense preferred. Please refer to position RN

BRONCHOPULMONARY

- Research focuses on the characterization of mechanisms of signal transduction following the aggregation of IgE receptors on mast cells and basophils. Studies include the characterization of novel receptor associated proteins, phospholipase A2 and phospholipase D, and their role during signal transduction. Requires a Ph.D. in Biochemistry, Molecular Biology, Cell Biology or Immunology. Please refer to position JK

- Investigate the biochemical characterization of phospholipases which are involved in signalling mediated by high affinity receptor for IgE on mast cells and basophils. Studies involve the analysis and purification of these enzymes. Requires a Ph.D. in Biochemistry, Cell Biology or Immunology. Please refer to position MB

INFLAMMATION

- Research focuses on the role of adhesion molecules on leukocyte migration and trafficking in animal models of inflammation. Studies involve the development of murine models and analysis of adhesion molecule expression and function utilizing neutralizing monoclonal antibodies and nucleic acid probes. Requires a Ph.D. in Immunology, Molecular Biology, Biochemistry or related field. Experience in cell and molecular biology techniques required. A background in cell adhesion highly desirable. Please refer to position BW

Roche is located on a 127-acre campus in an attractive suburban community just 10 miles west of New York City and its cultural and intellectual centers. We offer a highly competitive salary and benefits package in a multidisciplinary environment that stimulates personal and professional growth and encourages publication.

For consideration, please send your curriculum vitae, the names of three references, and your position code preference, to: Mr. R.H. Stevenson, Assistant Director, Preclinical Research, Hoffmann-La Roche Inc., Nutley, New Jersey 07110-1199. We are an equal opportunity employer.
PLANT BIOCHEMIST

ZENECA, Inc., formerly ICI Americas, an acknowledged leader in crop protection chemicals, is seeking a Plant Biochemist to join its biochemical research group in the San Francisco Bay Area. The successful candidate will design and implement plant biochemical studies in support of new herbicide discoveries.

The position requires a Ph.D. in Plant Biochemistry or closely related field and postdoctoral or equivalent experience in determining the mode of action of herbicides. Because much of the research will be conducted as part of interdisciplinary teams, good communication skills and knowledge of organic chemistry are essential. Evidence of originality in previous work is also desired since the position offers wide scope for innovation to promote herbicide discovery efforts. (The leveling of this position will be determined by the candidate's education and experience.)

ZENECA Inc. offers a competitive salary/benefits/relocation package and a stimulating work environment. For consideration, forward your resume in confidence to: Maria O'Connor, Human Resources Department, ZENECA Inc., 1200 South 47th Street, Richmond, CA 94804-0023. We are an Equal Opportunity Employer.

ZENECA
Ag Products

Research Biologist

Searle, a global leader in the pharmaceutical industry is seeking a Research Biologist who shares our commitment to developing new frontiers in pharmaceutical research. This is an excellent opportunity for a biologist to operate a gamma scintigraphy camera and adapt nuclear medicine techniques to preclinical research applications. Additional job functions include handling gamma-emitting radioisotope and documenting use. Qualified candidates must have a BS in Biology with 2-5 years experience in radioisotope handling (cell labelling techniques preferred), computer proficiency, and a background in in vivo research techniques, including surgery.

In addition to a challenging, innovative environment, Searle offers an excellent salary and benefits package. For consideration, please send your resume to: Searle, Human Resources, Dept. CM5, 4901 Searle Parkway, Skokie, IL 60077. EOE M/F/V/D.

POSTDOCTORAL POSITION available to study the interaction of T cell receptors with peptide-MHC complexes using murine models of autoimmune disease (J. Exp. Med. 224: 188, 1992). Experience in NMR and/or immunochemistry is desirable, but applicants from other areas will be considered. Please send curriculum vitae and names of three referees to: Dr. B. Sally Ward, Cancer Immunobiology Center and Department of Microbiology, U.T. Southwestern Medical Center, 5325 Harry Hines Boulevard, Dallas, TX 75235-8576, USA.

UT Southwestern is an Equal Opportunity Institution. We offer a non-smoking working environment.

POSTDOCTORAL POSITIONS are available at the Department of Cancer Biology, Harvard School of Public Health for the study of the pathogenesis, epide-
miology, and molecular biology of cancer associated with viruses, including retroviruses; with lymphocyte immortalization and lymphoma development; also to study the role of oncogenes and related growth factors in human cancers; mechanisms of cell transformation; and the molecular regulation of T cell recognition. The positions require a Ph.D. or M.D. or D.V.M. U.S. citizenship or permanent residency required. One to three years of clinical training desirable but not required. Send curriculum vitae and names of three references to: Dr. M. Essex, Department of Cancer Biology, Harvard School of Public Health, 605 Huntington Avenue, Boston, MA 02115.

Harvard University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study human leukemia and prostate tumor growth regulation. Studies include: differentiation induction of tumor cells, characterization of cellular and molecular biology during tumor cell development and tumor-immune system interaction. The candidates must have a recent Ph.D. with strong background in molecular biology. Send curriculum vitae and names of three references to: Professor J. W. Chiao, Department of Medicine, New York Medical College, Valhalla, NY 10595.

POSTDOCTORAL POSITION MOLECULAR BIOLOGY

Immediate opening to study T cell recognition of autointogens in EAE and MS. Experience in cellular immunology and gene expression required. Send curriculum vitae and references to: Dr. Offer/Ja-
ndenbark, Neuroimmunology Research 151-D, VA Medical Center, Portland, OR 97221.

POSTDOCTORAL POSITION in ECOSYSTEM/COMMUNITY ECOLOGY

Available immediately to study the functional significance of tree species in northern forests. A cooperative project between the Ecosystems Center, Marine Biological Lab (Woods Hole, Massachusetts), Forest Science Department, Colorado State University, and the Rocky Mountain Forest and Range Experiment Station (Fort Collins, Colorado) is studying the impacts of climate change on forest structure and function. Individuals with interests in community ecology, ecosystem ecology and mathematical modeling are invited to apply by August 4, 1993, for this two-year position in Fort Collins. Salary is $39,000. Questions may be addressed to Don Gray (803) 429-9414. If qualified please submit your résumé immediately to: MACA, 2629 Redwing Road, Suite 110, Fort Collins, CO 80526.

POSTDOCTORAL POSITION in BIOMOLECULAR MATERIALS

$2180 to $2290 per Month

Synthetic Organic Chemist (Ph.D. within the last three years) for development of novel biomolecular polymeric materials. Strong background in synthesis, purification, characterization (IR, NMR, MS) of organic/bio-organic compounds. Prefer experience in carbohydrate, peptide and/or polymer chemistry. Appointment is for one year with the possibility of renewal. Please send curriculum vitae, and three references, specifying Job #G/8029 to: Dr. Francois Tropper, Lawrence Berke-
ley Laboratory, University of California, Human Re-
sources Department, Mailstop 938A, One Cyclotron Road, Berkeley, CA 94720. An Equal Opportunity Employer.
POSTDOCTORAL POSITION available to study molecular virology. Ph.D. graduates with productive research background in molecular biology are encouraged to apply. Send curriculum vitae, 3 letters and personal statement to: Anna Lok, M.D., Tulane University Medical Center, 1430 Tulane Avenue, SL35, New Orleans, LA 70112. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION—DROSOPHILA MOLECULAR GENETICS: A position is open to study dosage sensitive regulatory genes affecting the expression of the white eye color locus in Drosophila. Experience with genetics/molecular biology is desirable. Please send curriculum vitae and the names and telephone numbers of three references to: James Birchler, Division of Biological Sciences, University of Missouri, Columbia, MO 65211; Email: birchler@biosci.mibp.missouri.edu. The University of Missouri is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL INVESTIGATOR. To examine metal bioavailability to bivalves in San Francisco Bay, joint with USGS, Menlo Park, California. Appointment for at least 18 months. Must have experience in metal biogeochemistry and experimental use of radiocess and be capable of intensive field work. Files received by August 1, 1993, are assured consideration, although applications will be accepted until position is filled. Send curriculum vitae, names of three references, and statement of interests to: N. S. Fisher, Marine Sciences Research Center, SUNY, Stony Brook, NY 11794-5000. The University at Stony Brook is an Equal Opportunity/Affirmative Action Educator and Employer. Women and minorities are strongly encouraged to apply.

