

Statistical Software

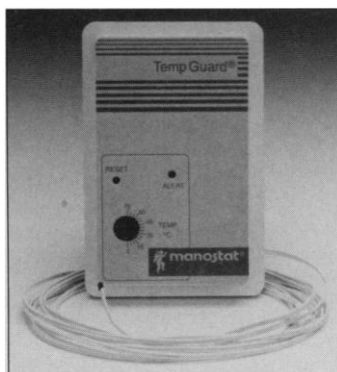
PC-Group is a statistical package for personal computers that builds statistical models using classification analysis. According to the manufacturer, this approach has four major advantages over more traditional statistical techniques: It is highly interactive, giving the user the ability to explore the data and control the model building process. It is designed to detect interactions and nonlinear effects that can be easily missed using other techniques. It produces models that are easier to understand and that can be more meaningful than traditional models. It provides a unified approach to the analysis of both ordinal (ordered numerical) and nominal (categorical) outcomes. The program requires an IBM-compatible computer with a hard disk and 420K memory available. Austin Data Management Associates. Circle 89.

Isoelectric Focusing pH Profiling System

The Lazar PH Profiling System is designed for isoelectric focusing-electrophoresis applications. The system features a unique, miniature, flat combination pH probe in conjunction with an acrylic gel positioning table. pH measurements can be made on flat bed polyacrylamide gels, tube gels, disc gels, thin layer granular gels, and preparative gels. The system provides direct correlation between protein banding patterns and pH profile without tedious gel splicing or chemical pH markers. It is designed to be used directly with all standard laboratory pH meters. Lazar Research Laboratories. Circle 90.

Incubator Temperature Monitor

TEMP GUARD is a compact, battery-operated device that monitors incubator temperatures and sounds a long-lasting alarm when temperature is out of range. Even if the temperature variance



is corrected an indicator stays lit to record that the temperature changed and to alert the users to possible damage to the incubator contents. A 10-foot-long probe permits convenient location of the unit. Manostat Corp. Circle 91.

Pressure Filtration Units

Sartolab-P 20 and Sartolab-P 20 plus are new pressure filtration units that provide high flow rates and throughputs for sterile filtration of media and aqueous solutions in batches ranging from 100 ml to 10 liters. The units can be connected to a peristaltic pump or pressure tank and filtrate directly into culture containers, so culture media need not be stored temporarily in different containers. The Sartolab-P 20 plus unit includes a prefilter for media that contain sera and solutions that are difficult to filter. Sartorius Corp. Circle 92.

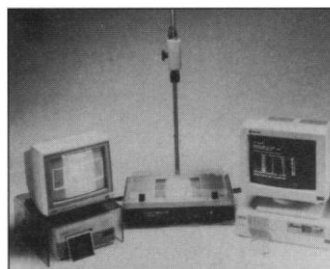
Sequence Assembly and Editing on the Macintosh

AssemblyLIGN software for DNA sequence assembly and editing is available as a stand-alone or bundled with IBI's sequence analysis program, MacVector. AssemblyLIGN incorporates standard Macintosh graphic fea-

tures for easy operation. Researchers can build consensus sequences and search for overlaps manually or use the system to assemble their consensus and identify ambiguities automatically. Users have full control over all alignment parameters, and the only limit to the size and volume of a sequence project is the capacity of the Macintosh on which it is being performed. AssemblyLIGN will work on any Macintosh with 1 megabyte of memory, but a minimum of 4 megabytes is recommended. International Biotechnologies Inc. Circle 93.

Gel Image Analysis Software

The SW2000 Image Analysis Software package complements UVP's GDS2000 Gel Documentation System. It allows the user to send a gel image from the GDS video monitor directly to a personal computer for analysis. The software is available for both



IBM-compatible and Apple Macintosh computers. The menu-driven system also allows users to save archival copies of images. UVP. Circle 94.

Scientific Data Management Software

GRAMS/386 (Graphic Relational Array Management System) is processing and database software for scientific data. It al-

lows the user to acquire, view, process, and organize data easily. It can import data from hundreds of analytical instruments into a common software environment. Capabilities include curve fitting, subtraction, quantitative analysis, peak picking, integration, and a variety of chemometric procedures. GRAMS allows an entire laboratory to be on-line and accessible through powerful database graphics. Presentation-quality graphics and what-you-see-is-what-you-get plotting allow the user to incorporate plots and charts into reports and presentations. GRAMS runs under Microsoft Windows on IBM 386, 486, and compatible computers and fully utilizes the hardware capabilities provided by an 80386 or 80486 central processing unit. Galactic Industries Corp. Circle 95.

Literature

PC Systems Handbook for Scientists and Engineers 1992 Supplement is a combination tutorial and catalog that includes both technical discussions and product listings. The 48-page supplement includes both hardware and software. CyberResearch. Circle 96.

Safety Special is a products guide for laboratories handling radioactive and hazardous material. Amersham International. Circle 97.

QED Monoclonal Antibodies and Services is a catalog describing monoclonal antibodies to therapeutic drugs, infectious disease agents, serum and tissue proteins, enzymes and enzyme inhibitors, and specialized antigens. ImmunoPharmaceutics. Circle 98.

Fermentation Equipment: From Bench to Industrial Pilot Plant Systems is a 28-page brochure. New Brunswick Scientific. Circle 99.

Application Notes, illustrating the isolation and recovery of native protein samples using the Model 230A Automated Micro-preparative Electrophoresis System, is available. Applied Biosystems Inc. Circle 100.

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

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POSITIONS OPEN

ASSISTANT PROFESSOR. This full-time, 12 month, tenure-earning track faculty position in the Division of Nutritional Biochemistry and Metabolism will be filled by a person with expertise in the area of molecular biology. This individual will be expected to develop an independent research program relating molecular biology to nutrition sciences, compete successfully for extramural grant support, participate in the teaching of dental, medical and graduate students in existing courses and to develop new courses within area of expertise. Candidates should hold a Ph.D. and have postdoctoral experience. Send curriculum vitae, summary of research interests and accomplishments, three relevant publications and list of three references to: **Dr. Carlos Krumdieck, Director, Division of Nutritional Biochemistry and Metabolism, Department of Nutrition Sciences, 1675 University Boulevard, University of Alabama at Birmingham, Birmingham, AL 35294.** *The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

ASSISTANT PROFESSOR—Ph.D. with at least three years of experience in cellular immunity to human retroviruses. Would join team of investigators at the University of Pennsylvania and the Wistar Institute. Demonstrated ability to attract independent funding highly desirable. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.* Reply to: **Stuart E. Starr, M.D., Division of Allergy, Immunology, and Infectious Diseases, The Children's Hospital of Philadelphia, 34th Street and Civic Center Boulevard, Philadelphia, PA 19104.**

ASSISTANT PROFESSOR OR RESEARCH ASSOCIATE position (depending on qualifications) available immediately in Dr. Bolli's laboratory for a Ph.D. or M.D. with expertise in **CARDIOVASCULAR PHYSIOLOGY or PHARMACOLOGY.** This individual will conduct research on the mechanisms of myocardial ischemia/reperfusion injury in open-chest and conscious dogs and pigs and in isolated rat hearts, focusing particularly on myocardial "stunning," preconditioning, and the role of oxygen radicals. Candidates must have postdoctoral training in research involving myocardial ischemic injury and two years of experience with some of the above animal models. Send curriculum vitae, a statement of research interests, and names of three references to: **Roberto Bolli, M.D., 6535 Fannin, M.S. F-905, Houston, TX 77030.** *Equal Opportunity/Affirmative Action Employer.*

ECOLOGISTS. The Department of Zoology, University of Toronto has two full-time tenure track positions at the **ASSISTANT PROFESSOR** level, commencing July 1, 1993, subject to budgetary approval. In one position, preference will be given to candidates with experience in community or ecosystem ecology; the second position is open to candidates in all areas of ecology. Successful candidates will be expected to contribute to the teaching of an intermediate ecology course, plus an advanced course in their area of special interest. They will also be expected to develop a research program, teach and advise graduate students, and attract external funding. Applications consisting of curriculum vitae, reprints and description of future research programs, plus the names of three references should be sent to: **Dr. S.S. Desser, Chair, Department of Zoology, University of Toronto, M5S 1A1, Ontario, Canada.** Deadline for receipt of applications is January 15, 1993. *This advertisement is directed to Canadian citizens and permanent residents of Canada. The University of Toronto encourages both men and women to apply for positions.*

ASSISTANT PROFESSOR OF PATHOLOGY. The University of Illinois College of Medicine at Peoria seeks an Academic Pathologist to teach Pathology and help coordinate the Pathology curriculum. The successful candidate will also establish a research program or direct the research and diagnostic electron microscope facility. Candidates must have an earned doctorate and must be qualified to teach Pathology. Available November 1, 1992; applications accepted until position is filled. Submit curriculum vitae, names of three references, and statement of academic plans to: **Gerald Bartlett, Chair, Pathology Department, University of Illinois College of Medicine at Peoria, Box 1649, Peoria, IL 61656-1649.** *University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

Virginia Commonwealth University's Department of Pharmacology and Toxicology announces a non-tenurable **ASSISTANT PROFESSOR** position to conduct CNS pharmacology research. Applicant must have a Ph.D. in pharmacology and at least two years of postdoctoral experience in CNS pharmacology. Must possess research funding and peer-reviewed scholarly publications, as well as prior research experience with assessment of spinal pain pathways and brain site studies. Must have background to teach in graduate and professional schools. Send curriculum vitae, letter of research interests and three letters of reference, by 15 September 1992, to: **B. Caine, Box 613, MCV Station, Richmond, VA 23298-0613.** *Virginia Commonwealth University is an Equal Employment Opportunity/Affirmative Action Employer and encourages women, minorities and those with disabilities to apply.* Position description available upon request.

BIOCHEMIST/MOLECULAR BIOLOGIST. The Department of Poultry Science has a 12 month, tenure-track **ASSISTANT PROFESSOR** position for an individual with a Ph.D. in basic sciences and postdoctoral training in molecular biology. Experience with poultry required. Individuals with a commitment to research and teaching should submit curriculum vitae, transcripts, statement of research interests, and three letters of reference to: **Dr. P.S. Hargis, Department of Poultry Science, Texas A&M University, College Station, TX 77843-2472.**

ASSISTANT PROFESSOR DEPARTMENT OF HUMAN GENETICS VIRGINIA COMMONWEALTH UNIVERSITY RICHMOND, VIRGINIA

Applications are invited for a tenure-track position of Assistant Professor in the Department of Human Genetics with specialization in the area(s) of Quantitative, Behavioral and Population Genetics. The successful applicant should hold a doctoral degree with particular emphasis in one or more of the above areas and at least two years of postdoctoral research and teaching experience along with a commensurate record of publication. He/she will be expected to participate in the departmental teaching in his/her areas of expertise, to supervise graduate students, and to play a major role in establishing an independent research program in the application of twin and family studies to the genetic analysis of human phenotypes and their development. Interested applicants should submit their curriculum vitae and three references by October 31, 1992 to: **Dr. Lindon J. Eaves, Department of Human Genetics, Virginia Commonwealth University, Box 3, MCV Station, Richmond, VA 23298-0003.**

Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and persons with disabilities are encouraged to apply.

University of California, San Francisco, ASSISTANT PROFESSOR OF NEUROLOGY. The Department of Neurology, the Gallo Center, and the Program in Neuroscience seek exceptional candidates for an Assistant Professor in Residence. Salary and laboratory facilities will be provided by the Gallo Center at San Francisco General Hospital. The major research interests of the Gallo Center are in signal transduction and gene expression with an emphasis on relevance to alcoholism. Candidates should have a Ph.D. and/or M.D. with an outstanding record in neuroscience, molecular biology, biochemistry and *Drosophila* genetics. Excellent laboratory facilities with substantial financial support are available. Salary, start-up funds, and other benefits are highly competitive. Candidates should have at least two years of postdoctoral experience and are expected to demonstrate the potential for a strong, independently funded research program in *Drosophila* genetics. Please send curriculum vitae, research plans, and three names for reference to:

Ivan Diamond, M.D., Ph.D.
 Director, Gallo Center
 Department of Neurology
 University of California
 Building 1, Room 101
 1001 Potrero Avenue
 San Francisco, CA 94110

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

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Genetics Institute is a recognized leader in the discovery and characterization of novel human regulatory proteins and their development into biopharmaceuticals. The following positions provide opportunities for outstanding individuals to achieve in this pioneering organization.

Genetics Institute offers competitive salaries and benefits, including comprehensive health care, dental and life insurance, three weeks' paid vacation, 401(k), stock purchase and equity participation plans, tuition assistance, an on-site exercise facility and child care resource and referral.

Genetics Institute is dedicated to building strength through diversity.

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STRUCTURAL PROTEIN CHEMISTRY

Staff Scientist

Responsibilities will involve the primary and tertiary structural analysis of recombinant glycoproteins and the assessment of functionally important domains. This position calls for a PhD in Biochemistry or a related discipline, 0-3 years' postdoctoral experience, and a strong background in protein chemistry, enzymology or related field. Experience with HPLC, proteolytic mapping, UV/vis and fluorescence spectroscopy, chemical modification, or other classical protein characterization techniques is required. Excellent communication skills and the desire to work in an interactive environment are essential.

CARBOHYDRATE CHEMISTRY

Staff Scientist/Laboratory Head

Lead a group of scientists whose responsibilities encompass the isolation, structural and functional characterization of glycoconjugates. Candidates should have expertise with the isolation, structural and biological analysis of carbohydrates and glycoproteins. Experience with NMR spectroscopy of oligosaccharides preferred. PhD and 5+ years' postdoctoral or industrial experience, supervisory background, and a record of scientific leadership and accomplishment are essential, as are excellent communication skills and the desire to work in a collaborative environment.

BIOMOLECULAR MASS SPECTROMETRY

Postdoctoral Fellow

We seek a talented, well-trained individual with experience in mass spectrometric analysis of biological molecules to contribute to the biomolecular mass spectrometry field. Laboratory instrumentation includes a four-sector tandem mass spectrometer, reflectron MALD-TOF, and access to ES-MS and conventional microsequencing technologies. The position offers the opportunity for substantial collaborative interaction with other scientists, the challenge to develop novel instrumental and/or chemical based strategies for the structural characterization of biologically important molecules, and the chance to make significant contributions to the field. Candidates who will complete their PhD program within the next several months are encouraged to apply.

Research Associate

Become part of an established group focusing on the structural analysis of recombinant glycoproteins and proteolytically derived peptides, glycopeptides and carbohydrates using two- and four-sector mass spectrometry and matrix-assisted laser desorption time-of-flight mass spectrometry. Experience in peptide and/or carbohydrate chemistry, HPLC and basic strategies for characterizing recombinant glycoproteins is critical. A basic understanding of mass spectrometry is required, however, extensive hands-on experience is not essential. In addition, you must be highly motivated and have the ability to work independently and as a team member.

For these positions, please forward resume and letter of interest, specifying position of interest, to: Human Resources Department, Genetics Institute, Inc., One Burt Road, Andover, MA 01810, Attn: Peter Lasky.

GENETICS



INSTITUTE

Molecular Biologists, PhD

Pfizer, a U.S. based multinational pharmaceutical company, has earned its reputation as an industry leader by maintaining its pharmaceutical research at the forefront of biomedical science and therapeutic innovation. Consider these exciting research opportunities in the Molecular Genetics and Protein Chemistry Department located at our Central Research Laboratories in Groton, Connecticut.

Neurobiology: Receptor Structure and Molecular Biology

Become a part of a multi-disciplinary team focused on the discovery of novel receptors expressed in the central nervous system. Applicants should have a PhD degree with at least two years of postdoctoral or industrial experience in molecular biology with emphasis in gene isolation and analysis. This should include library construction, cDNA cloning, quantitative RNA analysis; DNA sequence analysis; and PCR using degenerate primers. Interest in the molecular biology and biochemistry of neuroreceptors is highly desirable.

Cancer: Molecular Biology

In collaboration with our Cancer Drug Discovery Group, you will participate in the development of strategies to exploit cancer cell selective molecular targets and create approaches towards cancer drug discovery as novel targets are identified. Applicants should have a PhD with at least two years of postdoctoral research in cancer molecular biology. Candidates with experience in the cloning and characterization of novel genes to the field of tumor cell biology (oncogenes, tumor suppressor genes, etc.) are particularly encouraged to apply.

Cardiovascular: Molecular Biology

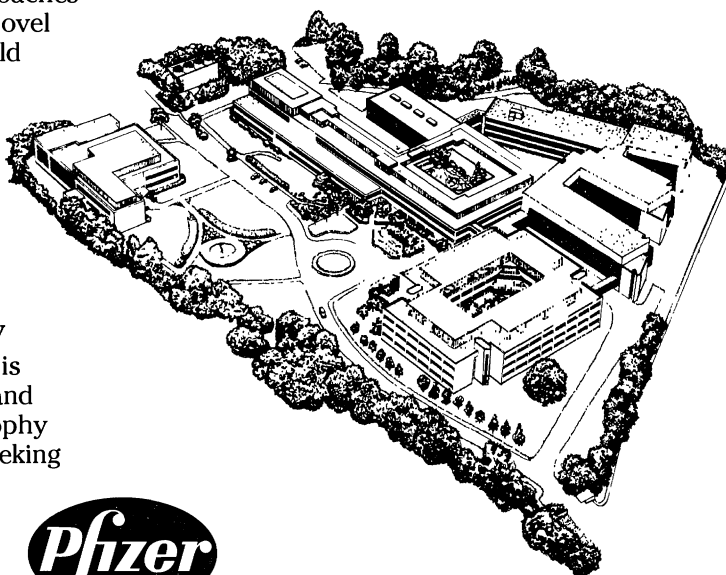
The Cardiovascular Discovery Group is pursuing the role of growth factors and proto-oncogenes in cardiac hypertrophy and congestive heart failure. We are seeking

candidates with a PhD in molecular biology and at least two years postdoctoral experience in these areas.

Obesity: Gene Transcription

The Molecular Biology Group at Pfizer has considerable expertise in the regulation of gene transcription. As part of our commitment to obesity research, we are seeking applicants with a PhD in molecular biology and at least two years postdoctoral work in obesity or diabetes research. One of the research areas includes the regulation of gene transcription involved in the development and maintenance of obesity.

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, description of research experience, and names of three references to: **Mr. Kym Goddu, Personnel Associate, Employee Resources Department, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340.** We are an equal opportunity employer.



Central Research

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ANTIVIRAL DRUG MECHANISMS

Program Resources, Inc. (PRI) has created a new laboratory to support the NCI's preclinical drug discovery program for AIDS at the Frederick Cancer Research and Development Center (NCI-FCRDC).

SCIENTIST – PhD (molecular biology) with 2-3 years experience in the molecular biology of HIV or retrovirus infection. Cell biology or tissue culture experience useful. As laboratory head, will develop and supervise the performance of studies to identify the mode(s) of action of potential anti-HIV agents. Will also collaborate on development of useful clinical candidates for treatment of HIV infections.

RESEARCH ASSOCIATES – MS/BS (molecular biology) with 3-5 years experience in tissue culture, virology, reverse transcriptase

assays, and quantitation of HIV infectivity. Background handling radioisotopes and working experience under bio-containment conditions useful.

The working environment provided by the NCI-FCRDC is a campus-like setting in Frederick, MD near Baltimore and Washington, DC. PRI offers a salary commensurate with credentials and an attractive fringe benefits program. Forward resume in confidence to Barbara J. Norton-Gill, Employment Representative.

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NCI-FCRDC

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Frederick, MD

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EOE, M/F



ASSISTANT DIRECTOR

Laboratory Animal Medicine

SmithKline Beecham Pharmaceuticals, a worldwide leader in pharmaceutical research, is seeking a highly qualified veterinarian to assume Assistant Director responsibilities in our Laboratory Animal Science Department. As Assistant Director, the Veterinarian will manage the LAS veterinary medical section's ongoing activities, its staff and state-of-the-art facilities. This will include clinical microbiology, clinical pathology, surgery, radiology, necropsy and examination facilities. The Assistant Director manages preventative medicine and quarantine programs, animal vendor surveillance and evaluation, and clinical treatment to support LAS services to investigators. The successful candidate will draw upon strong interpersonal and communication skills to participate directly in scientific investigations, providing consultation and expert advice on the design and completion of research activities.

Requirements include a DVM/VMD and Board certification (ACLAM, ACVIM, etc.) with a minimum of 5 years Laboratory Animal Medicine experience. Proven managerial skills as well as an established research background are preferred.

Our research facilities are located in suburban Philadelphia, in an area near many academic and commercial institutions that are active in Laboratory Animal Medicine and Science. We offer an excellent compensation, benefit, and relocation package, as well as many opportunities for personal and professional growth. For confidential consideration, please forward your resume to Employment Administrator, M047, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer. M/F/H/V.



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POSITIONS OPEN

BIOCHEMISTRY FACULTY POSITION UNIVERSITY OF WISCONSIN-MADISON

The Department of Biochemistry at the University of Wisconsin-Madison invites applications for a tenure-track position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Although all areas of biochemistry will be considered, we are particularly interested in applications from individuals whose research emphasizes some aspect of metabolism. The successful candidate is expected to develop a vigorous, independent research program and participate in the undergraduate and graduate teaching of general and specialized biochemistry courses. Applications, including curriculum vitae, list of publications, summary of past work and accomplishments, and a statement of plans for future research, should be sent to: **Professor Hector F. DeLuca, Chairman, Department of Biochemistry, University of Wisconsin-Madison, 420 Henry Mall, Madison, WI 53706**. In addition, applicants should arrange for at least three letters of reference to be mailed to the same address. Application materials should be received by October 1, 1992. *The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.* Names, titles and/or occupations, and addresses of applicants and nominees cannot be kept confidential.

NEUROBIOLOGY FACULTY POSITIONS

The Neurobiology Research Center at the University of Alabama at Birmingham (UAB) School of Medicine invites applications for two faculty positions at the **ASSISTANT, ASSOCIATE** or **FULL PROFESSOR** level. Applicants for Assistant Professor should have at least two years of postdoctoral experience. The Center is seeking individuals with a strong record of achievement using modern approaches to neurobiology whose interests complement those of current members. Researchers using molecular approaches are especially encouraged to apply. Current interests of the faculty are systems and cellular neurobiology, membrane biophysics, synaptic plasticity and modulation, cellular and molecular basis of neurodevelopment, signal transduction and intracellular signalling. The Center has excellent research facilities and has recently been provided with new space in the Civitan International Research Complex on the UAB campus. The development of the Center is supported by funds from the state and the Lucille P. Markey Charitable Trust.

Send curriculum vitae and statement of research plans and have three letters of recommendation sent to: **Michael J. Friedlander, Ph.D., Neurobiology Research Center, University of Alabama at Birmingham, Birmingham, AL 35294** by September 30, 1992. *UAB is an Affirmative Action/Equal Opportunity Employer.*

University of California, San Francisco, ASSOCIATE PROFESSOR OF PHARMACOLOGY. The Department of Pharmacology and the Program in Neurosciences seek exceptional candidates for an Associate Professor in Residence. Salary and laboratory facilities will be provided by the Gallo Center at San Francisco General Hospital. Candidates should have a Ph.D. and/or M.D., or equivalent and an established program in ethanol research focused on protein kinase C-mediated signal transduction and PKC isozymes. Extensive experience in biochemistry, immunology, cell biology, and proficiency in molecular biology is required. The successful individual will be expected to bring a strong innovative research program to the Gallo Center and to participate in Departmental and Neuroscience activities. Send curriculum vitae and bibliography, a summary of research accomplishments and research plans, copies of five publications, and three names of reference to:

**Chairperson
Pharmacology Search Committee
Gallo Center, Building 1, Room 101
1001 Potrero Avenue
San Francisco, CA 94110**

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POSITIONS OPEN

MOLECULAR/CELLULAR BIOLOGIST (Ph.D.)

ASSISTANT PROFESSOR— ENDOCRINOLOGY (TENURE TRACK)

Division of Endocrinology, Department of Medicine, University of Tennessee, Memphis, has an opening for a molecular/cellular biologist at Assistant Professor level with a possible joint appointment in a basic science department. This position requires an individual with relevant experience and interest in studies relating insulin and growth factors receptors to various insulin-resistant states. Requirements include at least three years of post-doctoral training in related molecular biology laboratory and tangible evidence of productivity. Applicants should send curriculum vitae, names of references, and outline of research interest to: **Abbas E. Kitabchi, Ph.D., M.D.; Chief, Division of Endocrinology; Department of Medicine, the University of Tennessee, Memphis; 951 Court Avenue, Room 335M; Memphis, TN 38163; telephone: (901) 528-5802; FAX: (901) 577-4340.** *The University of Tennessee, Memphis, is an Affirmative Action/Equal Opportunity Employer/Title IX/Section 504/ADA with special interest to receive applications from women and minorities.*

ASSISTANT/ASSOCIATE PROFESSOR ENDOCRINOLOGY

The Department of Physiological Science at UCLA is seeking applicants for a tenure-track position, beginning Fall of 1993. Areas of interest include but are not limited to molecular aspects of hormone action, neuroendocrinology, and organismal or systemic endocrinology. Applicants must be able to establish an active research program and to teach endocrinology to undergraduates and graduate students. Submit curriculum vitae, statement of present and future research interests, and three letters of evaluation by November 1, 1992 to: **Professor Gordon L. Fain, Chair, Endocrinology Search Committee, Department of Physiological Science, Jules Stein Eye Institute, University of California Los Angeles, Los Angeles, CA 90024-7008.** *The University of California is an Equal Opportunity Employer and encourages applications from women and members of minorities.*

NEUROBIOLOGIST

The Department of Anatomy and Neurobiology, College of Medicine, The University of Tennessee (UT), Memphis is seeking applications to fill **ASSISTANT or ASSOCIATE PROFESSOR** tenure track positions. Candidates must be pursuing research program in neuroscience, preferably molecular neurobiology or neurogenetics, and must show strong evidence of research achievement. Candidates must participate in teaching anatomical courses. Rank and salary will be commensurate with qualifications. The Department is the center of a rapidly expanding, multidisciplinary neuroscience program with a highly interactive, productive group of neuroscientists. Please submit curriculum vitae, statement of research interests, and names of three individuals who can be contacted for letters of reference to: **S. T. Kitai, Chairman, Department of Anatomy and Neurobiology, UT Memphis, 855 Monroe Avenue, Memphis, TN 38163.** Review of applications will begin September 1, 1992, and continue until the positions are filled.

The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.

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**Science New Lab Service Department
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POSTDOCTORAL OPPORTUNITIES IN MOLECULAR CARCINOGENESIS

... are currently available at the American Health Foundation, a multidisciplinary, not-for-profit cancer research institute with state-of-the-art research facilities. Working in close collaboration with scientists in established research programs, you will receive training enabling you to enhance your skills and to participate in developing new research strategies to elucidate mechanisms of carcinogenesis at the molecular level.

CHEMICAL CARCINOGENESIS

Mechanisms of cancer chemoprevention by naturally occurring and synthetic chemopreventive agents will be studied. DNA adducts formed by carcinogens in laboratory animals and human tissues will be identified. **Respond to: Stephen S. Hecht, Ph.D.**

BIOCHEMICAL PHARMACOLOGY

Assess unique modifications of oligodeoxynucleotides as probes for biological effects of DNA-damaging chemicals. Determine the significance of post-translational modifications of regulatory proteins, in the mechanism of action of novel cancer chemopreventive agents. **Respond to: Emerich Fiala, Ph.D.**

MOLECULAR CARCINOGENESIS

Study the regulation of specific UV-inducible gene expression in human cell systems with a major focus on the functional assessment of these genes with respect to cell cycle, control of cell growth, and differentiation. **Respond to: Zeev Ronai, Ph.D.**

ENVIRONMENTAL CARCINOGENESIS

Investigate the mechanism of lung, esophageal, and oral cavity carcinogenesis. Isolate potential carcinogens from food and tobacco products, study their activation by P450 enzymes to DNA binding species, and investigate their effect on gene expression. **Respond to: Dietrich Hoffmann, Ph.D.**

PATHOLOGY/TOXICOLOGY — Engage in research on the mechanism of action of hepatocarcinogens with focus on the characterization of alterations in gene structure and function. **Respond to: Gary M. Williams, M.D.**

These positions have the potential to become long-term appointments at a higher level. The American Health Foundation provides an excellent opportunity for future independent research, within a modern environment in a pleasant Westchester County campus setting. If qualified, please send your "c.v." with references, directly to the investigator in your area of choice, c/o: American Health Foundation, One Dana Road, Valhalla, New York 10595. We are an equal opportunity employer m/f/h/v.