POSTDOCTORAL POSITIONS IN CANCER PHARMACOLOGY AT THE UNIVERSITY OF CHICAGO

Positions available in the areas of anticancer drug development, clinical pharmacology and drug resistance. Individuals with a Ph.D. in pharmacology or pharmaceutical sciences, molecular biology, biochemistry or related field are encouraged to apply. Experience in HPIC, mass spectrometry, drug metabolisms, protein-DNA interactions and transcription factors or in vitro mutagenesis, especially desirable. The investigators and their research interests are as follows:

M. Eileen Dolan, Ph.D.
DNA Repair/Drug Metabolism
Ahmad R. Saffa, Ph.D.
Multidrug Resistance
Mark Ratain, M.D.
Drug Metabolism/Pharmacogenetics

Send curriculum vitae, a brief description of research experience and names of references to: 8841 South Maryland Avenue, MC 2115, Chicago, IL 60637-1470.

POSTDOCTORAL ASSOCIATE POSITIONS

POSTDOCTORAL TRAINING OPPORTUNITIES are regularly available with the COLLEGE OF BIOLOGICAL SCIENCES at the UNIVERSITY OF MINNESOTA. Positions may be available in the Departments of Biochemistry, Ecology, Evolution and Behavior; Plant Biology; and Genetics and Cell Biology. Positions may also be available in the following research programs: the Bell Museum of Natural History, the Gray Freshwater Biological Institute, the Biological Process Technology Institute, the Lake Itasca Forestry and Biological Station, and the Plant Molecular Genetics Institute.

A Ph.D. degree or foreign equivalent is required. Appointment is limited to three years. The college maintains a file of applicants for Postdoctoral Associate positions for the current fiscal year from July 1, 1993, through June 30, 1994. All applications are reviewed when each position is established. Applications from interested persons must include personal curriculum vitae, a brief statement of research interests and experience, names, addresses and telephone numbers of three references, and specification of department/programs of interests. Direct application material to: Associate Administrator, College of Biological Sciences, University of Minnesota, 1479 Gortner Avenue #240, St. Paul, MN 55108.

We are an Equal Opportunity Employer committed to diversity in the workplace.
HEAD
CLINICAL
MONITORING

As part of the National Cancer Institute's Biological Response Modifier's Program, Program Resources, Inc. (PRI) operates a large clinical laboratory dedicated to providing state-of-the-art immunological support for a comprehensive program of clinical and laboratory research designed to investigate, develop and bring to trial potential therapeutic agents that may alter biological responses important in cancer growth and metastases.

Current clinical trials are investigating the use of a variety of biological agents including cytokines (IL-2, IL-1), Growth Factors (PIXY-32, G-CSF, GM-CSF, M-CSF), immunotoxins, autologous vaccines, adoptive immunotherapy, gene therapy, and monoclonal antibodies. Experience with assays relevant to looking at lymphoid populations in small tumor specimens, including in situ hybridization, PCR and in situ immunofluorescence is desired. We anticipate expansion of our activities to include the development of new vaccination strategies and the development of methods to assess the induction of specific T-cell immunity in cancer patients.

The successful candidate will coordinate protocol design and implementation to ensure the timely and accurate clinical monitoring of all patients enrolled in the BRMP oncology program. The incumbent will interface with scientists who conduct relevant clinical/preclinical research in order to expedite the translation of laboratory findings into cancer therapy. Incumbent will supervise a scientific/technical staff of 25 who are located in approximately 2,000 square feet of well-equipped state-of-the-art laboratories.

Applicants should have an MD and/or PhD in immunology with 5-10 years of related experience and an established reputation of directing and performing scientific programs is desired.

PRI offers a salary commensurate with credentials and a comprehensive benefits program, including insurances, a 401(k) savings plan and relocation assistance. For consideration, please forward CV/resume, references, publications list and salary requirements to Barbara J. Norton-Gill, Technical Recruiter.

PROGRAM RESOURCES, INC.
a DynCorp subsidiary
NCI-FCRDC
P.O. Box B
Frederick, MD 21702-1201
EOE, M/F

RESEARCH ASSOCIATE
Adhesion Biology Group

The Upjohn Company, a recognized leader in pharmaceutical research and development, has an opportunity available in our Adhesion Biology Group to conduct research activities involving the study of leukocyte and endothelial adhesion molecules.

Applicants for this position should possess a BS/MS degree in Biochemistry (or related field) and experience in protein chemistry, cell biology or molecular biology.

Upjohn offers a stimulating, multi-disciplinary research environment at our headquarters in Kalamazoo (a southwestern Michigan community located midway between Detroit & Chicago). An excellent salary and benefits package is provided. For confidential consideration, please send your resume to: THE UPJOHN COMPANY, Attn: Corporate Recruiting, Position #169, 7000 Portage Road, Kalamazoo, MI 49001.

Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA,
SAN DIEGO
THE STEPHEN W. KUFFLER
PROFESSOR OF BIOLOGY

The Department of Biology is seeking applications and nominations for the Stephen W. Kuffler Endowed Professorship in Biology. The candidate must be an outstanding scientist and a recognized leader in biological research related to the nervous system, with proven ability as a scholar and a teacher. The chair is endowed by a generous gift in honor of the late Stephen W. Kuffler and is to be held for the academic tenure of the occupant.

Steve Kuffler contributed to the early development of neurobiology in La Jolla, where a robust environment has now created a large group of neuroscientists. The candidate will occupy laboratories in a new building and should enjoy interactions with colleagues both in the Department of Biology and throughout the community.

Applications should be submitted prior to August 31, 1993. Salary will be commensurate with stature and based on the UC scale. Curriculum vitae and bibliography should be sent to Ms. Mary Sue Webb, Biology Department 0346, University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92037-0346.

UCSD is an Affirmative Action/Equal Opportunity Employer.
MAKE A DISCOVERY
THAT MAKES AN IMPACT.

At Becton Dickinson and Company, people don’t just make discoveries—they make a difference. Here, individual initiative is prized and technical innovation expected. Join us today and make an impact on the Becton Dickinson DNA Probes Project. We are now seeking the following professionals for our suburban Baltimore, MD facility.

GROUP LEADER
DNA Probes Development
Requires Ph.D. in biochemistry, microbiology, molecular biology, or related field and 5+ years of postdoctoral and/or industrial experience in the development of DNA probes for use in diagnostic applications. Requires ability to propagate microorganisms and to prepare, clone and sequence DNA fragments, as well as the ability to design, synthesize and isolate oligonucleotide primers. Must have knowledge of restriction enzyme specificities and be able to coordinate and direct activities of group.

SENIOR SCIENTIST
DNA Probes Development
Requires Ph.D. in biochemistry, microbiology, molecular biology, or related field and 3+ years of postdoctoral and/or industrial experience in the development of DNA probes for use in diagnostic applications. Requires ability to propagate microorganisms and to prepare, clone and sequence DNA fragments, as well as the ability to design, synthesize and isolate oligonucleotide primers. Must have knowledge of restriction enzyme specificities.

GROUP LEADER
Clinical Sample Processing
Requires Ph.D. in biochemistry, microbiology, molecular biology, or related field and 3+ years of clinical and/or industrial experience in the development of DNA probe assays based on DNA amplification technology (e.g., PCR). Requires ability to perform PCR amplification of target DNA in clinical specimens and to prepare DNA suitable for amplification (PCR) from clinical specimens. Knowledge of clinical microbiology sample processing methods and identification of microorganisms by standard growth-based methods as well as the ability to coordinate and direct activities of a group of scientists is also needed.

SENIOR SCIENTIST
Clinical Sample Processing
Requires Ph.D., M.S. or M.T. in clinical microbiology or related field and 3+ years of experience working as a clinical microbiologist in a hospital or public health laboratory setting. Requires ability to identify mycobacteria using traditional staining and culture-based methods, experience processing large numbers of sputa for culture of mycobacteria and experience with BACTEC 460 and GenProbe systems for culture and identification of mycobacteria. Familiarity with other DNA-probe and amplification-based techniques for identifying mycobacteria and other pathogenic microorganisms as well as experience maintaining a viable collection of clinical isolates needed.

SENIOR SCIENTIST
Biofermentation & Enzyme Prep
Requires Ph.D. or M.S. in biochemistry, molecular biology or related field and 3-6 years of experience (depending on degree) working in the cloning and expression of enzyme or protein reagents in bacterial systems. Experience in bench or pilot scale production and purification of enzyme or protein reagents by biofermentation and chromatographic processes (10-30 L) is a must. Must be experienced in cloning and expressing heterologous proteins in E. coli and operation of semi-automated biofermentation equipment. Requires experience in developing chromatographic, partitioning and other methods for purifying recombinant expression product from cell cultures or lysates and knowledge of restriction endonucleases and DNA polymerases.

At Becton Dickinson, we offer highly competitive salaries, comprehensive benefits, and research opportunities that are among the most stimulating in the industry. To apply in confidence, send your resume with salary requirements to: Human Resources, Becton Dickinson Advanced Diagnostics, 10 Loveton Circle, Sparks, MD 21152. Becton Dickinson is serious about our commitment as an AA/EO Employer.
**Director, Radiological Health**

The University of Utah seeks a Director of the Radiological Health Department. The Director is also the University's Radiation Safety Officer (RSO). The RSO is responsible to regulatory agencies for all aspects of protecting employees, patients, students and the general public from exposure to ionizing radiation utilized by the University and its employees. Qualifications of the Director and RSO are as follows: The RSO must be certified by (a) The American Board of Health Physics and Comprehensive Health Physics, (b) The American Board of Radiology, (c) The American Board of Nuclear Medicine, (d) The American Board of Science and Nuclear Medicine, or (e) The Board of Pharmaceutical Specialties in Nuclear Pharmacy; or candidates must have had classroom and laboratory training and experience as follows: (a) 200 hours of classroom and laboratory training in radiation physics and instrumentation, radiation protection, mathematics pertaining to the use of measurement of radioactivity, radiology, and radio pharmaceutical chemistry and (b) one year of full time experience as a radiation safety technologist at a medical institution under the supervision of the individual identified on the license as the RSO.

As the Director of the Radiological Health Department, the incumbent is responsible to the University for administration of the personnel, facilities, equipment and budget that are necessary to conduct the Radiation Protection Program. These responsibilities include determining the number and type of employees needed, the hiring, promotion, discipline or firing of employees and salary adjustments. The Director prepares the budget and controls department expenditures. He/She proposes radiation policies to the Radiation Safety Committee for approval and formulates department policies for implementing the radiation protection program. The Director is responsible for handling a budget of approximately $500,000 and supervises thirteen (13) employees.

The University is an AA/EO employer and encourages applications from women and minorities, and provides reasonable accommodation to the known disabilities of applicants and employees.

A letter of application, a current Curriculum Vitae, and three to five letters of recommendation should be submitted to:

**Personnel Administration, c/o Shirley Watkins (SW 2624)**
**101 Anex**
**University of Utah**
**Salt Lake City, UT 84112**

Closing Date for applications is August 31, 1993.

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**POSITIONS OPEN**

**EVOLUTIONARY BIOLOGY/ QUANTITATIVE GENETICS**

**POSTDOCTORAL POSITION** open to help quantify the contribution of epistatic gene action to fitness in a natural genome. Program involves genetic mapping and quantitative genetics desired. Starting date: January 2, 1994 (flexible). Send by September 15, 1993: curriculum vitae, addresses and telephone numbers of 3 references, and statement of research interests to: Dr. Charles B. Fenster, Botany, University of Maryland, College Park, MD 20742–5815.

**POSTDOCTORAL POSITION—IMMUNOLOGY**

Immediate opening to study T cell signal transduction in vivo and in vitro. Emphasis on autoimmune disease, signal transduction in immunology or molecular biology with experience in tissue culture is required. Multidisciplinary effort involving Rheumatology and Microbiology. Send curriculum vitae and names of three references to: David A. Horwitz, M.D., USC School of Medicine, Division of Rheumatology & Immunology, 2011 Zonal Avenue, HMR 711, Los Angeles, CA 90033. Equal Employment Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION TO STUDY MOLECULAR BIOLOGY OF mdm2 AND p53.**

Position available immediately to study molecular mechanism of the tumor suppressor p53 and the cellular oncogene mdm2. Applications are invited from persons with a keen interest in this area of research. Current focus in the laboratories includes studies on the involvement of p53 and mdm2 in cellular transcription and growth. This challenging opportunity exists in our extremely well-equipped and intense laboratories. Persons with experience in recombinant DNA technology and protein purification are especially encouraged to apply with complete curriculum vitae and names of three references to: Swati Deb, Ph.D., or Sumitra Deb, Ph.D., Department of Microbiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284–7758. The University of Texas Health Science Center at San Antonio is an Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION—MUSCLE DEVELOPMENT**

University of Texas M.D. Anderson Cancer Center

A postdoctoral position to investigate the in vivo role of the bHLH myogenic factor myogenin is available beginning December 1, 1993. The research involves using mice that have recently been generated with a null mutation in the myogenin gene. Homozygous mutant mice display severe skeletal muscle deficiency and die at birth. Requirements include experience in molecular biology and preferably some knowledge of mammalian muscle development. The position is available for up to three years and the stipend will follow NIH fellowship guidelines. Interested individuals should send curriculum vitae and the names of three references to:

William Klein, Ph.D.,
Department of Biochemistry and Molecular Biology,
Box 117
University of Texas M.D. Anderson Cancer Center
1515 Holcombe Boulevard
Houston, TX 77030

The University of Texas M.D. Anderson Cancer Center is an Equal Opportunity/Affirmative Action Employer and smoke-free workplace.

**POSTDOCTORAL POSITION** in immunology to study mechanisms that control T cell development and function, T cell repertoire selection, and cellular signals which determine cell fate. Emphasis on comparative studies of αβ and γδ T cells. Experience in molecular biology, biochemistry, and/or immunology desirable. Starting date negotiable. Send curriculum vitae to: Dr. A. Augustin, Division of Basic Immunology, National Jewish Center for Immunology and Respiratory Medicine, 1400 Jackson Street, Denver, CO 80206.

**POSTDOCTORAL POSITIONS** open in the areas of basic research, analytical chemistry, and pharmaceutical development. Candidates with Ph.D. degree with training in analytical, lipid or biochemistry, pharmacology, pharmacy desired. Candidates with M.D. degree interested in laboratory work related to drug development may also apply. Send curriculum vitae to: Human Resources, DepoTech Corporation, 11025 North Torrey Pines Road, Suite 100, La Jolla, CA 92037.
POSTDOCTORAL FELLOWS:
OPPORTUNISTIC INFECTIONS/HIV

Two openings are available August 1, 1993, for up to three years, to study DNA-dependent enzymes from Pneumocystis carinii and HIV integrate as drug targets. A background in molecular biology and the enzymology of DNA-dependent enzymes is required. Send curriculum vitae and the names of three references to: Dr. C. Dykstra, Department of Pathology, School of Medicine, University of North Carolina at Chapel Hill, CB# 75235, 811 Brinkhouse-Bullitt, Chapel Hill, NC 27599. Phone/FAX: (919) 966-6718. Equal Employment Opportunity Employer, H/M/F/V.