American Health Foundation

POSITIONS OPEN

CHIEF, DIVISION OF PEDIATRIC HEMATOLOGY/ONCOLOGY IN THE DEPARTMENT OF PEDIATRICS AT THE UNIVERSITY OF FLORIDA

The applicant should be a diplomate of the American Board of Pediatrics, Board eligible/certified in Pediatric Hematology/Oncology, and be qualified to serve at the rank of associate or full professor. Applicant should be an energetic physician-scientist with proven leadership skills and a strong academic background. He/she must have a vision of the future of the practice of Pediatric Hematology-Oncology and demonstrate a firm understanding of the need for developing/expanding collaborative, interdivisional/interdepartmental programs. Application recruiting deadline: November 1, 1992. Anticipated start date: January 1, 1993. Interested applicants should contact: **R. L. Bucciarelli, M.D., Associate Chairman, Department of Pediatrics, Box 100296 JHMH, Gainesville, FL 32610.**

An Equal Employment Opportunity/Affirmative Action Employer.

PROFESSOR AND HEAD DEPARTMENT OF ENTOMOLOGY TEXAS A&M UNIVERSITY

Texas A&M University seeks a distinguished scientist-educator to head this diverse department of about 100 faculty and staff, 70 graduate, and 45 undergraduate students. The department's programs focus on both the basic and applied aspects of insect biology, systematics, molecular sciences and integrated pest management. The Head will provide intellectual and philosophical leadership necessary to maintain and strengthen the department's national and international preeminence in the entomological sciences, direct the educational programs, manage and coordinate departmental resources, and serve as the principal liaison between the department and external agencies. The Department Head holds an academic appointment as Professor in the College of Agriculture and Life Sciences and is responsible for the administration of statewide entomology programs of the Texas Agricultural Experiment Station and of the Texas Agricultural Extension Service. Qualifications include a Ph.D. with an emphasis in entomology; an academic record of distinction in teaching, research and/or extension in a university environment; and capability for leadership, management, and integration of academic, research, and extension programs. Nominations, or applications with current curriculum vitae and names and addresses of at least three references, should be sent by September 30, 1992 to: **Dr. Max D. Summers, Chair, Search Committee, Department of Entomology, Texas A&M University, College Station, TX 77843.**

The Texas A&M University System is an Equal Opportunity/Affirmative Action Employer.

HEAD, DEPARTMENT OF BIOLOGY UTAH STATE UNIVERSITY

A distinguished scientist is sought to serve as head of a large and diverse biology department. The candidate must have a Ph.D. in a relevant field, leadership abilities, and an understanding of the teaching, research, and extension roles of a land-grant university. A broad appreciation for teaching and research in the ecological, organismal, and molecular aspects of biology from both basic and applied perspectives is necessary. Significant academic experience, a notable research career, and recent success in extramural funding are required. The candidate should be tenurable at the full professor level. The head oversees the activities of 45 faculty, 9 administrative staff, and approximately 500 undergraduate and 75 graduate students. The head also promotes the department's affiliations with other campus units including the Biotechnology Center, Ecology Center, Extension Services, Molecular Biology Program, and Utah Agricultural Experiment Station. Candidates must send curriculum vitae, a statement of research, teaching and administrative goals, and have three reference letters sent to: **Dr. Jon Takemoto, Chair, Search Committee, Department of Biology, Utah State University, Logan, UT 84322-5305. Telephone: (801) 750-1770, FAX: (801) 750-1575.** Screening of applications will begin October 1, 1992, and will continue until a suitable candidate is found. *Utah State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.*

POSITIONS OPEN

DIRECTOR, Environmental Fellows Program. The Waste-management Education and Research Consortium (WERC) managed by New Mexico State University, seeks a qualified individual to head up an aggressive education program for leaders from industry and government. The program also includes conferences televised worldwide.

A Doctoral degree in engineering or scientific field with at least seven years of related experience required. The individual must be a manager, as well as an academician, with worldwide contacts. Applications accepted until September 1, 1992 or until filled. Submit applications to: **Director, WERC; Box 30001, Department 3805; Las Cruces, NM 88003-0001.** Applications should include a letter of interest, résumé, and three letters of reference. *New Mexico State University is an Equal Employment Opportunity/Affirmative Action Employer.*

DIRECTOR, CENTRAL FACILITY FOR POLYMER MORPHOLOGY. The Materials Research Laboratory at the University of Massachusetts, Amherst, seeks applicants for the position of Director of the Central Facility for Polymer Morphology/Professional Technician II. The successful candidate will be responsible for the supervision and maintenance of the Central Facility including instrument and laboratory upkeep, scheduling, instruction in safety practices as well as purchase and maintenance of laboratory supplies. Will act as a consultant regarding equipment purchases and design of morphology experiments. Will be expected to teach a graduate-level course on "Practical Polymer Morphology." Candidates must have a Ph.D. in Chemistry, Physics, or Materials Science with experience in x-ray scattering and electron microscopy. Salary commensurate with qualifications and experience. Grant-funded position; reappointment beyond October 1993 contingent upon grant renewal. Applicants should send curriculum vitae, statement of research interests, copies of recent publications, and names of three references, prior to August 25, 1992 to: **Search 28171, Employment Office, Room 167, Whitmore Administration Building, University of Massachusetts, Amherst, MA 01003.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

DIRECTOR, ENVIRONMENTAL RESEARCH CENTER AND SPILL REMEDIATION RESEARCH CONSORTIUM. Duties include administering, developing, and reviewing research programs; liaison to state/national funding sources; stimulating development/submission of grant proposals. Qualifications include an earned doctorate and academic achievement that merit faculty appointment at a senior rank. Salary will be commensurate with qualifications and experience. A letter of application, curriculum vitae, names, addresses, and telephone numbers of at least five references should be sent to: **Dr. Thomas G. Wheeler, Box 90655, McNeese State University, Lake Charles, LA 70609.** Applications will be accepted until the position is filled. *An Affirmative Action/Equal Opportunity Institution.*

THE UNIVERSITY OF BRITISH COLUMBIA (UBC), FACULTY OF MEDICINE, HEAD, DEPARTMENT OF PHYSIOLOGY. The Faculty of Medicine, University of British Columbia invites applications and nominations for the position of **HEAD OF THE DEPARTMENT OF PHYSIOLOGY.**

We seek an academic leader to be responsible for directing and developing the teaching and research programs of the Department. The Department has 18 full-time Faculty members and attracts research support of approximately \$1,900,000 annually. Candidates should have a proven record of scholarly activity, a strong research background and a commitment to undergraduate and graduate medical education. Starting date will be July 1, 1993. Salary will be commensurate with experience and qualifications. This appointment is subject to final budgetary approval.

UBC encourages qualified women and minority applicants. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Applications, accompanied by detailed curriculum vitae and the names of three references, should be directed by **September 30, 1992** to: **Dr. M.J. Hollenberg, Dean, Faculty of Medicine, University of British Columbia, Room 317, Instructional Resources Centre, 2194 Health Sciences Mall, Vancouver, B.C. CANADA V6T 1Z3.**

POSITIONS OPEN

GEOGRAPHIC MEDICINE—The University of Alabama at Birmingham (UAB) Department of Medicine is seeking candidates for **DIVISION DIRECTOR** of Geographic Medicine. Candidates should have an active, funded research program in molecular parasitology and an established reputation in research. International experience is preferred. Demonstrated leadership and a clear commitment to academic excellence are required. Appointment will be at an appropriate rank based on qualifications and experience. Qualified applicants should submit curriculum vitae to: **J. Claude Bennett, M.D., Chairman, Department of Medicine, UAB Station, Birmingham, AL 35294.** *An Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS INSTITUTE OF BIOSCIENCES AND TECHNOLOGY

The Institute of Biosciences and Technology in Houston, Texas, a component of Texas A&M University (TAMU), invites applications at all academic levels for tenure track positions. The mission of the Institute is *Hereditary Studies related to Medicine and Agriculture*. Focus areas include: Genome Research, Mammalian Viruses, Human Nutrition, Carcinogen-Mutagen Research, Transgenic Animal Models of Disease, and Genetic Regulation. Faculty appointments will be at TAMU in College Station. Substantial resources are available in our new 11 story building in the Texas Medical Center. Applicants should submit curriculum vitae, a description of future research plans, and three references to:

**Dr. Robert D. Wells, Director
Institute of Biosciences and Technology
Texas A&M University
2121 West Holcombe Boulevard
Houston, TX 77030
FAX: 713-677-7725**

Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

INFECTIOUS DISEASE EPIDEMIOLOGIST

Emory University School of Public Health seeks a tenure/tenure-track **FACULTY MEMBER** (level is negotiable) in infectious disease epidemiology. The position entails development of an externally funded research program and a major role in teaching master's/doctoral level students. Interested applicants should submit curriculum vitae, publication list and the names of at least three referees to: **Dr. M. Elizabeth Halloran, Emory University School of Public Health, 1599 Clifton Road, NE, Atlanta, GA 30329.** Review begins September 15, 1992. *Emory University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are particularly encouraged.*

FACULTY POSITION BIOLOGY OF INFECTIOUS DISEASES

The Department of Molecular Genetics and Cell Biology at The University of Chicago invites applications for a junior or intermediate level tenure-track position to investigate the basic biology of infectious diseases. Host-parasite interactions, the immune response to infection, and basic mechanisms of pathogenesis by bacteria, fungi and parasites are examples of research interests appropriate for this position. Significant postdoctoral experience is required. In addition to establishing an independent research program and participating fully in the graduate programs of the Department and of the Division of the Biological Sciences, the individual filling this position will have the opportunity to interact with clinicians and trainees of the Departments of Medicine and of Pediatrics interested in infectious diseases. Applicants should send curriculum vitae, a statement of research interests and a list of at least three references to: **Dr. Wolfgang Epstein, Microbiology Search, Department of Molecular Genetics and Cell Biology, 920 East 58th Street, Chicago, IL 60637-1474.** *The University of Chicago is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available October 1992 or later to study the role of cell-matrix interaction and the cytoskeleton on IL-1 action. Ph.D. with emphasis in biochemistry is required, experience in molecular biology is preferred. Send curriculum vitae and names of three references to: **Dr. Eva Qvarnstrom, Department of Pathology, SM-30, University of Washington, Seattle, WA 98195.**

WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

STAFF SCIENTIST POSITIONS

The opening of the Axelrod Institute for the study of infectious disease reflects the continuing commitment of the Wadsworth Center to molecular medicine. This expansion provides exciting employment opportunities within the Center, a multidisciplinary basic research and public health laboratory. Centralized core technical facilities in biochemistry and ultrastructure, immunology, molecular genetics, and information resources ensure state-of-the-art equipment and laboratory services. The staff positions are in both research and service-related functions. Research staff are expected to develop strong independently funded programs. Participation in the graduate program of the School of Public Health of the State University of New York, which is housed at the Wadsworth Laboratories, provides opportunity for academic interaction and involvement in graduate education.

MOLECULAR, CELL AND DEVELOPMENTAL BIOLOGISTS

Candidates with expertise in molecular biology are sought to fill several positions. One opening is for an individual interested in studying regulation of gene expression in phage/bacterial or yeast systems. Candidates should have experience in microbial genetics, nucleic acid-protein interactions, genetic recombination, splicing and/or molecular evolution. A second position is available for someone interested in cell cycle regulation, membrane signaling and transport, or protein translation in mammalian cells. Expertise in protein expression and *in vitro* cellular reconstitution systems (especially oocyte) is desirable. A third position is available for a developmental biologist working in a non-mammalian system with well-defined genetics and a sophisticated developmental program.

Search Committee Chairpersons: Dr. Carmen Mannella and Dr. Marlene Belfort

CELLULAR IMMUNOLOGISTS

The Center is particularly interested in attracting candidates in basic research to apply cellular and molecular approaches to the study of lymphocyte activation, interaction and/or regulation, and to interact with established groups in virology, cell biology, biochemistry and molecular genetics. Experience in flow cytometry and/or cytokine assays is desirable. Special opportunities are available for collaborative study pertaining to the immunobiology of HIV-1 infection and AIDS.

Search Committee Chairperson: Dr. Donal Murphy

NMR SPECTROSCOPIST

Candidates should be skilled in 1D and 2D homonuclear proton NMR techniques and prepared to apply the merging 2D, 3D and 4D ^{15}N - ^{13}C -heteronuclear-edited NOESY methodology to biological problems in the health sciences. The incumbent may interact with Center investigators studying oligosaccharide conformation and protein folding. Interaction with the X-ray crystallography and mass spectroscopy facilities is highly encouraged.

Search Committee Chairperson: Dr. Robert Trimble

INFORMATION RESOURCES COORDINATOR AND COMPUTER SUPPORT PERSONNEL

The Center seeks an individual with an extensive background in electronic data processing/system analysis and with management skills. The selected individual will supervise system analysts, and data-base management and networking specialists to: (i) develop and manage a computer core facility supporting both basic research and service functions, and network core technical facilities in biochemistry, immunology and molecular genetics; (ii) support and advise individual laboratories that provide State-mandated clinical and proficiency testing services; (iii) coordinate acquisition of hardware and software by directors of different units, to establish and maintain an integrated computational infrastructure with shared access.

Entry-level positions for network, PC and software support are also available.

Search Committee Chairperson: Dr. Joachim Frank

CLINICAL GENETICIST

A clinical geneticist is sought with experience in molecular analysis of human diseases. The position requires expertise in all aspects of DNA analytical procedures. The individual will interact with the medical community to provide diagnostic reports and regulatory oversight of clinical genetics laboratories.