POSTDOCTORAL FELLOWSHIP

Available immediately to design and synthesize novel peptide-based, biologically active compounds. The laboratory is involved in research designed to bridge the fields of molecular biology and medicinal chemistry. Preference will be given to individuals with a strong background in synthetic organic chemistry and/or medicinal chemistry with experience in computer modeling. Send curriculum vitae to: Professor John M. Tomich, Director, Kansas State Biotechnology Core Facility, Department of Biochemistry, Kansas State University, 104 Willard Hall, Manhattan, KS 66506. Telephone/FAX: (913) 532-6397. Application Deadline is August 13, 1993. Women and minorities are encouraged to apply. KSU is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH FELLOW

Dalton Cardiovascular Research Center
University of Missouri—Columbia

Position available immediately to join an active research group studying mechanisms of hypertension. Our laboratory utilizes a multifaceted approach to studying this problem including molecular, cellular, and whole animal techniques. Applicants must have Ph.D., M.D., or equivalent training in physiology, pharmacology, or a related area. Experience in molecular biology techniques is desirable, but not required. Please send curriculum vitae and names of three references prior to September 1, 1993, to: Dr. Edward H. Blaine, Dalton Cardiovascular Research Center, Research Park, University of Missouri—Columbia, Columbia, MO 65211. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS
IN PLANT-INSECT INTERACTIONS

The Interdisciplinary Research Training Program (RTP) on Plant-Insect Interactions at the University of Arizona invites applications for Postdoctoral Fellowships. RTP is funded, in part, by the DOE/NASA Joint Program on Collaborative Research in Plant Biology. Its goals are to provide effective interdisciplinary training in plant and insect sciences and to develop a better understanding of the complex interactions between plants and insects to serve as a guide for genetic engineering of plants for protection against insects. As well as a stipend, support for research supplies and travel will be available. Fellows will normally be supported for two years, with the second year of funding dependent on progress and the development of active research interactions. Applicants should send an introductory cover letter with statement of research interests, curriculum vitae, and names of three references to: August 1, 1993, to: Plant-Insect Interdisciplinary Program, 404 Forbes Building, University of Arizona, Tucson, AZ 85721. Please note, according to the conditions of the grant, stipend recipients must be citizens, nationals, or permanent residents of the United States. The University of Arizona is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE—Postdoctoral position available immediately to study regulation of transepithelial transport in renal and other epithelial cells by specific protein kinase C isoenzymes and a combination of molecular, electrical, and biochemical techniques. Should have a strong background in biochemistry or molecular biology. Send curriculum vitae and names of three references to: Dr. Thomas G. O'Brien, Lankenau Medical Research Center, 100 Lancaster Avenue, Wynnewood, PA 19096.

SCIENTISTS: MOLECULAR BIOLOGY AND TOXICOLOGY
SOUTHERN CALIFORNIA

Allergan, Inc., a Fortune 500 pharmaceutical company and a global leader in the eye and skin care products industry, invites you to become part of an exciting venture to design retinoid drugs for dermatology, ophthalmology, cardiology and oncology. Unanswered questions concerning toxic and therapeutic mechanisms of retinoid action provide major challenges for the science of drug design. You will be part of a multidisciplinary team of medicinal chemists and biologists. The following opportunities are available in Irvine, California.

MOLECULAR BIOLOGIST

Describe actions of retinoids at a molecular level. Ph.D. in Molecular Biology or related field with demonstrated scientific independence and a strong record of basic research accomplishment.

TOXICOLOGIST

Characterize and model systemic effects of retinoids. Ph.D. in Toxicology or related field. We seek an interactive individual who is capable of carrying out original studies in retinoid toxicology.

At Allergan, you’ll enjoy a competitive salary and benefits package, plus the opportunity to pursue scientific and professional growth in a dynamic team environment. For immediate consideration, please send your resume to: Allergan, Inc., Human Resources Dept. JS-RETS-SC, 2525 Dupont Drive, Irvine, CA 92715. Allergan is an Equal Opportunity Employer.

RESEARCH and DEVELOPMENT OPPORTUNITIES

GENSIA, INC., is a rapidly growing, publicly traded biopharmaceutical company located in San Diego. Our focus is on the discovery, development and commercialization of innovative products, specifically in the cardiovascular and cerebrovascular areas. Our progressive research and development programs have created a demand for several positions including the following:

Pharmacokinetics
Ph.D.-level scientist to develop, validate and perform assays for drugs and metabolites in biological matrices and to determine the pharmacokinetics and metabolic routes of the drugs. The position will also be responsible for analysis of drugs in biological media by HPLC and other laboratory methods and would interact with department members in the areas of Drug Delivery Development Systems and Drug Metabolism. Code: PK5F

Central Nervous System:
BS/MS level position for investigations of drug efficacy in in vitro models of cerebrovascular diseases. Code: CNLM

CV Pharmacology:
Ph.D.-level, hands-on supervisory position to design and conduct experiments in the evaluation of cardioprotective drug candidates in vivo models of cardiac disease.

Chemistry/Biochemistry:
Ph.D. and MS-level positions, including Associate Director, to support our research efforts in Biochemistry, Process, Analytical, and Medicinal Chemistry. Code: CSAME

Drug Delivery Systems Development:
Ph.D.-level positions of Associate Director, Research Scientist, and Sr. Formulation Chemist; and BS/MS level position of Data Analyst to focus departmentally on the development of proprietary drug formulations and novel drug delivery systems and devices. Code: DDVY

Clinical Research
M.D., Ph.D., RN and BS/MS level opportunities are available, including Associate Director and Clinical Research Associates, for support in the efforts of our Clinical Trials and Marketing Programs. Code: CVDG

Gensia, Inc., offers competitive salaries and a comprehensive benefits program with stock options. We invite qualified candidates who possess a strong interest in bringing in new technology, good communication skills, and team orientation to submit a resume to: Gensia, Inc., Human Resources, Code: 11025 Rosehill St., San Diego, CA 92121-1204. We are proud to offer equal employment and a culturally diverse work environment to everyone.

GENSIA PHARMACEUTICALS, INC.
APPLIED BIOSYSTEMS

We develop systems for the study of the art of PCR and fluorescence technologies.

We are an equal opportunity employer.

We offer a competitive salary and generous benefits.

We seek a Ph.D. in Chemistry or Biochemistry with at least 2 years of experience in product development, nucleic acid and purification technologies. Knowledge of fluorescence technologies a plus. Experience in writing and instrument development.

Two full-time, permanent positions are available.

Salary is commensurate with qualifications and experience. Applications are due by September 14.

The University of British Columbia is an equal opportunity employer.

The Canadian Perchlorate Study Group is a non-smoking environment.

Applied Biosystems, Inc.

A Division of Perkin-Elmer Corporation

The University of British Columbia is a member of the Perkin-Elmer Corporation.

The University of British Columbia is located on a campus-size hospital.

The preferred candidate will offer a B.S. or M.S. in Biochemistry or related field with strong experience in the study of the art of PCR and fluorescence technologies.

The preferred candidate will have a Ph.D. in Biochemistry or related field with strong experience in the study of the art of PCR and fluorescence technologies.

The preferred candidate will have a Ph.D. in Biochemistry or related field with strong experience in the study of the art of PCR and fluorescence technologies.
The seeds of automation in the environment.

The National Heart, Lung, and Blood Institute is recruiting a Chief for its Pulmonary Branch in the Division of Intramural Research. The Branch chief will be responsible for planning, overseeing and coordinating research into the pathogenesis and treatment of pulmonary disease and, to this end, has the opportunity to appoint senior and junior investigators, post-doctoral fellows, and technical support staff. The successful applicant must be board certified or board eligible in Pulmonary Disease and have led an internationally recognized program in basic and/or clinical research.

This is a Civil Service position in the Senior Executive Service (SES), with base salary from $92,900 to $107,300 per year. Physicians may be eligible for a Physicians' Comparability Allowance up to $20,000 per annum. A recruitment bonus of up to 25 percent of base pay may be available to a non-federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25 percent may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval.

Mandatory managerial/executive qualifications include the ability to demonstrate leadership responsibilities in developing program goals; representing the program to outside groups; directing program planning, execution, evaluation; obtaining and allocating fiscal and material resources; and conducting a fair and equitable employment program.

Please submit an Application for Federal Employment (SF-171), Curriculum Vitae, Bibliography and description of research accomplishments to:

Susan Frieswyk, Personnel Management Specialist
National Institutes of Health
National Heart, Lung, and Blood Institute
Building 31, Room 8A28
9000 Rockville Pike
Bethesda, Maryland 20892
(301) 496-6477

Public Health Service Commissioned Officers wishing to enter SES must follow the above procedures. Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to above address.

Applications from women, minorities, handicapped and veterans are strongly encouraged.

Additional information may be obtained from: Martha Vaughan, M.D., Chair, Pulmonary Branch Search Committee on (301) 496-4554.

NIH is an Equal Opportunity Employer • U.S. Citizenship is Required

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Automation Technology Development
Pioneer Hi-Bred International Inc., a Fortune 500 company and the world's largest developer, producer, and marketer of agricultural seeds, has an immediate opening for a Technology Development Manager in the Automation Group in the Data Management Department. Pioneer is an equal opportunity employer providing a competitive salary, excellent benefits and facilities, plus a cooperative work environment.

The successful applicant will be part of an automation team responsible for the development of automation projects to enhance field and lab research activities to support Plant Breeding. Automation projects may range from rapid harvest systems, measurement and instrumentation systems, and automated data acquisition, to image analysis, remote sensing and robotic systems. The manager will be responsible for identifying, evaluating, and applying innovative automation technologies to meet strategic research needs; transferring technological developments and reducing to practice in a production mode; developing external contacts and research collaboration to further advance automation technologies for Plant Breeding research. Requires Ph.D. in biology, agricultural or biosystems engineering, or closely allied biological/agricultural science. Training desired in biochemical testing, instrumentation and measurement systems with emphasis in electronics, instrumentation, and computer technology. Must have demonstrated automation application systems within a research environment.

Send resume to:
Pioneer Hi-Bred International, Inc.
Plant Breeding Division
Dept. of Data Management
Attn: Robert McKenna
7250 N.W. 92 Ave., P.O. Box 1004
Miami, FL 33126
E-mail: mckenna@PHBREED.COM

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CELLULAR BIOCHEMIST

SmithKline Beecham Pharmaceuticals has an international reputation for our innovative approach to drug discovery and development. Our success is built on the collaboration of multidisciplinary teams of scientists who share their ideas and expertise. You will practice state-of-the-art methodologies and work on projects that are both challenging and diverse.

As a Senior Investigator in our Department of Cellular Biochemistry, you will establish and direct our dedicated bone histomorphometry laboratory. In addition to providing morphometric data analysis and interpretation of in vivo and in vitro experiments, you will assist with in vivo experimental design and assess the mode of action of diverse agents. You will also develop and refine bone biology in situ methodologies.

The qualified candidate will have a Ph.D. in Bone Biology, expertise in bone histomorphometry and a minimum of one year of postdoctoral training experience (up to three years is preferred). A background in general in situ methodologies is desired, as is experience in osteoblast differentiation and function.

Based in our modern, state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham provides you with the opportunity to work in an environment where advancement is based on performance. In addition, we offer a competitive compensation that is industry-adjusted annually, an excellent relocation package and a flexible benefits package. For confidential consideration, please submit your resume and the names of three references to: SmithKline Beecham Pharmaceuticals, Employment Administrator, #052, PO Box 1539, King of Prussia, PA 19064-0939. We are an Equal Opportunity Employer, M/F/D/V.

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SmithKline Beecham Pharmaceuticals
Challenging the natural limits.

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Send resume to:
Pioneer Hi-Bred International, Inc.
Plant Breeding Division
Dept. of Data Management
Attn: Robert McKenna
7250 N.W. 92 Ave., P.O. Box 1004
Miami, FL 33126
E-mail: mckenna@PHBREED.COM
RESEARCH INVESTIGATORS
Seattle, WA

The Bristol-Myers Squibb Pharmaceutical Research Institute in Seattle performs research dedicated to pursuing novel approaches to the development of therapeutic products in the areas of immunology, infectious diseases and cancer.

BIOLOGICAL PROCESS RESEARCH

The successful candidate will lead and participate in activities aimed at the optimization of expression and production of recombinant proteins in culture processes. In this position, you will initiate and evaluate research into novel production technologies and work effectively with groups in various other parts of the corporation responsible for process research, process development and pre-clinical research. Candidates should have a Ph.D. in Biochemistry, Microbiology, Cell Biology, or Biochemical Engineering with over 3 years of industrial experience. A background in process research development as part of a team is a strong plus. REF. 93-0303.

AUTOIMMUNITY

Participate in structure and function studies of B7, CD28 and CTLA4. Elucidate CD28 specific signaling pathways and develop transgenic models to elucidate CD28 structure and function. Candidates must have a Ph.D. in Molecular Biology, Immunology or Cell Biology with a minimum of three years postdoctoral experience. REF. 93-0304.

We offer a creative research environment, competitive salaries, an excellent benefit package and relocation assistance. Our facility offers open and well-equipped laboratories overlooking beautiful Puget Sound and the Olympic Mountains from our downtown site. Please forward your resume to: Bristol-Myers Squibb, Human Resources Dept., 3005 First Avenue, Seattle, WA 98121. Please note the position reference code. Equal Opportunity Employer, M/F/D/V.

Bristol-Myers Squibb Company

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS available in October 1993 and January 1994 to study mechanisms of signal transduction across cell membranes. The work will focus on the structure, function and cellular regulation of G proteins. Experience in protein chemistry and/or molecular biology is essential. Send curriculum vitae and names of three references to: Dr. Eva J. Nee, Harvard Medical School, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Equal Opportunity/Affirmative Action Employer.

GENOME RESEARCH—POSTDOCTORAL ASSOCIATE position is available immediately in genome program at Argonne National Laboratory. Experience in sequence and human expressed and genomic DNA. Research project concerns studies on preparation and testing of libraries and development by hybridization technology. The position would suit those with previous experience in genomics as well as those with some exposure to cloning and sequencing at gene level who have interest in DNA sequence organization. Studies from this laboratory include PNAS 88: 10089-10093 (1991) and Science 260: 1649 (1993). Please send curriculum vitae and three letters of recommendation to: Susan M. Walker, Employment and Placement, Box BIM—POSTDOC-55, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. Argonne is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL SCIENTIFIC RESEARCH OPPORTUNITIES IN INDIA

Three- to twelve-month fellowships in India are available to U.S. citizens. For information, contact: Jeanne Marie Greene, Academy for Educational Development, 1255 23rd Street, NW, Washington, DC 20037.