Search Committee Chairperson: Dr. Kenneth Pass

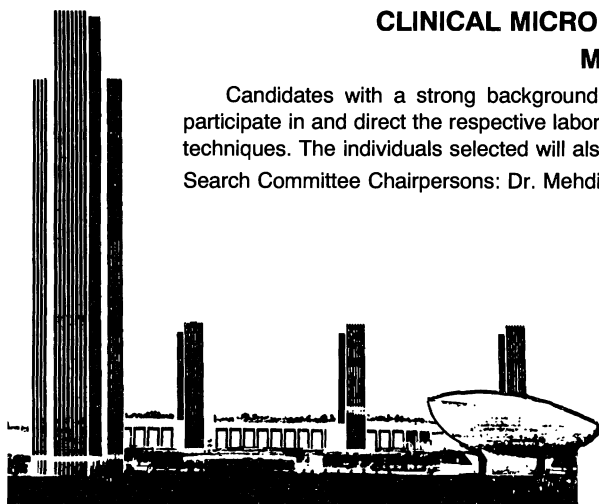
CLINICAL MICROBIOLOGIST/IMMUNOLOGIST MYCOLOGIST

Candidates with a strong background in diagnostic clinical microbiology/immunology or medical mycology will participate in and direct the respective laboratory's diagnostic and reference units, applying recent molecular diagnostic techniques. The individuals selected will also be responsible for Statewide proficiency testing of clinical laboratories.

Search Committee Chairpersons: Dr. Mehdi Shayegani and Dr. Ira Salkin

- Positions available immediately
- Salaries competitive and commensurate with level of appointment.
- Candidates with a doctoral degree and at least three years' post-doctoral experience should send applications by September 15th with the names of three references to the appropriate search committee chairperson at:

Wadsworth Center for Laboratories and Research
New York State Department of Health
Empire State Plaza, P.O. Box 509
Albany, NY 12201-0509



POSITIONS OPEN

The University of California, San Francisco School of Medicine. **TENURED TRACK FACULTY POSITION IN THE PROGRAM OF BIOLOGICAL SCIENCES.** The Department of Orthopaedic Surgery and the Program in Biological Sciences of the School of Medicine, University of California, San Francisco seek a molecular cell and/or developmental biologist whose primary interest is in the organization and function of bone and cartilage as tissues. The successful candidate for this tenure track position should have a demonstrated expertise in connective tissue research primarily in osteogenesis and chondrogenesis. The successful candidate should be able to develop an active and independently funded research program and teach professional and graduate students.

Letters of application should be accompanied by curriculum vitae and bibliography, narrative description of plans for future research, and the names, addresses and telephone numbers of three references. Please send all material by September 15, 1992 to: **Dr. Bruce Alberts, Chairman of the Search Committee, Professor of Biochemistry and Biophysics, Box 0448—HSE 920, University of California, Medical Center, San Francisco, CA 94143-0450** or **Dr. David S. Bradford, M.D., Professor and Chairman, Department of Orthopaedic Surgery, University of California, Medical Center, San Francisco, CA 94143-0728.**

POSTGRADUATES

DOCTORATES, any field considered. Mature attitude, excellent teaching ability, congenial personality, and professional presence necessary. We train you for intensive laboratory instruction of surgeons. Permanent instruction sites in New York City, West Palm Beach, Seattle, St. Louis and Los Angeles (Anaheim). Some travel required. Not a sales position. Beginning salary commensurate. Write for application information to: **Director, Midas Rex Institute, 2929 Race Street, Fort Worth, TX 76111-4134.** New applicants only, please.

POSTDOCTORAL POSITIONS available to study molecular biology of human disease. Research involves study and isolation of genes for tuberous sclerosis, Charcot-Marie-Tooth disease, and other related neurological disorders using genetic linkage strategies and physical mapping techniques. Molecular genetics/biology experience preferred but not essential. Salary commensurate with experience. Send curriculum vitae, statement of research interests, and three references to: **Drs. Margaret Pericak-Vance or Jeffery Vance, Box 2900, Duke University Medical Center, Durham, NC 27710.** *Equal Opportunity/Affirmative Action Employer.*

Available immediately—**TWO POSTDOCTORAL POSITIONS** to study the tissue-specific expression of angiotensin converting enzyme and the receptors for angiotensin II. Ang II plays a critical role in cardiovascular and renal function. The positions require a recent M.D. or Ph.D. in biochemistry, pharmacology or molecular biology. Most importantly we are looking for people with the drive to eventually develop an independent research effort. Send curriculum vitae and telephone numbers of references to: **Ken Bernstein, M.D., Room 711 WMB, Department of Pathology, Emory University, Atlanta, GA 30322.** *Emory University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION. We have recently cloned the gene encoding a diphtheria toxin receptor by employing an expression cloning strategy in which toxin-sensitive cells were isolated after transfection of toxin-resistant wild-type mouse L-cells with a cDNA library from highly toxin-sensitive monkey Vero cells [see *CELL* 69, 1051-1061 (1992)]. The position entails investigating the expression and processing of the receptor, *in vitro* transcription-translation studies, site-directed mutagenesis of the cloned gene, and characterization of the mechanism of receptor internalization. Candidate should have training in biochemistry, molecular biology, or microbiology. Send curriculum vitae and names of three references to: **Dr. Leon Eidels, Department of Microbiology, The University of Texas (UT) Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048.** *UT Southwestern is an Equal Opportunity Institution.*

POSITIONS OPEN

POSTDOCTORAL PHYSICAL CHEMIST Ref. 2/92

The Ludwig Institute for Cancer Research, the Walter and Eliza Hall Institute and AMRAD Corporation are undertaking the development of a new automated protein sequencer. A position is available for an experienced Postdoctoral Physical Chemist, with an interest in combining automated instrumentation and organic chemistry, to join the team developing this new sequencer, working with Dr. Richard Simpson in the Joint Protein Sequencing Laboratory in Melbourne.

In the first instance this position is available for one year, with the possibility of a second year. As the development proceeds, there may be an opportunity for a scientist with entrepreneurial skills to participate in the establishment of the sequencer as a commercial entity.

The salary for this position is negotiable up to \$42,538, according to background and experience. Further information can be obtained from Richard Simpson by telephone (+61-3-347 3155) or FAX (+61-3-347 1938).

Applications should be sent to: **The Director, Ludwig Institute for Cancer Research, Post Office, Royal Melbourne Hospital, Melbourne 3050, Australia.** Detailed curriculum vitae including the names of three references should be attached to the application. Applications close August 31, 1992.

MIT/Harvard POSTDOCTORAL POSITIONS available in the following areas: tissue engineering, polymeric drug delivery systems, biodegradable polymers, and angiogenesis research. Backgrounds in any of the following areas are desirable: polymer synthesis, chemistry, molecular biology, cell biology, chemical engineering, process engineering, and polymer processing. Send résumés to: **Dr. Robert Langer, Germeshausen Professor of Chemical and Biomedical Engineering, Department of Chemical Engineering, Massachusetts Institute of Technology, E25-342, Cambridge, MA 02139.**

POSTDOCTORAL POSITIONS IN FUNGAL POPULATION GENETICS

Funding is anticipated for two postdoctoral positions to study the population structure of two fungi, *Histoplasma capsulatum*, which can reproduce sexually, and *Coccidioides immitis*, which, reportedly, cannot. The three-year study will involve developing nucleic acid markers for the genomes of these fungi and should add to the debate over the contribution of sexual reproduction to the population structure of microbial populations in nature.

For further information, please contact either:
John W. Taylor, Department of Plant Biology, 111 GPBB, University of California, Berkeley, CA 94720. Telephone: (510) 642-5366, FAX: (510) 642-4995, email jtaylor@violet.berkeley.edu.

or
Thomas J. White, Roche Molecular Systems, Inc., 1145 Atlantic Avenue, Suite 100, Alameda, CA 94501. Telephone: (510) 814-2837, FAX: (510) 522-1285.

POSTDOCTORAL POSITION IN MOLECULAR CARCINOGENESIS

Available to conduct research on the fine mapping of genotoxin induced DNA damage and repair in mammalian cells using specific immuno- and molecular probes. A Ph.D. in biological sciences or related field and familiarity with standard biochemical, immunological and molecular biological techniques and instrumentation is required. Ample opportunity to interact with a large and diverse group of the Comprehensive Cancer Center researchers. Send résumé and three references to: **Altat Wani, Ph.D., Department of Radiology and Comprehensive Cancer Center, The Ohio State University, Columbus, OH 43210.** Email: wania@osu.edu. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION, available October 1, 1992, to participate in studies of gene expression in brain following cerebral ischemia, and modification of gene expression in response to polypeptide growth factors. Ph.D. or M.D./Ph.D. with experience in molecular biology required. Contact: **Dr. Seth Finklestein, CNS Growth Factor Research Laboratory, Massachusetts General Hospital—East, 149 13th Street, 6th Floor, Charlestown, MA 02129.** Telephone: (617) 726-5759. FAX: (617) 726-5677.

POSITIONS OPEN

POSTDOCTORAL POSITION available in a Training Program to study the role of phosphatases in the regulation of smooth muscle. Experience in molecular biology is essential. Start date negotiable. Entry level salary: \$23,000; negotiable for more senior applicants. *Grant requires consideration of U.S. citizens/permanent residents only.* Applications accepted until 1 November 1992. Send curriculum vitae and three letters of reference to: **Dr. D. J. Hartshorne, University of Arizona (UA), Muscle Biology Group, Department Animal Sciences, Tucson, AZ 85721.** *UA is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Postdoctoral position available immediately for microbial/molecular geneticist to investigate the repair and mutagenic properties of oxidative DNA lesions. Interdisciplinary, interactive group at the **University of Vermont's Markey Center for Molecular Genetics, Department of Microbiology and Molecular Genetics, Burlington, VT 05405.** Contact: **Dr. Susan Wallace at (802) 656-2164.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION in leukocyte biology available to study intracellular trafficking of receptors for bacterial endotoxin. Some experience with electron microscopy is desirable, as well as familiarity with techniques of cell biology and protein biochemistry. Please send curriculum vitae with names, addresses and telephone numbers of three references to:

**Dr. Patricia A. Detmers
The Rockefeller University
1230 York Avenue
New York, NY 10021**

POSTDOCTORAL POSITION IN IMMUNOLOGY AT BROWN UNIVERSITY. Position available for individual interested in areas of viral immunology and/or regulation of lymphocyte proliferation. This laboratory is primarily involved in research to understand cytokine and neuroendocrine regulation of NK and T cell responses *in vivo* and NK cell lineage. Previous experience in immunology, biochemistry, or molecular biology required. Please send curriculum vitae and a list of three references to: **Dr. Christine A. Biron, Division of Biology and Medicine, Box G-B618, Brown University, Providence, RI 02912.** Screening will continue until a successful candidate has been identified or the search is closed. *Brown University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION YALE UNIVERSITY

Two-year, benchwork-intensive postdoctoral position available January 1, 1993 or July 1, 1993 in the Endocrine Section, Yale University School of Medicine. The Section comprises 19 full-time faculty and has major research programs in fuel metabolism, mineral metabolism, neuroendocrinology, and signal transduction mechanisms. Candidates should have a Ph.D. and/or M.D. degree and be a U.S. citizen or a permanent resident. Please send résumé, statement of research experience and interests, and three references to: **Dr. Robert Sherwin, Endocrine Section, Fitkin 1, Yale University, P.O. Box 3333, New Haven, CT 06510.** Telephone: 203-785-4183; FAX: 203-785-6015. *An Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS IN IMMUNOLOGY

St. Jude Children's Research Hospital

Applications are invited for postdoctoral appointments in the Department of Immunology at St. Jude Children's Research Hospital. The areas of interest are: murine and human T cell repertoire, tolerance and superantigens (M.A. Blackman, J.L. Hurwitz, D.L. Woodland), control of gene expression in lymphocytes (C. Coleclough), inherited human immunodeficiencies (M.E. Conley), macrophage development, T cell regulation and autoimmunity (W.S. Walker, D. Sun) and viral immunity (J.E. Allan, P.C. Doherty). *U.S. citizenship or permanent residency status is not essential.* Please contact: **Dr. Peter C. Doherty, Chairman, Department of Immunology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105.** *An Affirmative Action/Equal Opportunity Employer. We provide a smoke free environment.*

The Upjohn logo consists of the word "Upjohn" in a white, serif font, set against a solid black rectangular background.

RESEARCH SCIENTISTS RESEARCH ASSOCIATES

ADHESION BIOLOGY GROUP

The **Upjohn Company**, a recognized leader in pharmaceutical research and development, has several excellent opportunities available for scientists and research associates in our new Adhesion Biology Group. Under the direction of Donald C. Anderson, M.D., research activities will include the definition of adhesion molecule structure at the three dimensional level, mechanistic studies of adhesion molecule function and investigation of the regulation of adhesion molecule expression in models of inflammation.

Upjohn Laboratories offers a stimulating, multi-disciplinary research environment at our modern facilities located in Kalamazoo (a southwestern Michigan community located midway between Detroit and Chicago). An excellent salary and benefits package is provided.

For confidential consideration, please submit your resume (refer to position code #115) to: **Donald C. Anderson, M.D., THE UPJOHN COMPANY, 7000 Portage Street, Unit 7245-267-3, Kalamazoo, MI 49001.** We are an equal opportunity employer. M/F.

SUPERVISOR MAGNETIC RESONANCE IMAGING LAB

The Research Imaging Center of the University of Texas Health Science Center at San Antonio is seeking a physical scientist specializing in magnetic-resonance imaging (MRI) to serve as Technical Director of its MRI Research Laboratory. The Research Imaging Center is a newly formed imaging-research center concentrating on the synergistic application of multiple imaging modalities to human physiology and pathophysiology. The position is for a junior faculty member who will be expected to actively promote multi-modality research both through MRI-based independent research and through joint projects with other RIC laboratories. The MRI lab is equipped with a 2.0 Tesla GE CSI unit for animal imaging and is purchasing a research-dedicated 1.5 Tesla system equipped for both imaging and spectroscopy in humans. Other RIC imaging modalities include positron-emission tomography, magnetic resonance spectroscopy and electrical-source imaging.

Candidates must have a doctoral degree in physics, engineering, or other appropriate physical science with post-doctoral experience in the design and development of MRI hardware and software. Experience with pulse-sequence design and programming is required. Experience in functional MRI (i.e., detection of task-induced brain activation) is strongly preferred. This position carries an appointment as a Senior Scientist at the RIC and a tenure-track academic appointment in the Department of Radiology.