POSITIONS OPEN

RESEARCH ASSOCIATE POSITIONS

RESEARCH ASSOCIATE OPPORTUNITIES are periodically available with the COLLEGE OF BIOLOGICAL SCIENCES at the UNIVERSITY OF MINNESOTA. Positions may be available in the Departments of Biochemistry; Ecology, Evolution and Behavior; Plant Biology; and Genetics and Cell Biology. Positions may also be available in the Bell Museum of Natural History, the Gray Freshwater Biological Institute, the Biological Process Technology Institute, Lake Itasca Forestry and Biological Station, and the Plant Molecular Biology Institute.

These positions are for independent research. To be considered, applicant must hold a Ph.D. degree or foreign equivalent and at least two years of postdoctoral experience. Applications are encouraged and a monetary salary support from an external granting agency. Multiple positions may be available, depending upon space and facilities, availability of funding, as well as faculty research interests.

Applications from interested persons must include personal curriculum vitae, a statement of research interests and experiences, names, addresses and telephone numbers of three references, and specification of department programs of interest. Closing date for applications to be received is June 30, 1994.

Direct applications material to: Associate Administrator, College of Biological Sciences, University of Minnesota, 1479 Gortner Avenue #240, St. Paul, MN 55108.

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

MOLECULAR BIOLOGIST: The Department of Hematology/Oncology at Brookdale Hospital, SUNY Science Center at Brooklyn, invites application for a Research Scientist position to join the ongoing research in myeloid leukemia. The candidate must have a Ph.D. with experience in molecular biology. Excellent salary. Academic faculty appointment available. Please send curriculum vitae and names of three references to: Jen C. Wang, M.D., Department/Hematology/Oncology, Brookdale Hospital Medical Center, Linden Boulevard at Brooklyn Plaza, Brooklyn, NY 11212. Telephone: (718) 240-5800. Please apply immediately. Equal Opportunity Employer.


RESEARCH Associate MoleCULAR BIOLOGY

Your dedication to benchwork and desire to learn will be rewarded as you join our renowned team of highly motivated scientists. Your contributions to the development of DNA-based diagnostics will be recognized.

Your skills in DNA preparation and PCR amplification are required along with a B.S./M.S. or equivalent in the life sciences and two or more years of experience in molecular biology with experience in clinical applications.

To apply, please send curriculum vitae and salary history to: Box 35, Science Magazine, 1333 H Street, N.W., Washington, DC 20005.

ToxICOLOGY: ITI Research Institute, a leading R&D organization based in Chicago, has an opening in its well-equipped inhalation toxicology laboratory for a RESEARCH TOXIcologist. The chosen candidate will assume responsibilities as study director for acute, subchronic and chronic inhalation toxicology/carcinogenicity studies.

Responsibilities will include participation in design, supervision and conduct of experiments, preparation of protocols and SOPs, scheduling of studies, interpretation and evaluation of results, and preparation of reports. Candidates should have a Ph.D. in toxicology, pharmacology or related discipline and 2 to 5 years of postdoctoral experience in toxicology. Preference will be given to candidates having experience in inhalation toxicology. Demonstrated technical writing skills a must. Knowledge of GLP and various testing guidelines is desirable. ABT certification is preferred.

The position offers excellent opportunity for collaborative work with staff members involved in other areas of Life Sciences research. Salary commensurate with qualifications and experience. Please submit resume including salary history to: Ms. Lucy Ahm, Senior Personnel Representative, ITI INSTITUTE, 10 West 35th Street, Chicago, IL 60616. Equal Opportunity/Affirmative Action Employer, M/F/D/V.
FACULTY POSITIONS
CHEYNEY UNIVERSITY of PENNSYLVANIA

Founded in 1837, Cheyney University, the oldest historically Black institution of higher learning, is located 18 miles southwest of Philadelphia. Cheyney is now inviting applications for the following faculty positions:

- **Physics** - with competence to teach physics I and II for majors and physical sciences for non-majors.*
- **Organic Chemist** - to teach organic chemistry I and II and biochemistry for majors, and physical sciences for non-majors.*
- **Molecular-Biologist** - to teach molecular biology, cell physiology, immunology for majors, and biology courses for majors and non-majors.*
- **Developmental Biologist** - to teach histology, cytology, embryology for majors, and freshman biology courses for majors and non-majors.*

*Competencies needed for the above full time positions: Ph.D. in required area; at least 3 years of teaching experience; grant writing and/or involvement with undergraduate students in small research projects.

Cheyney offers competitive salaries and a complete benefits package. Screening for positions will begin on July 19, 1993, however, a review of applications will continue until each position is filled.

Send a letter of application, including the position applying for, resume, transcripts along with the names and addresses of 3 professional references to:

Human Resources/SC, (Position applying for)
CHEYNEY UNIVERSITY
Cheyney, PA 19319
Cheyney University is an AA/EEO employer

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You will conduct research in the drug delivery and metabolism of nucleotide-based therapeutics to aid in the selection of drug molecules for development. This will involve the design and application of in vivo models to support pre-clinical absorption, distribution, metabolism and excretion studies, using novel drug molecules. You will also apply bioanalytical methods to support in vitro and in vivo assessment of transport and degradation of novel drug molecules. A Ph.D. in Pharmaceutical Sciences or Biochemistry along with 2-4 years' pharmaceutical development experience is required. Familiarity with GLPs and experience in microsurgery, pharmacokinetic modeling, and metabolite isolation and identification are also desired.

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Research Fellow/Sr. Research Assistant

The Lindsley F. Kimball Research Institute, a division of the New York Blood Center, has a challenging opportunity available for a Ph.D. Research Fellow or MS degree Sr. Research Assistant in Biochemistry or Molecular Biology.

Working under the supervision of the laboratory head in our Cell Biochemistry Lab, you should have experience and publication record demonstrating innovative and independent research accomplishments. Experience in techniques of enzymology (enzyme purification and characterization, kinetic studies, protein chemistry) and Molecular Biology required. (DNA library construction) cloning, screening and mutagenesis necessary.

We offer a competitive salary and a comprehensive benefit package. Send CV to: Manager of Human Resources/LFK, The New York Blood Center, 150 Amsterdam Ave, New York, NY 10023. Equal opportunity employer m/f/d/v.

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51,306 Nature**

* December 1992 ABC Publisher's Statement
** December 1992 BPA Publisher's Statement

Science, the global weekly of research.

For more information, contact:
Janis Crowley, 212-496-7704 (U.S.);
in Europe, contact Annemarie Vis, +44 223 302 067

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* December 1992 ABC Publisher’s Statement  
** December 1992 BPA Publisher’s Statement
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August 15-21 1993
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University of Copenhagen
Professorship in Cell Physiology

Applications are invited for a Professorship in Cell Physiology at the August Krogh Institute at the Faculty of Natural Sciences, Copenhagen University, to commence as soon as possible.

The faculty wishes to appoint an applicant with a high international research reputation within the fields of transport of solutes across membranes of animal cells and/or the function of membrane receptors and signal molecules as transducers of signals from the environment during regulation of homeostatic mechanisms of the cell.

The professor will participate in developing research in cell physiology with regard to establishing projects for graduate students in biology and biochemistry, and will participate in the Department’s teaching on all levels. The language of instruction is Danish, but English will be accepted for the first two years of appointment.

Further information about the position, research planning, facilities, and staff can be obtained from the Director of the August Krogh Institute (13 Universitetsparken, DH-2100, Copenhagen 0, Denmark).

Employment will be in a civil service position, grade 37, for which the present basic annual salary is 369,033 Danish kroner with a possible, negotiable addition.

Application, including curriculum vitae, list of publications, and documentation for teaching experience and other professional activities should be addressed to the Queen of Denmark, and sent to the Faculty of Natural Sciences, Panum Institute, Blegdamsvej 3, DK-2200 Copenhagen N. Denmark.