Salary and Academic Rank commensurate with qualifications. Send curriculum vitae and references to: MRI Supervisor Recruitment, c/o Peter T. Fox, M.D., Professor and Director, Research Imaging Center, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284-6240. An AA/EEO employer.


BROOKHAVEN NATIONAL LABORATORY

POSTDOCTORAL RESEARCH ASSOCIATES Biology Department

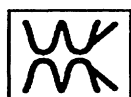
The Biology Department at Brookhaven National Laboratory has positions available for: (i) A **MOLECULAR BIOLOGIST** with experience in DNA cloning,

sequencing and expression to conduct research on regulatory enzymes associated with photosynthetic membranes. Previous experience with *in vitro* mutagenesis and a strong interest in protein structure/function relationships would be advantageous. (ii) A **PROTEIN BIOCHEMIST** with protein purification, peptide analysis and analysis of terminal covalent modifications to conduct research on proteins associated with the stromal surface of the thylakoid membrane. Experience with phosphoproteins would be desirable.

Candidates should forward a curriculum vitae, a list of publications and the names and addresses of three references to: Dr. Geoffrey Hind, Biology Department, Brookhaven National Laboratory, Associated Universities, Inc., Upton, Long Island, NY 11973. Equal Opportunity Employer M/F/D/V.

The logo for Brookhaven National Laboratory, featuring the letters "bnl" in a stylized, bold, lowercase font.**BROOKHAVEN
NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.**
*at the center of science,
beside the sea*





THE THIRD KECK SYMPOSIUM ON COMPUTATIONAL BIOLOGY

November 1-3, 1992 • Four Seasons Hotel • Houston, Texas

ANNOUNCEMENT AND CALL FOR POSTER ABSTRACTS

John Wooley, NSF
"Opportunities in Computational Biology"

Ken Kennedy, Rice University
"Programming Software Support for
Massively Parallel Computers"

Larry Smarr, NCSA
"Supercomputing and the Transformation of Science"

Geoffrey Fox, Syracuse University
"Physical Concepts in Optimization"

Joachim Frank, SUNY Albany
"Crystallography without Crystals:
A Computational Challenge"

Wilfred van Gunsteren, ETH
"Molecular Modeling of Biomolecules:
Striking a Balance between Supercomputing and
Back-of-the-Envelope Calculations"

Herbert Hauptman, Med. Fdn. of Buffalo
"A Minimal Principle in the Phase Problem of
X-Ray Crystallography"

Gregory Petsko, Brandeis University
"Protein Crystallography and
Computational Biophysics:
A Marriage Made in Heaven or the Other Place?"

Bob Robbins, Johns Hopkins University
"Interconnectivity of Genome Databases"

Mike Waterman, USC
"Finding and Interpreting an Infinite Number of
Sequence Comparisons in Finite Time"

Alan Lapedes, Los Alamos Nat'l Laboratory
"Protein Structure and Function using Neural Networks
and Information Theory"

Richard Lathrop, MIT
"Massively Parallel Learning Methods for
Protein Sequence Patterns"

Workshop Discussants

Bill Brinkley Charles Brooks III Alan Carle
Tom Caskey Wah Chiu Bob Cottingham
Elizabeth Getzoff Richard Gibbs Charles Lawrence
Andy McCammon George Phillips Monte Pettitt
B.V.V. Prasad Conly Rieder Florante Quijcho
Ray Salemme Bruce Schatz Mike Schmid
David Specter Randy Smith Craig Upson
Steve Wolinski

*A Joint Program of Rice University and Baylor College
of Medicine*

For more information, contact Sue Wong, W.M. Keck Center for Computational Biology
P.O. Box 1892 Houston Texas 77251 (713) 285-5352 Fax (713) 285-5154 swong@rice.edu

National Institutes of Health

POSTDOCTORAL POSITION IN MUCOSAL IMMUNOLOGY

The Laboratory of Immunology, National Institute of Dental Research, seeks an outstanding candidate for a postdoctoral fellow position to study interactions of microbial pathogens with epithelial cells with an emphasis on induction of receptors, cell signalling pathways and cytokines which impact on oral mucosal immunity and inflammation. Considerable opportunity exists for performing independent research in a well-equipped multidisciplinary laboratory. Experience in immunology, cell and molecular biology is desirable. Candidates with more than three years of relevant postdoctoral experience may be considered for a Staff Fellow position. Starting salary will be commensurate with qualifications and experience. Interested candidates should submit a curriculum vitae and names of three references no later than **September 30, 1992**.

Material should be sent to:

Faye M. Harbrant
Personnel Management Specialist
National Institute of Dental Research
National Institutes of Health
Bldg. 31, Room 2C23
9000 Rockville Pike
Bethesda, MD 20892

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Biotechnology Sales Representatives in Immunology

BioSource International is a leading supplier of immunological reagents and ELISA kits to biomedical research scientists. BSI is a young and dynamic California based company with an outstanding record of growth and achievement. This is a ground floor opportunity, with career development potential in sales management, marketing and administration. We offer a competitive salary, bonus, car allowance, stock options, 401K plan and medical/dental plan.

The position requires a minimum of a B.S. degree in biology or a related discipline, an M.S., M.B.A. or Ph.D. is preferred, with two or more years of relevant laboratory experience in immunology, cell biology or molecular biology. Familiarity with ELISA, flow cytometry, and bioassays a plus. We are seeking candidates for both the Chicago/Midwest territory and the NYC/New Jersey territory. The candidate should be extremely well organized, possess excellent written and verbal communication skills, and be computer literate. No prior sales experience is required, but an outgoing sales-oriented personality is a prerequisite.

Please forward your resume in confidence to:

BioSource International
Attention: Mrs. Berry
950 Flynn Road, Suite A
Camarillo, CA 93012



CAREER OPPORTUNITIES IN OLIGONUCLEOTIDE THERAPEUTICS

ISIS Pharmaceuticals, located in Carlsbad, CA (San Diego County), is a pharmaceutical company focused on antisense oligonucleotide therapeutics. ISIS has innovative research programs, strong funding, a world-class scientific advisory board, excellent facilities and strong academic ties which make ISIS an exciting opportunity for outstanding individuals. Present openings include:

Cellular Biologist/Molecular Pharmacologist

ISIS Pharmaceuticals is seeking Ph.D or M.D. scientist to develop and implement research on intracellular transport of molecules and interaction of novel chemicals with model biological membranes. The successful candidate would work closely with medicinal chemists and molecular and cellular biologists to study the mechanisms by which novel drugs interact with mammalian cells and accumulate within. At least two years postdoctoral experience in the cell biology/molecular pharmacology of transport of molecules in mammalian cells would be required. Experience in receptor ligand interactions and membrane biology/biophysics would be an advantage. Please refer to position code 124.

Biochemists/Molecular Biologist/Cell Biologist BS/MS

ISIS has several positions for BS/MS scientists with experience in biochemical, molecular biology and cellular biology techniques such as protein purification, DNA and RNA sequencing, DNA cloning, cell culture and microscopy. Please refer to position code 125.

ISIS Pharmaceuticals offers a competitive salary, excellent benefits and equity participation. Submit cover letter, CV and references to: **Human Resources, ISIS Pharmaceuticals, 2280 Faraday Ave., Carlsbad, CA 92008.**


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TOXICOLOGIST/ TERATOLOGIST

Bristol-Myers Squibb Pharmaceutical Research Institute is the R&D Division of Bristol-Myers Squibb, a worldwide leader in the discovery and development of innovative pharmaceuticals. Currently, we are seeking a Toxicologist/Teratologist to join us at our New Brunswick, NJ Campus.

We are seeking a Ph.D. level reproductive toxicologist/teratologist for our New Brunswick, NJ site. Specialization in male fertility and/or embryology is preferred. Responsibilities will include serving as Study Director for Segment I, II and III reproductive drug safety evaluations.

Please forward your resume to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Dept. 344-ER, P.O. Box 4000, Princeton, NJ 08543-4000.** Equal Opportunity Employer, M/F/D/V.



Bristol-Myers Squibb Company

JOHNS HOPKINS UNIVERSITY

Database Training Instructor

The Johns Hopkins University invites applications and nominations for the Database Training Instructor in the Laboratory for Applied Research in Academic Information, William H. Welch Medical Library of the Johns Hopkins Medical Institutions (JHMI).

This position in the Lab's Product Services Group has responsibility for developing, modifying, and delivering training and outreach activities for the Lab's databases (including the Genome Data Base and Online Mendelian Inheritance in Man) and for related biomedical databases produced by other organizations. This a Research Associate (non tenure-track faculty) position.

Duties: Teach courses and present demonstrations in the Lab's training facility in Baltimore and at universities, research centers, and meetings both nationally and internationally; develop, evaluate, and update training activities, both classroom and non-classroom-based, to reflect changes in the databases and the needs of a diverse and distributed scientific community including students, senior faculty, industrial researchers, clinicians, and information specialists; provide feedback and input to the Lab's Product Development and Data Management Groups.

Requirements: Ph.D. in the life sciences or related field with M.L.S. or M.A./M.S. in information systems, 3-5 years experience with biological/medical databases, including the provision of product services/training/demonstrations to the user community. Excellent teaching and communications skills. Ability to work with other professional staff, both in the Lab and at other institutions. Willingness to travel up to 25 percent. Strong commitment to user service. Training in molecular biology/genetics and experience with sequence analysis software highly desirable.

Salary is negotiable and competitive. Send (via US mail or electronic mail) or fax letter of application, resume, and salary requirements to:

Training Coordinator
Laboratory for Applied Research in Academic Information
The Johns Hopkins University, Johns Hopkins Inn
400 North Broadway, Room 335
Baltimore, MD 21231
Fax: (410) 614-0434
E-mail (internet): kab@library.welch.jhu.edu

Deadline for applications is August 31, 1992.

An Affirmative Action/Equal Opportunity Employer

BIOTECHNOLOGY RESEARCH & DEVELOPMENT

DNX Corporation - the established leader in transgenic sciences - has exciting and unique career opportunities in our Princeton, New Jersey, Research & Development facility:

RESEARCH ASSOCIATES, BS/MS Disease Modeling, Gene Expression

Candidates with 2+ years experience in recombinant DNA technology, in vitro mutagenesis, or mammalian cell culture are invited to apply for positions in our DISEASE MODELING and GENE EXPRESSION groups. In Disease Modeling, you will enhance biological models for use in drug discovery (**CODE DM-1**); in Gene Expression, you will be involved in understanding mechanisms governing high-level tissue specific expression in transgenic animals. (**CODE GE-1**)

RESEARCH ASSOCIATES, BS/MS Xenotransplantation

Candidates with 2+ years experience in immunological techniques including ELISAs, monoclonal antibody production, and complement assays are invited to apply for positions within our Xenograft group, where you will research the emerging field of animal organ to human transplants. (**CODE XENO-1**)

RESEARCH ASSOCIATES/ PROCESS ENGINEERS, BS/MS Protein Purification and Scale-up

Candidates with 2+ years experience in therapeutic protein purification and the transfer of protocols into a GMP production environment, are invited to apply for positions within our Protein Purification and Scale-up group. Here you will support the development effort of purification and scale-up for pilot plant production. (**CODE PURIF-1**)

RESEARCH ASSOCIATES, BS/MS Protein Assay and QC

Candidates with 2+ years experience in routine protein assays, including HPLC, electrophoresis, amino acid analysis, and sequencing, in addition to ELISA, and microbiological assays are invited to apply for positions in our Protein Assay and QC group, where you will perform assays on In-Process and final product samples. (**CODE PROAS-1**)

DNX offers an excellent scientific working environment in an ideal location (midway between New York and Philadelphia) along with an attractive salary and benefits package. If you want to apply your scientific talents to the innovative areas described above, we'd like to hear from you. For prompt consideration, send your resume (with the position code noted), including a list of references and salary requirements, to:



**Director-Human Resources
303B College Road East
Princeton, New Jersey 08540**

Equal Opportunity Employer

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately for a **THEORETICAL ECOLOGIST** to develop spatially explicit models of Northern Spotted Owls. Requires a research emphasis in animal behavior and population ecology with strong theoretical aptitude and training. Experience with UNIX-based workstations helpful. Salary is \$2500 per month. Application deadline is August 24, 1992. Send curriculum vitae, list of references, and publications to: **Dr. Robert J. Taylor, California Forestry Association, 1311 I Street, Sacramento, CA 95814.**



POSTDOCTORAL POSITION to study lymphocyte-mediated immunoregulation of experimental autoimmune encephalomyelitis. The work involves peptide synthesis, and cellular and molecular immunological approaches. Experience in lymphocyte culture techniques and molecular biology highly desirable. Send curriculum vitae and names of three references to: **Dr. Robert H. Swanborg, Department of Immunology and Microbiology, Wayne State University School of Medicine, Detroit, MI 48201.**

Haskell Laboratory for Toxicology and Industrial Medicine, Du Pont, has a **POSTDOCTORAL POSITION** available.

Postdoctoral position available immediately for a Ph.D. with extensive molecular and cell biology experience to participate in pulmonary mechanistic studies designed to elucidate toxicological effects of inhaled particulates. The successful candidate should have working knowledge of common molecular biology techniques, tissue culture methods and/or experience with ELISA and standard protein isolation techniques. Postdoctoral positions are one year assignments renewable for a second year upon mutual agreement. Excellent salary. Please submit curriculum vitae and cover letter to:

David B. Warheit, Ph.D.
Senior Research Toxicologist
E. I. du Pont de Nemours and Company
P.O. Box 50, Elkton Road
Newark, DE 19714

Du Pont is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION ECOLOGICAL MODELING

Available immediately for Ph.D. in ecology (process modeling), environmental science, or related area to help develop an ecosystem model of global terrestrial productivity and biogeochemical cycling for coupling to an Earth System Model for the study of global change. Send résumé, letter of application, transcripts, three letters of recommendation, and copies of relevant publications to: **Phil Harding, Lawrence Livermore National Laboratory, Department A92282PH, P.O. Box 808, Livermore, CA 94550. Equal Opportunity Employer.**



POSTDOCTORAL POSITIONS available (three years) immediately to join a highly motivated, small group studying the regulation of proteolytic enzymes critical to the expression of tissue-invasive/destructive phenotypes in normal and neoplastic cell populations (*Science* 249:178, 1990; *Science* 254:99, 1991; *J. Biol. Chem.* 267:5005, 1992). Studies will center on the creation and characterization of *in vitro* and *in vivo* models (transgenic and embryonic stem cell approaches) to define the role of proteinases in extracellular matrix remodeling. Background in molecular biology with interest in the extracellular matrix, integrins, proteinases or endothelium preferred. Applicants must be U.S. citizens or have permanent residence status. Submit curriculum vitae and two letters of reference to: **Dr. Stephen J. Weiss, Upjohn Professor of Medicine and Oncology, University of Michigan Cancer Center, C570 MSRB II—1150 West Medical Center Drive, Ann Arbor, MI 48109-0668.**

POSITIONS OPEN

YALE UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL POSITIONS IN IMMUNOBIOLOGY

Postdoctoral positions available to work with Drs. Richard Flavell and Erol Fikrig on the molecular and cellular immunobiology of autoimmunity and Lyme disease. Preference will be given to applicants with prior experience in molecular biology, microbial pathogenesis or cellular immunology. Send curriculum vitae and three letters of recommendation to: **Ms. F. DeGrenier, Section of Immunobiology, Yale University School of Medicine, 310 Cedar Street, 424 FMB, Box 3333, New Haven, CT 06510. Yale University is an Equal Opportunity Employer.**

The University of Wisconsin Department of Surgery has a **POSTDOCTORAL POSITION** to study gene therapy approaches to endocrine cell transplantation. Experience in molecular biology including cloning, transfection, and gene expression systems. Experience in cell culture and immunochemical techniques desirable. Send résumé and three letters of recommendation to: **Dr. Debra Hullett, Surgery Department, 600 Highland Avenue, Madison, WI 53792-7375. The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION available in September, 1992 to join an NIH-funded investigation in the disposition of reactive metabolites, mechanism for their reaction with proteins and toxicity *in vitro* and *in humans*. A Ph.D. in biological sciences or chemistry required. Experience with pharmacokinetics and HPLC is desirable. Send curriculum vitae and three letters to: **Dr. Philip C. Smith, School of Pharmacy, CB7360, The University of North Carolina, Chapel Hill, NC 27599. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION at Harvard Medical School. Transcription Factors in Normal and Leukemic Human Myeloid Cells. Postdoctoral or research associate position available immediately for a Ph.D. in molecular biology to isolate and characterize transcription factors which specifically regulate myeloid (neutrophil/monocyte/macrophage) genes and to investigate the role of these factors in myeloid differentiation and acute myelogenous leukemia, and to investigate the role of the retinoic acid receptor and PU.1 factor in these processes. Experience in transcription factor research highly desirable. Send curriculum vitae and three letters of reference to: **Dr. Daniel G. Tenen, Hematology Division, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215.**

MOLECULAR ENDOCRINOLOGY

TWO POSTDOCTORAL POSITIONS are available to investigate the gene regulation and structure-function relationship of the LH/CG receptor. Please send curriculum vitae and arrange to mail three reference letters to: **Professor Tae H. Ji, Department of Molecular Biology, University of Wyoming, Laramie, WY 82071-3944. Telephone: 307-766-6272. FAX: 307-766-5098.**

HARVARD SCHOOL OF PUBLIC HEALTH POSTDOCTORAL POSITION

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

POSTDOCTORAL POSITION in Immunology, available immediately. Training in the broad areas of Gastrointestinal and Hepatic Immunology, with specific emphasis on IL-4 and other cytokines. Contact: **William R. Brown, M.D., Gastroenterology Division B158, University of Colorado School of Medicine, 4200 East 9th Avenue, Denver, CO 80262. U.S. citizens or permanent residents only. Affirmative Action/Equal Employment Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL FELLOW position available for work in the molecular biology of α_1 -adrenergic and related receptors. This position requires expertise in cloning, mutagenesis, and other general molecular biology techniques. Experience with receptor regulation is desired but not required. Please send curriculum vitae and three letters of reference to: **Debra A. Schwinn, M.D., Box 3094, Duke University Medical Center, Durham, NC 27710.**

POSTDOCTORAL/MEDICAL FELLOW

The Wellman Laboratories of Photomedicine at Massachusetts General Hospital/Harvard University and the Beckman Laser Institute and Medical Clinic at the University of California, Irvine announce the establishment of the joint Beckman-Wellman Fellowship. The Fellowship will be for a two year period and will involve spending six month periods at each institution. The research projects and individuals must take advantage of the unique capabilities of each program such that the research could not be easily done at only one of the institutions. The fellowship is open to Ph.D.'s or M.D.'s with less than five years of postdoctoral experience. Areas of research interest are: oncology, photobiology and photophysics, dermatology, surgery, reproductive biology, cell biology and genetics, and bioengineering. Applicants must have a demonstrated interest in photomedicine/photobiology. Both institutions are Equal Opportunity Employers and encourage women and minority applicants. Please correspond with either program director:

Dr. Michael W. Berns
Beckman Laser Institute and Medical Clinic
1002 Health Sciences Road East
Irvine, CA 92715

Dr. John Parrish
Wellman Laboratories of Photomedicine
Massachusetts General Hospital
50 Blossom Street
Boston, MA 02114

POSTDOCTORAL FELLOWSHIP

A postdoctoral fellowship is available in the area of signal transduction and molecular mechanism of neuroendocrine function. Laboratory is interested in hormone binding, calcium ion channels, protein kinase C, calmodulin, gene regulation and expression, intracellular and extracellular calcium, lipid metabolism and their regulation of hormonal release, receptor up and down regulation, and target cell sensitization and desensitization.

The University of Iowa College of Medicine is the home of the largest teaching hospital in the United States and is a major research center (offering 15% of NIH grants). It is located in a rural setting offering excellent profession, undergraduate, and public schools along with low crime and a pleasant lifestyle.

Qualified applicants should forward curriculum vitae, list of publications, a statement of interest and the names of three to five individuals suitable as professional references to:

Dr. P. Michael Conn
Professor and Chairman
Department of Pharmacology
The University of Iowa College of Medicine
Iowa City, IA 52242-1109
Telephone: 319-335-7965
FAX: 319-335-8930

BITNET: CMDPMCWY@UIAMVS

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

POSTDOCTORAL FELLOWSHIP AND RESEARCH ASSOCIATE positions in renal cell physiology (biochemistry/signaling/biophysics/molecular biology) in excellent multi-investigator program related to hypertension. Training opportunities exist in the areas of epithelial cell culture, immortalization of primary cells, electrophysiology, epithelial transport, imaging, various aspects of signaling, cell fractionation and receptor analyses. Stipend/salary range: \$20,000 to \$35,000, depending on experience. Requirements: evidence of relevant research experience and ability to work independently as documented by publications in high impact journals. Send curriculum vitae to: **Ulrich Hopfer, M.D., Ph.D., Department of Physiology and Biophysics, Case Western Reserve University (CWRU) School of Medicine, Cleveland, OH 44106-4970; FAX: 216-368-5586; E-mail: ujh@po.CWRU.edu. CWRU is an Equal Opportunity Employer.**

JERUSALEM, ISRAEL

JUNE 13-18, 1993

SYMPOSIUM ON BIOLOGY OF THE EPITHELIAL CELL

Phenotypes, Polarity, Ion Pumps, Exchangers, Molecular and Cell Biology
held under the auspices of the XIth International Congress of Nephrology

TOPICS

Epithelial Cells in Culture
Models of Polarity
Na⁺K⁺ATPase
H⁺ATPase
Sodium Channels
Potassium Channels

Chloride Channels
Anion Exchangers
Structure and Function of Water Channels
Mutant Hybrid and Chimeric Pumps
CFTR and Cystic Fibrosis

INVITED SPEAKERS

Al-Awqati, Q., USA
Alper, S. L., USA
Aronson, P. S., USA
Bello-Reuss, E., USA
Berridge, M., U.K.
Biber, J., Switzerland
Bichara, M., France
Brown, D., USA
Burg, M., USA
Cabantchick, Z. I., Israel
Caplan, M., USA
Cereijido, M., Mexico
Doucet, A., France
Fambrough, D., USA
Friedlander, G., France
Frizzel, R. A., USA
Giebisch, G., USA
Gluck, S., USA
Grantham, J. J., USA
Greger, R., Germany

Guggino, W., USA
Handler, J., USA
Hanrahan, J. W., Canada
Harris, W., USA
Hoffman, E., Denmark
Hopfer, U., USA
Jentsch, T., Germany
Knickelbein, R. G., USA
Kopito, R. R., USA
Lazdunski, M., France
Lingrel, J., USA
Louvard, D., France
Murer, H., Switzerland
Nelson, W. J., USA
Pouyssegur, J., France
Rodriguez-Boulan, E., USA
Ronco, P., France
Rossier, B., Switzerland
Wald, H., Israel

ABSTRACT DEADLINE IS DECEMBER 15, 1992

Oral and poster sessions relating to the above-cited themes will be held in conjunction with formal presentations and state-of-the-art lectures. Attendance is open to all. Registration and abstract forms, hotel reservation information and fee schedules may be obtained from:

Secretariat (GB), XIth International Congress of Nephrology

P.O. Box 50006, Tel Aviv, Israel 61500

(Tel: 972-3-5174571; Fax: 972-3-660325).

SCIENTISTS/SR. SCIENTISTS

Macronex, a newly-emerging biopharmaceutical discovery and development company located in the Research Triangle area of North Carolina, is positioning itself to be a world leader in the development of human therapeutics based on the physiological regulation of macrophages and monocytes. We are currently expanding our research programs and have openings available for Scientists/Sr. Scientists in our macrophage/cell biology group.

Successful candidates will have a Ph.D. degree with a minimum of 3+ years experience in cell biology or immunology with direct experience in working with human monocytes or macrophages. Experience in bioassays of monocyte/macrophage function is required and experience in immunoassay development and/or the measurement of monokines is highly desirable. We seek energetic, highly-motivated individuals who possess excellent interpersonal skills. Selected individuals will be part of a group of 9-10 scientists focused on understanding the mechanisms of macrophage activation and regulation and will be supported by teams of molecular biologists, protein and peptide chemists, and medicinal chemists. **Position #106.**

We offer competitive salaries and benefits including employee stock participation. The Research Triangle provides a progressive area offering a high quality, affordable lifestyle. Interested candidates should send their resume and CV, referencing **Position #106**, with the names, addresses, and phone numbers of three references to: **Macronex, Inc., Suite 700, 120 Southcenter Court, Morrisville, NC 27560.**

MACRONEX

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An Equal Opportunity Employer

THE CHINESE UNIVERSITY OF HONG KONG (founded 1963) offers comprehensive programmes up to PhD level in the Humanities, Business Administration, Science, Medicine, Social Science, Education, Engineering and Architecture. Current student enrolment is 9,300 full-time equivalent, which will expand to 11,500 by 1994-95. Clinical courses are taught at the Medical Faculty's 1400-bed teaching hospital, the Prince of Wales Hospital, which is one of the regional hospitals in Hong Kong. The Medical Faculty admits 160 students annually and is fully recognised by the General Medical Council of the United Kingdom. The University is also very active in promoting research and consultancies and liaising with industry and the business sector worldwide. English is used in teaching and administration in the Faculty of Medicine.

Applications are invited for

Lectureship in Biochemistry

Applicants should have a relevant higher degree, preferably a PhD, and relevant teaching and research experience. Established skills in neurochemistry or food science or immunology will be an advantage.

Annual Salary & Fringe Benefits

HK\$309,120-350,700 by 2 increments BAR HK\$371,520-516,480 by 6 increments

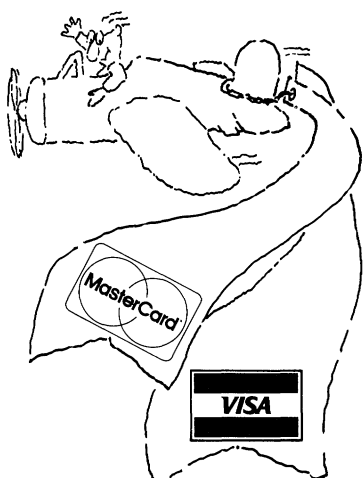
Starting salary and grade will be commensurate with qualifications and experience.

The University offers a competitive remuneration package. For superannuable appointment, benefits include leave with full-pay, contributory superannuation scheme (University 15%, appointee 5%), medical and dental care, education allowances for children, housing benefit for an appointee with annual salary of HK\$329,880 or above (with appointee contributing 7.5% of salary towards the provision of housing). Appointment may also be made on fixed term contract which carries equivalent benefits including a contract-end gratuity (15% of basic salary) in lieu of superannuable benefits. The University may also consider more flexible terms for suitable candidates.

Application Procedure

Send full resume in duplicate, giving full particulars, as well as names and addresses of 3 referees, together with copies of qualification documents (in duplicate) and recent publications to the Personnel Section, The Chinese University of Hong Kong, Shatin, Hong Kong (Fax: (852)603 5026) before **August 31, 1992**. Please quote the reference number **56/509/2/92** and mark "Recruitment" on cover.