5 copies of the application with enclosures together with 5 copies of papers that the applicant wants to serve as a basis for consideration should be sent to the August Krogh Institute, Universitetsparken 13, DK-2100 Copenhagen 0, Denmark.

Closing date for applications: the 27th of August 1993

SCHOOL OF CHEMICAL SCIENCES

LECTURESHIP IN PROTEIN CRYSTALLOGRAPHY

Applications are invited from persons interested in establishing protein crystallography within the School of Chemical Sciences. The Wellcome Trust has indicated its willingness to consider an application under its University Award Scheme to provide a starting salary and associated research costs of this post. It is hoped that, with funding from the Wellcome Trust, equipment will be available suitable for protein structure solution and for the work of Dr. A.K. Powel on the synthesis and structure determination of poly-iron and poly-alumino oxy/hydroxide clusters of biological relevance. Applicants should preferably have interests in the area of metalloproteins and may wish to interact with faculty members of the UEA Metabolology Centre drawn from the Schools of Biological and Chemical Sciences.

Interested persons should write, as soon as possible, for further information to Professor A.J. Thomson, F.R.S., School of Chemical Sciences, University of East Anglia, Norwich NR4 7TJ Tel: (0603) 592023 or FAX (0603) 259296.

Applications (three copies), stating the reference number CHE 93/06 and including a full curriculum vitae which outlines your research interests and gives your exact date of birth, together with the names of three persons to whom reference may immediately be made, should be lodged with the Administrative Secretary, University of East Anglia, Norwich, NR4 7TJ by no later than 21st July 1993.

Overseas candidates may FAX applications to (44) 603 585583. Further particulars may be obtained by telephone (0603) 582724 and quoting reference number CHE 93/06. No forms of application are issued.

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THE UNIVERSITY OF GRONINGEN
THE NETHERLANDS

invites applicants for the position of
Professor of Polymer Synthesis
(vacancy number: 930701)

in the Laboratory of Polymer Chemistry.

We are seeking an outstanding individual who will establish an innovative research program in the synthesis, catalysis, polymerization mechanisms and characterization techniques of new polymer materials.

The position is part of the Polymer Chemistry Laboratory where research groups are actively involved in the synthesis, characterization and theory of special polymer materials for electronic, photonic, biomedical and mechanical applications. The Polymer Chemistry Laboratory is part of the Materials Science Center with expertise and modern facilities for state of the art characterization and properties research.

The successful candidate should be internationally recognized and have a strong publication record and proven ability to attract external financial support.

He/She should be able to initiate novel approaches in fundamental and applied research and have experience in teaching undergraduate and advanced graduate courses in the polymer synthesis and polymer characterization.

The gross salary depends on qualifications and ranges from Dfl. 7,713,- to Dfl. 13,722,- per month.

Applications with curriculum vitae, list of publications, photocopies of relevant certificates, outline of research interest and names of three persons from whom references can be obtained, should be sent within one month to the University of Groningen, Personnel Department, P.O. Box 72, 9700 AB Groningen, The Netherlands, with reference to vacancy number 930701.

Further information can be obtained from the chairman of the Search Committee, Prof. Dr. G. Hadjiioannou, Polymer Chemistry Department, phone (+31) 50 634510/634300 / Bitnet HADZ210HGRUGS.

Those who wish to nominate a possible candidate are also invited to respond.

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INTERNATIONAL CAREER OPPORTUNITIES

ST. VINCENT’S HOSPITAL SYDNEY
AUSTRALIA

SENIOR SCIENTIFIC OFFICER
CENTRE FOR IMMUNOLOGY

Following the success of the Concert for Life, which raised funds for the research of HIV/AIDS, we wish to employ a virologist to join the Centre for Immunology, St Vincent’s Hospital, Sydney. The hospital is a 500 bed teaching hospital of the University of New South Wales which provides the largest Level 6 service for persons with HIV/AIDS in Australia. The Centre for Immunology houses HIV laboratories devoted to both diagnosis and research. Research interests include the biological characterisation of HIV isolates at varying stages of HIV disease and their relationships to clinical disease and antiretroviral therapy in the setting of clinical trials. Other interests include HIV-related neurological disease and vaccine trials. The Centre for Immunology also has a wide range of other research commitments. You must have a PhD in virology and at least 5 years related post-doctoral experience, at least some related to the virology of HIV. Experience in molecular biology is highly desirable. You would also be encouraged to develop a new area of expertise in the field. The appointment would initially be for a two year period, with excellent prospects of ongoing funding. Salary would be as per the relevant award, up to AU$52,162 per annum, according to experience and qualifications.

For further information contact Dr Andrew Carr on (61) 2 361 7700.

Written applications for this position detailing experience, qualifications and names of three referees should be forwarded to Katrina Bloom, Human Resources Department, St Vincent’s Hospital, Victoria St, Darlinghurst NSW 2010, Australia, by Friday 22 July, 1993.

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UNIVERSITY COLLEGE DUBLIN

Applications are invited by the Governing Body of the College for the following full-time statutory post:

PROFESSORSHIP OF BIOCHEMISTRY
(Ref: 27/93)

University College Dublin invites applications for the Chair of Biochemistry and the Headship of the Department of Biochemistry. This tenure post Tall holds until 31 October 1993.

The University seeks an outstanding scientist, with an internationally recognised research programme, an excellent record of scientific publication, a commitment to undergraduate and postgraduate teaching, and proven organisational and management skills. The appointment is envisaged as a key one in the further development of the Life Sciences on the University College Dublin campus.

The Department of Biochemistry is engaged in teaching and research activities in both the Faculty of Science and Faculty of Medicine. The current research interests in the Department include membrane biochemistry, molecular enzymology, protein structure and function, molecular genetics and environmental biochemistry. Prior to application, further information (including application procedure) may be obtained from the Personnel Office, University College Dublin, Belfield, Dublin 4, Ireland (quoting above reference number). Telephone enquiries: (+353-1) 7061412 or (+353-1) 7061508 - direct lines. FAX: (+353-1) 2692472.

The closing date for receipt of completed applications is: Monday, 27 September 1993.

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EMBL

The European Molecular Biology Laboratory, an international research organization situated in Heidelberg, Germany has vacancies for

PROTEIN CRYSTALLOGRAPHERS

Positions are available for protein crystallographers at staff scientist or group leader level at the Grenoble Outstation. The EMBL Outstation in Grenoble, France, is a laboratory of structural molecular biology sharing a site with the Institut Laue-Langevin (ILL), a leading international centre for neutron scattering, and the European Synchrotron Radiation Facility (ESRF), a high brilliance synchrotron source currently in its commissioning phase. The Outstation has an active internal research programme focused on structure-function relationships in proteins and nucleic acids, in particular on aminoacyl-RNA synthetases, other RNA-binding proteins and viral proteins. The laboratory is well-equipped for molecular biology, biochemistry, protein crystallography, computing and electron microscopy. In addition the Outstation is closely collaborating with the ESRF to provide beamlines and support laboratories for biologists wishing to make use of the ESRF. Successful candidates will be expected to play an active role in the service aspects of the laboratory (e.g. assistance to visitors or development of synchrotron methods) as well as pursue their scientific interests. Candidates with experience or an interest in applications of intense synchrotron radiation to protein crystallography are particularly encouraged to apply. An initial contract of 3 years, renewable up to nine years, with an attractive salary will be offered.