(approx. exchange rate at July 6, 1992: US\$1=HK\$7.8)



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POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOWSHIPS are now available at the Cardiovascular Biology Laboratory, School of Public Health, Harvard University. Research in the laboratory aims to elucidate basic biological mechanisms of thrombolysis and thrombosis to design improved strategies for the inhibition of clotting, or the detection and lysis of pathologic clots. Experience with either molecular cloning, protein engineering, protein chemistry, immunology or cell biology is desirable. Please send curriculum vitae and names of referees to: **Dr. Guy L. Reed, Cardiovascular Biology—HSPH, 665 Huntington Avenue, Boston, MA 02115.**

POSTDOCTORAL RESEARCH FELLOW SENSORY NEUROBIOLOGY

A postdoctoral position is available for an individual with a Ph.D. in neurophysiology, neurobiology, biophysics, bioengineering, or a related field. Current research projects involve the study of sensory transduction mechanisms in free nerve endings. Anatomical, electrophysiological, pharmacological, and bioengineering approaches are used to look at mechanisms of cold, mechanical, chemical, and pain transduction. Annual stipend is up to \$30,000 depending on experience. Applicants should send curriculum vitae and the names of three individuals who may be contacted for references to: **Darrell L. Tanelian, M.D., Ph.D., Director of Pain Management and Research, Department of Anesthesiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9068. The University of Texas Southwestern Medical Center at Dallas is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIPS in Neurotoxicology. Studies focus on mechanisms underlying developmental and cell-specific consequences of xenobiotic exposure in the nervous system. Experience in neuroscience, cell or molecular biology, xenobiotic metabolism or organic chemistry essential. Inquiries and curriculum vitae to: **Dr. H.E. Lowndes, Rutgers University, Neurotoxicology Laboratories, 41 Gordon Road, Piscataway, NJ 08854. Telephone: (908) 932-6907. An Affirmative Action/Equal Opportunity Employer.**

SCHOOL OF MEDICINE STANFORD UNIVERSITY

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION available immediately to lead group within the laboratory of Dr. Martin Brown working on mapping and cloning mammalian genes involved in repairing DNA damaged by ionizing radiation. Candidates must have experience in eukaryotic molecular genetics. Send curriculum vitae and names of three references to: **Dr. Martin Brown, Department of Radiation Oncology, Stanford Medical Center, Stanford, CA 94305-5468. Stanford University is an Equal Opportunity Employer. Women and members of minority groups are especially encouraged to apply.**

POSTDOCTORAL RESEARCH ASSOCIATE

Position available to study the molecular basis of solvent production by *Clostridium acetobutylicum*. Project includes gene cloning and analysis, introduction of genes into *Clostridia*, and metabolite and enzyme analyses. Experience in molecular biology, enzymology or applied microbiology is important. Send résumé and names of three references to: **Dr. George Bennett, Department of Biochemistry and Cell Biology, Rice University, P.O. Box 1892, Houston, TX 77251.**

The Division of Biochemical Toxicology at FDA's National Center for Toxicological Research (NCTR) has two **POSTDOCTORAL RESEARCH POSITIONS** available. One position (Daniel R. Doerge) involves research into the mechanisms of action of anti-thyroid chemicals. The second position (K. Barry Delclos) involves studies of the molecular mechanisms of toxicity of materials used in medical implants and the development of biomarkers of exposure to potentially carcinogenic agents. A Ph.D. in Biochemistry, Toxicology, or a related field is required. Interested individuals should contact the investigators listed above at: **NCTR, HFT-110, Jefferson, AR 72079-9502. Salary range: \$32,423 to \$38,861. DHHS/PHS/FDA/NCTR is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority candidates are especially encouraged to apply.**

POSITIONS OPEN

POSTDOCTORAL FELLOW. Position available fall 1992 to conduct research on cholesterol metabolism in macrophages using cell biological and biochemical approaches. Experience with fluorescence microscopy and/or lipid biochemistry desirable. Must be U.S. citizen or permanent resident. Send curriculum vitae and names of references to: **Dr. I. Tabas, Department of Medicine, Columbia University, New York, NY 10032.**

POSTDOCTORAL/RESEARCH ASSOCIATE

A full-time position is available immediately in the laboratory of Dr. James R. West to participate in ongoing work related to the neuroteratology of alcohol. The research involves a multidisciplinary approach to the study of how alcohol exposure alters brain development, including risk factors and mechanisms of damage. The position requires a Ph.D. or equivalent degree, training in neuroscience, and a working knowledge of statistics. Research experience in teratology, neuroanatomy or brain development will be given special consideration. Send curriculum vitae, a letter of application summarizing research experience, and have three letters of recommendation forwarded to: **Mr. George McHenry, Department of Anatomy, College of Medicine, University of Iowa, Iowa City, IA 52242.**

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

POSTDOCTORAL/RESEARCH ASSOCIATES IN EXPERIMENTAL PHYSICS/CHEMICAL PHYSICS AND THEORETICAL/ COMPUTATIONAL CHEMISTRY/PHYSICS

Ultrafast, short wavelength electron and x-ray diffraction as applied to imaging molecular quantum dynamics. Quantum control. Close interaction between experiments, analytic theory and calculations. Looking for exceptionally able 1) experimentalists with strong background from among molecular beams, charged particle beams, experimental high energy physics or accelerator physics; 2) theoretical/computational chemists or physicists with strong background in quantum or classical dynamics, molecular control, or related areas. **Professor Kent R. Wilson, Department of Chemistry, University of California, San Diego, La Jolla, CA 92093-0339. Affirmative Action/Equal Opportunity Employer.**



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Located at the end of the
Classified Section in this
issue of SCIENCE.

Molecular Biology Scientist IV

The new Baxter Biotech Immunotherapy Division is building on success in the development of protein therapeutics. We are committed to research and development of next generation therapeutic biologics utilizing state-of-the-art biotechnology. We seek a talented and energetic individual who can effectively contribute his/her expertise in a multi-disciplinary R&D environment:

This individual will conduct molecular biology research focusing on the design and construction of vectors for eukaryotic gene transfer and high level expression. Responsibilities will also include the establishment of new technologies in support of product development. Applicants must have demonstrated ability in molecular biology, especially including experience with viral and other vector systems. A PhD in molecular biology or related field, plus relevant postdoctoral training is required.

The name Baxter Healthcare Corporation is synonymous with products, systems and services devoted to improving health care throughout the world. We are a Fortune 100 company providing a smoke-free environment, competitive compensation and benefits. Please send your resume in confidence to: **Baxter Biotech Immunotherapy Division, Human Resources Dept. LD/MB, 1710 Flower Avenue, Duarte, CA 91010.** An Affirmative Action/Equal Opportunity Employer.

Immunotherapy Division

Baxter

TOXICOKINETICS/ BIOANALYTICAL CHEMIST

Merck Research Laboratories in West Point, a leader in pharmaceutical and biological research, has three research career opportunities available in our Toxicology Department.

Two positions involve development of bio-analytical methods for the quantification of drugs in biological systems and the design and interpretation of toxicokinetic studies. These positions require a Ph.D. in chemistry, biochemistry or the equivalent and 2-9 years experience in bioanalytical techniques. Supervisory experience is beneficial.

The third position includes bioanalytical method development for quantification of drugs/metabolites in plasma as well as laboratory and project supervision. This position requires a BS/MS in biological science or chemistry with 4-5 years experience in drug level analysis in biological systems and laboratory supervision.

Excellent salary and benefit programs accompany these positions at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter to: **Personnel Manager, Ad #D-16, MRL Human Resources WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486.** EEO/AA/VH Employer.



MERCK
Research Laboratories

POSITIONS OPEN

Marine Biotechnology/Molecular Biology University of Washington College of Ocean and Fishery Sciences

Two tenure-track positions will be filled in support of a new College initiative in the area of marine biotechnology/molecular biology. Appointees will occupy new state-of-the-art laboratories in the College.

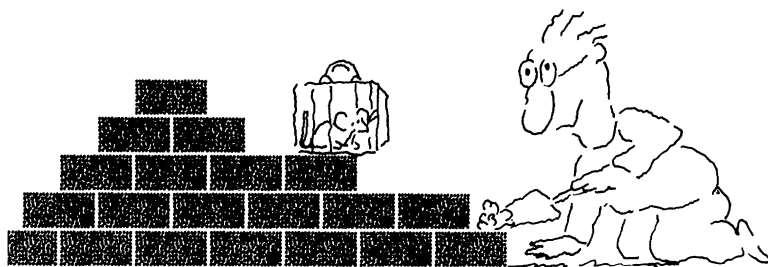
School of Oceanography—Marine Biotechnology (re-opened)

The School of Oceanography invites candidates active in research that applies biotechnology to marine microbes (phytoplankton, bacteria or protozoans) to apply for a senior-level state-funded faculty appointment in the School of Oceanography. In addition to participating actively in research and teaching in marine biotechnology, the successful applicant will act as the School's liaison to extensive ongoing biotechnological research and teaching programs in other University units, including the Colleges of Engineering, Arts and Sciences, and Forest Resources, the Schools of Fisheries and Medicine, and the Friday Harbor Laboratories, notably on problems of marine bioremediation. Appointment will be as soon after 15 March 1993 as is feasible for the successful candidate. Applicants should send a *curriculum vitae*, statement of research interest, a list of publications, recent reprints, and the names, addresses and phone numbers of four referees to: **Professor A. R. M. Nowell, Director, School of Oceanography, WB-10, University of Washington, Seattle, WA 98195**, by 1 October 1992.

School of Fisheries—Molecular Biologist

The School of Fisheries invites applications from molecular biologists with demonstrated ability to apply modern molecular genetic techniques to fisheries problems, such as stock identification, population structure, aquaculture and seafood product development, or phylogeny of commercially important fishes, mollusks, and crustaceans. The successful candidate is expected to teach courses at the undergraduate and graduate levels; develop a vigorous, externally funded research program; direct graduate students; and provide general molecular/genetics expertise to students, staff, and faculty. This is a 9-month state-funded tenure-track ASSISTANT PROFESSORSHIP in the School of Fisheries, to commence between 1 April and 16 September 1993. Applicants must have an earned doctoral degree. Post-doctoral or equivalent experience is desirable. Applicants should send a *curriculum vitae*, a statement of research and teaching goals, copies of published papers or manuscripts in press, and names, addresses, and phone numbers of four referees to: **Professor Marsha L. Landolt, Director, School of Fisheries, WH-10, University of Washington, Seattle, WA 98195**, by 1 October 1992. The University of Washington is an Equal Opportunity/Affirmative Action employer. Applications from women and minority candidates are strongly encouraged.

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SCIENCE Magazine

New Lab Service Department, Rm 830,
1333 H Street, N.W., Washington, DC 20005

The Global Weekly of Research
SCIENCE



Chemical Oceanography Faculty Position

The School of the Environment of Duke University invites applicants for a tenure-track faculty position at the level of Assistant Professor in chemical oceanography. Applicants in all areas of chemical oceanography are encouraged to respond; in particular, the University seeks applicants with a research interest in the carbon cycle. The new faculty member will be resident at the Marine Laboratory in Beaufort, North Carolina. Candidates with sea-going research programs are particularly encouraged to apply. The Marine Laboratory is the home port for the R/V CAPE HATTERAS, a member of the NSF academic oceanographic fleet. The appointee will be expected to develop aggressive research programs and contribute to Duke's developing curriculum in the ocean sciences.

Send curriculum vitae, names of three referees, and letter of research and teaching interests to: Prof. R. T. Barber, Chairman, Oceanography Search Committee, Duke University, School of the Environment, Marine Laboratory, Beaufort, NC 28516, by 15 October 1992.

Duke University

School of the Environment

Duke University is an Equal Opportunity/
Affirmative Action Employer

APPLICATIONS TO HOST SCIENTISTS & ENGINEERS FROM THE FORMER SOVIET UNION

The National Research Council's Cooperation in Applied Science and Technology (CAST) program invites applications from American laboratories which wish to host colleagues from the Newly Independent States (NIS) of the former Soviet Union (not including the Baltic states) for one academic year (up to nine months) to carry out joint research in U.S. universities and research institutions. Nine month incentive grants will be in the range of \$10,000-\$12,000. This program, which is funded by the U.S. Agency for International Development, will help NIS scientists and engineers who have worked in defense related research in the NIS to apply their skills to civilian activities. Young NIS specialists with a strong potential to contribute to the development of the private sector in their home country will receive special consideration.

American hosts and NIS specialists must possess doctoral degrees or their equivalent six months prior to the requested beginning date of the visits. Proposals are invited in the following fields: applied mathematics/statistics, control theory, computer science, aeronautics, applied physics, materials science, nuclear science, electronics, chemistry, microbiology, virology, and all branches of engineering. Although priority will be given to NIS specialists in defense related fields, other fields or specialists not previously engaged in defense work are welcome.

American hosts are expected to make all arrangements for the visits directly with their NIS colleagues. All visits must commence in calendar year 1992 or 1993.

Application deadlines for this program:

- (1) **Deadline: September 14, 1992;** Notification: November, 1992
- (2) **Deadline: March 1, 1993;** Notification: May, 1993

Requests for application packets: Office for Central Europe and Eurasia; National Academy of Sciences; 2101 Constitution Avenue, NW (FO2014); Washington, DC 20418; Telephone*: 202-334-3680; Fax: 202-334-2614 Bitnet: CAST@NAS; Internet: CAST@NAS.ed
*Please specify "CAST Program, 1992/1993"

ASSOCIATE EDITOR

An editorial position at *Science* is available for a Ph.D. scientist with a broad range of interests and research experience in one or more of the following areas: condensed matter physics, astrophysics, planetary science, chemistry and/or materials science. We are seeking someone with at least two or three years of postdoctoral experience and publications in the refereed literature. Editors have varied responsibilities including solicitation, selection, and editing of manuscripts. Previous editorial experience is not required. This is a full-time position in our Washington office.

Please send resume and a list of publications with cover letter and salary requirements to:

Ms. Alison French
AAAS
1333 H Street, NW
Washington, DC 20005

EOE

**COLORADO STATE UNIVERSITY
HILL PROFESSOR OF
ANIMAL BIOTECHNOLOGY**

A new professorship has been established within the Animal Reproduction and Biotechnology Laboratory. We seek an individual, as Associate Professor or Professor, with outstanding potential and a record of accomplishment in research and graduate education, whose expertise would be focused on programming reproduction or altering gene expression in agricultural animals. A Ph.D. or equivalent is required. Opportunities exist for interactive research with 13 faculty in the Animal Reproduction and Biotechnology Laboratory, as well as other molecular biologists on campus. A research program supported primarily by extramural research funds is expected. The ability to teach systemic physiology, cell and molecular biology, or developmental biology is essential. The Department will name an individual the Hill Professor of Animal Biotechnology. An endowment will provide long-term, partial support for activities associated with this position. The new faculty member will be considered for this designation. Salary is negotiable.

Nominations, inquiries or applications should be directed to Dr. Terry Nett, Department of Physiology, Colorado State University, Fort Collins, CO 80523. This truly is an open search for the best individual. Application deadline October 5, 1992. Applicants should submit a letter of interest outlining research and teaching qualifications and research goals, and a complete CV. Names, addresses and telephone numbers of 4 references must be included. If requested, inquiries will be kept confidential.