For further information and to apply please write, enclosing a CV and description of research experience and interests to Dr. Stephen Cusack, EMBL, c/o ILL, 156X, 38042 Grenoble, FRANCE. Tel: 76-20-72-38. Telefax: 76-20-71-99. Email: cusack@embl.embl.grenoble.fr.
INTERNATIONAL CAREER OPPORTUNITIES

**Engineering**  
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**Hydrologist/Computational Hydrologist**  
**Senior Research Scientist/Principal Research Scientist**

**An Innovator and Major Contributor Required**

**A$46K-A$65K Salary + Superannuation**  
*Division of Water Resources, Canberra ACT, Australia*

This Division undertakes applied and strategic research into water resources, quality, and aquatic ecosystems and their management in Australia.

One of the key issues facing the managers of Australia's water resources is the impact on water quality of effluent disposal and land use in large catchments. The Division has established a research program to provide the necessary tools for managers of large catchments to predict these impacts. Emphasis is being given to hybrid models of hydrologic processes, in which spatially explicit and implicit models are used together. In addition, the Division has considerable strength in tracing the movement of water, sediments and nutrients using stable and unstable isotopic and other geochemical tracers. It is planned to combine the tracer research and model development to provide several ways of predicting large catchment behaviour.

We are looking for an innovative hydrologist who will make a major contribution to this research. This person must have a PhD, demonstrated experience in (or at least interest in) modelling using flexible strategies across a range of skills, very strong programming and computational skills, and the ability to work collaboratively within small groups.

Before sending an application, please seek further information and/or the selection criteria etc from Dr Jetse Kalma (phone 61 6 246 5747; fax 61 6 246 5800; e-mail jdk@styx.cbr.dwr.csiro.au) or Dr Bob Wasson (phone 61 6 246 5778; fax 61 6 246 5800). Duty statements and selection criteria can be obtained from Mrs Carol Clyde (phone 61 6 246 5761; fax 61 6 246 5800; e-mail cly006@styx.cbr.dwr.csiro.au)

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The Extramural Grant Program

Baxter’s Renal Division announces 13 new Extramural Grant Program (EGP) recipients. The ninth-round winners were announced by the EGP's independent Medical Advisory Board (MAB) at the 1993 Annual Scientific Meeting held in Chicago, Illinois, May 12-13. The MAB reviewed 78 proposals and selected winners based solely on the scientific merit of the proposed research. The ninth-round Request for Proposals (RFP) topics were: 1) The Role of Lipids in Renal Disease and 2) Peritoneal Dialysis in the Pediatric Patient.

Ninth-Round Grant Winners

Guohua Ding, M.D., Ph.D. - Hershey, Pennsylvania
"A Cholesterol-TGF-β Axis and Progressive Renal Injury"

Allison Audrey Eddy, M.D.-Toronto, Canada
"Oxidized Low Density Lipoproteins in Interstitial Fibrosis"

Bengt Fellstrom, M.D., Ph.D. - Uppsala, Sweden
"Importance of Lipoprotein Abnormalities and Reactive Oxidative Species in the Development of Chronic Graft Dysfunction in Transplanted Organs"

Rosanna Gusmano, M.D. - Genoa, Italy
"Effects of Combined Intraperitoneal Infusion of Glucose and Amino Acid Solutions in Malnourished Children on CCPD"

Bertram L. Kasiske, M.D. - Minneapolis, Minnesota
"The Role of Protein Isoprenylation in Chronic Rejection"

Youngki Kim, M.D. - Minneapolis, Minnesota
"Effects of Normal and Modified Lipoproteins on Extracellular Matrix Metabolism of Human Mesangial Cells"

Michael Kirschbaum, M.D. - Long Beach, California
"Role of Uremia and Dialysis on Hepatic Lipoprotein Synthesis"

Ngoc-Anh Le, Ph.D. and Bradley Maroni, M.D. - Atlanta, Georgia
"Pathogenesis of Post-Transplant Hyperlipidemia"

Victoria S. Lim, M.D. - Iowa City, Iowa
"Protein Metabolism in Chronic Renal Failure Patients"

William F. Owen, Jr., M.D. - Boston, Massachusetts
"Estrogen Replacement Therapy for Cardiovascular Risk in ESRD"

Paul G. Schmitz, M.D. - St. Louis, Missouri
"Fatty Acid Modulation of Glomerular Pathophysiology"

Allan D. Sniderman, M.D. - Montreal, Canada
"Effect of Amino Acids on Hepatic Secretion of ApoB and Lp(a)"

Stuart M. Sprague, D.O. - Chicago, Illinois
"Effect of β-2-Microglobulin on Bone Cell Metabolism"

The Extramural Grant Program (EGP) is a unique corporate research program designed to stimulate innovative science in the field of renal disease, its pathophysiology and treatment options. Modeled after the National Institutes of Health (NIH) grant program, the EGP has two funding rounds per year. A total of $1 million in new grants are awarded each year. Since 1989, nine grant rounds have been completed with more than $9 million awarded to 116 scientists representing 13 countries. Funded research encompasses both basic science (63%) and applied clinical studies (37%). A breakdown of the research is highlighted in the graph below.

Upcoming RFP Topics

Deadline: November 5, 1993 (tenth round)
1) Quality of Life on Dialysis
2) Open (all research relevant to the study of renal disease)

Deadline: April 8, 1994 (eleventh round)
1) Safe Strategies for Shortening Treatment Time for ESRD
2) The Importance of Gender in Modality Selection and Prescription Adequacy.

For more information contact
Lee W. Henderson, M.D., F.A.C.P.
Baxter Healthcare Corporation, Renal Division, The Extramural Grant Program
1620 Waukegan Road, McGaw Park, IL 60085
ph: (708) 473-6137 or fax: (708) 473-6923

Renal Division

Baxter
**POSITIONS OPEN**

ENGINEER. Test. Characterize MR head and media recording performance and correlate results with processes; set up test equipment for MR head and media characterization; automate testing through computer control. Ph.D. in Material Science plus knowledge of recording theory for digital data storage, theoretical and experimental spectrum analysis of recording noise, magnetism, C, thin film deposition process, thin film microstructure, $48,500 per month. Job site interview, Midland, California. Send with resume to Job # I1W20142, P.O. Box 269037, Sacramento, CA 95826-9037.


**ENVIRONMENTAL SPECIALIST IV**

Pattakka, Florida. $33,000 to $49,500. This is a senior research position for an environmental toxicologist. Duties include: the development and management of a toxic substances survey for a large estuarine ecosystem and the development of remediation plans. Should have experience in sampling and analyzing sediments and issues for the presence of toxic substances, knowledge of environmental health effects of various pollutants, and knowledge of remediation techniques. Qualifications include: a Bachelor's degree from a recognized college in toxicology, biology, estuarine ecology or related field and five years of experience in environmental toxicology. Send resume with source of ad to: St. Johns River Water Management District, Office of Human Resources (JMB), P.O. Box 1429, Patalka, FL 32178-1429. Apply by July 23, 1993. An Equal Opportunity/Affirmative Action Employer.

**REGULATORY TOXICOLOGIST**

Growth-oriented Gulf Coast specialty chemical manufacturer is searching for a highly motivated individual to manage a proactive toxicology program to determine the health and environmental effects of products, by-products and waste materials. The position will report directly to the V.P., Environmental Affairs. The ideal candidate will have a B.S. in Chemistry along with a Ph.D. in Toxicology or a closely related field, and sufficient industrial experience to function independently.

Primary duties will include evaluation and recommendation of company policy and practice along with regulation compliance. Preparation of reports, calculations and general data analysis, preparation of regulatory documents and periodic review of all regulatory issues. Interests and experience in area of law enforcement and safety preferred. A position as a Toxicologist/Regulatory Researcher with a private laboratory is also available. Interested persons should submit a resume with salary history and request in confidence to: Human Resources Manager, First Chemical Corporation, P.O. Box 1427, Pascagoula, MS 39567. An Equal Opportunity Employer.

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