Minority scientists are encouraged to apply. Colorado State University is an EEO/AA employer. EO Office: 21 Spruce Hall.

Vice Dean for Graduate Studies and Research



Hahnemann University

A search is underway for a Vice Dean for Graduate Studies and Research at Hahnemann University. Hahnemann is a modern, progressive health sciences institution located in dynamic center city Philadelphia. Hahnemann is comprised of the School of Medicine, the Graduate School, the School of Health Sciences and Humanities, and Hahnemann Hospital, a 616-bed tertiary care center. Approximately 2,000 students are matriculated in the three schools of the University, and the University has over 4,000 employees.

The Graduate School has 22 Master's and 12 Ph.D. programs with 647 students. Hahnemann is making a major effort to enhance research. Extramural funding is \$17,000,000 (an 86% increase over 1988). The Vice Dean will report to the Dean of the Graduate School and Vice President for Research. The Vice Dean will be responsible for the management of all aspects of the Graduate School, including recruitment, admissions, and student affairs. In addition, he/she will play an important role in research development.

The successful candidate must have an earned doctorate in a biomedical-related area and a strong record of academic achievement, including publications and the garnering of competitive research funding. He/she must qualify for appointment at the Professor level in an academic department.

Nominations or applications, including a curriculum vitae and the names of three references, are due no later than September 30, 1992, and should be sent to: **Stephen R. Max, Ph.D., Dean, Graduate School and Vice President for Research, Hahnemann University, Broad & Vine, Mail Stop 480, Philadelphia, PA 19102-1192.** Hahnemann is an Equal Opportunity Employer, an Affirmative Action Employer, and invites and encourages applications from women and minorities.

National Institute of Child Health & Human Development
National Institutes of Health

CHIEF

Contraceptive Development Branch
Center for Population Research

The National Institute of Child Health and Human Development (NICHD) is seeking applicants for the position of Chief, Contraceptive Development Branch (CDB). This position is located in Rockville, Maryland, and is a permanent full-time position with a salary of \$64,233 to \$83,502 per annum commensurate with qualifications.

The Chief, CDB is responsible for directing, planning, managing and evaluating a program of contracts, grants, and centers conducting research on the development of new and improved methods of fertility regulation. Applicants for this position must have an advanced degree (Ph.D./MD) or equivalent experience in biomedical sciences and have experience in contraceptive development. Experience with NIH programs is desirable. Send Applications for Federal Employment (SF-171) to:

Ms. Robin A. Avent
NICHD/NIH
Building 31, Room 2A25
9000 Rockville Pike
Bethesda, MD 20892



For application forms and a copy of the requirements, contact the NICHD Personnel Office on (301) 496-3365. **The deadline for applications is September 12, 1992.**

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

The University of Minnesota Department of Surgery, Division of Surgical Sciences is seeking a Professor (tenured)/Program Director to lead and direct its Immunology Research Program regarding immunosuppressive and antiarthritic drug research.

QUALIFICATIONS:

Individual must have a Ph.D. in Immunology and should have 10-15 years of experience in an academic setting and/or pharmaceutical company doing original research. Experience in drug development with a pharmaceutical company including FDA submission is mandatory. Individual must have a national reputation in research with evidence of leadership in candidate's professional field.

RESPONSIBILITIES:

Individual will be responsible for the overall direction of the Immunology Research Program as well as working with physicians in the design and interpretation of clinical trials. The individual will develop, implement, and advise on resource development. He/She will coordinate reports, displays, publications, and other results of the Immunology Research Program. Individual will develop and maintain liaisons with other University staff and students as needed and will stay current with developments within the field and will broaden knowledge and expertise. Individual will carry out research, teaching, and administrative duties. Individual will contribute to the development of the program through participation in national and/or international associations, publications, and/or other related activities.

Send curriculum vitae by September 15, 1992 to:

Rosalie Cihlar
Executive Secretary
Surgery Department
University of Minnesota
Box 195 UMHC
Minneapolis, MN 55455

THE UNIVERSITY OF MINNESOTA IS AN
EQUAL OPPORTUNITY EDUCATOR AND EMPLOYER

POSITIONS OPEN

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION available for candidates with strong background in molecular virology or pharmacology to study mechanisms of HIV replication in infected cells and molecular pharmacology of novel antiviral agents. Eligible candidates should have Ph.D. or M.D. degree and not have more than three years of postdoctoral research experience. Salary will depend on experience. Support includes travel to scientific meetings. Send curriculum vitae and names of three references to: **Dr. Arnold Fridland, Department of Infectious Diseases, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. St. Jude Hospital is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATES. Preuss Laboratory for Brain Tumor Research, at Duke University Medical Center, seeks postdoctoral fellows with background in molecular biology. Candidates must have Ph.D. in biological sciences and interest in tumor and molecular biology and/or immunology. Laboratory studies include suppressor genes, generation and humanization of murine monoclonal antibodies, genes related to differentiation in tumors and to mutant EGF receptor. Competitive salary from NIH training grant and other funds related to qualifications and experience. Send curriculum vitae and three letters of reference to: **Darell D. Bigner, M.D., Ph.D., Edwin L. Jones, Jr., and Lucille Finch Jones Cancer Research Professor of Pathology, Duke University Medical Center, Box 3156, Durham, NC 27710. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATES. Two positions available January 1, 1993 or sooner to join a multidisciplinary group studying Parkinson's disease, basal ganglia function, and recovery of function following dopamine system damage. Specific research projects will study: (1) *in vivo* neurochemistry and electrophysiology of the nigrostriatal dopamine system in experimental parkinson models and, (2) neurochemical, anatomical, and molecular biological studies of ganglioside and neurotrophic factor effects on the dopamine system. Minimum requirement: a Ph.D. in Neuroscience or a related discipline. Desired: Position (1) experience in microdialysis or single unit electrophysiology; Position (2) neurochemistry/molecular biology background, experience with *in situ* hybridization. Send curriculum vitae, a letter stating research interests and the names of three references to: **Jay S. Schneider, Ph.D., Hahnemann University, Department of Neurology, Broad and Vine Streets, Mail Stop 423, Philadelphia, PA 19102. An Equal Opportunity Employer.**



The USDA, Agricultural Research Service, Biosciences Research Laboratory, Fargo, North Dakota has a position for **POSTDOCTORAL/RESEARCH GENETICIST** for Genome Mapping in *Heliothis* pest species. Emphasis is on genes involved in reproductive and developmental processes, pesticide resistance and the transposable sequences. Experience in PCR, gene cloning, DNA sequencing and *in situ* mapping required. Appointment will be for two years with possible one year extension and an additional one year extension with starting salary of \$32,423 per annum. Contact: **S. Karl Narang, USDA, ARS, P.O. Box 5674, SU Station, Fargo, ND 58105, telephone: 701/239-1273** for further information on research project and **J. A. Murchison, telephone: 301/344-3138**, for application procedure. *Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSISTANT-ECOLOGIST. Biological weed control and the regulation of plant populations by herbivores. Requires strong background in population ecology of plant/insect interactions and Master of Science degree in biological science with an emphasis in ecology. Application deadline is September 1, 1992. Starting date is September 11, 1992. Full-time appointment, minimum salary \$24,000 per year. Send résumé, statement of qualifications, transcripts, and three letters of reference to: **P.B. McEvoy, Department of Entomology, Oregon State University, Corvallis, OR 97331-2907. Oregon State University is an Affirmative Action/Equal Opportunity Employer and is responsive to dual-career needs.**

POSITIONS OPEN

THE DIVISION OF GASTROENTEROLOGY AT VIRGINIA COMMONWEALTH UNIVERSITY is seeking a highly motivated Ph.D. or M.D. to conduct studies on hepatic cholesterol metabolism. Work will involve transfection and regulation of gene expression. Training and research experience in molecular/cellular biology required. Please send curriculum vitae and three references to: **W.M. Pandak, M.D., Division of Gastroenterology, Box 711, Richmond, VA 23298. "An Equal Opportunity/Affirmative Action Employer."**

JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS (JILA)

JILA [operated jointly by the National Institute of Standards and Technology (formerly NBS) and the University of Colorado] is devoted to research, study, and teaching in atomic and molecular physics, chemical physics, laser physics, astrophysics, precision measurement, gravitational physics, geophysical measurement, and related areas. Applications are invited for two programs:

- (1) **RESEARCH ASSOCIATESHIPS** for advanced research by recent Ph.D.'s. Applications are accepted and considered anytime throughout the year.
- (2) **VISITING FELLOWSHIPS** for advanced research by senior scientists. Deadline for completed applications is **November 1, 1992.**

Further information can be obtained from: **Secretary, Visiting Scientists Program, JILA, Box 440, University of Colorado, Boulder, CO 80309-0440. The University of Colorado is an Affirmative Action/Equal Opportunity Employer.**

NEUROBIOLOGY RESEARCH ASSOCIATE

A Postdoctoral Research Associate position is immediately available to study Olfactory Physiology in vertebrates. The research involves a multidisciplinary approach to the anatomical, behavioral, and hormonal substrates of olfactory communication in the hamster and mouse. Experience in one or more of these areas is a requisite. Send résumé, statement of research interests, experiences, and the names of three references to: **Dr. Robert J. O'Connell, c/o Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545. An Affirmative Action/Equal Opportunity Employer M/F/H.**

RESEARCH ASSOCIATE

Position available for M.D. or Ph.D. to join and aid in the direction of an active head injury laboratory. A strong background and interest in pharmacological, anatomical and neurobehavioral aspects of experimental CNS trauma is sought. This position will entail initiating and carrying out independent research projects in this area. Some postdoctoral experience is desired. We are looking for a long term relationship in a laboratory with a lot of potential for growth. A very competitive salary and fringe benefit package is assured the proper candidate. A joint appointment in the Department of Neurosurgery at the University of Minnesota is an option. Direct inquiries to: **Gaylan L. Rockswold, M.D., Director, Head Injury Program, Hennepin County Medical Center, 701 Park Avenue, Minneapolis, MN 55415-1829. Telephone: (612) 347-2810.**

RESEARCH ASSOCIATE to focus on pesticide fate in soil. Nontenure position (18 months) to plan and execute research, data analyses and report results in conjunction with cooperative project for University of Nebraska-Lincoln (UNL), USDA-ARS and USEPA. Requires Ph.D. in soil and water sciences or related field as well as experience with synthetic organics, radioisotopes and instrumental analysis. Desire familiarity with gas chromatography, HPLC, radioassay techniques, and soil characterization. To adequately address the project candidate should have a strong background in soil mineralogy, soil chemistry, soil microbiology and soil physics. Send résumé, transcripts and three letters of reference by September 4 to: **Dr. Robert C. Shearman, Department of Agronomy, University of Nebraska-Lincoln, P.O. Box 830915, Lincoln, NE 68583-0915. Telephone: 402/472-1555. UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples.**

POSITIONS OPEN

RESEARCH ASSISTANT

Research Assistant position is available in the Department of Surgical Research at the University of Virginia Health Sciences Center. Research areas include projects studying the host-defense mechanisms and their relationship with bacterial pathogens in the development of infections. Experience in cell biology and/or microbiology is needed. The Research Assistant will gather and tabulate data and aid in the preparation of manuscripts for publication. M.S. degree or higher and expertise in computer application is required. Send curriculum vitae to: **Timothy L. Pruett, M.D., Department of Surgery, Box 181, University of Virginia Health Sciences Center, Charlottesville, VA 22908. Affirmative Action/Equal Opportunity Employer.**

ASSISTANT RESEARCH SCIENTIST to study toxicological implications of metallothionein gene expression and synthesis in early development of molluscs. Requires Ph.D. in appropriate field with strong background in molecular biology/protein chemistry and marine invertebrate developmental biology. Send curriculum vitae and names of three references to: **Dr. G. Roesijadi, The University of Maryland System-CEES, Box 38, Solomons, MD 20688. Deadline: August 31, 1992 or until position is filled. Affirmative Action/Equal Opportunity Employer.**

ENVIRONMENTAL PROFESSIONALS sought with applied experience in:

- terrestrial and wildlife ecology
- wetland ecology
- aquatic ecology and limnology
- ecological risk assessment

Successful candidates should have excellent written and oral communication skills and an ability to interact with clients and regulatory agencies. Ph.D. or M.S. preferred, quantitative and computer skills desired. Ability to work in a multidisciplinary team environment a must. Send résumé and salary history to: **Manager of Human Resources, Breedlove, Dennis and Associates, Inc., P.O. Box 720037, Orlando, FL 32872-0037. An Equal Opportunity Employer.**

RESEARCH AGRONOMIST to develop and identify millet inbred lines and hybrids, including maintenance of germ plasma; plan and supervise laboratory and field operations such as seed filing, inventory, seed packaging, planting, pollinating, harvesting and data collection; prepare reports and data summaries; supervise selection and training of temporary employees. B.S. Agronomy (plant breeding) plus one year of experience as a Research Agronomist (in the job offered) and four years of experience as a Plant Breeder. Salary: \$2,098 per month, 40 hours per week. Apply at the Texas Employment Commission, Plainview, Texas, or send résumé to: **The Texas Employment Commission, TEC Building, Austin, TX 78778. Refer to J.O. #6687461. Ad paid by an Equal Opportunity Employer.**

RESEARCH SCIENTIST in Department of Neuroscience of Medical Center/King Drew University. Research on the pathophysiology of neurogenic bladder associated with head and spinal cord injuries. Responsible for abstracting information from patients' charts, use of computers, research library.

Ph.D. in Biological science. Experience: three years. Salary: \$50,000 per year. Job site/interviews: Los Angeles, California. Send this ad and résumé to: **Job # WS 12775, P.O. Box 9560, Sacramento, CA 95823-0560 no later than August 22, 1992.**

Ph.D.—PHARMACOLOGY

The Product Development Division at Ribi ImmunoChem Research, Inc. invites applications for a position at the **RESEARCH SCIENTIST II** level. Candidates should have expertise in cellular immunology with managerial experience over technical staff. Experience with immunofluorescence, *in-vitro* cytotoxicity, ELISA and immunoblot desirable. The successful candidate will be expected to be the product advocate for tumor vaccine development projects. Applicants must have a Ph.D. in related scientific discipline with two to five years of industry experience. Send letter of interest, curriculum vitae, bibliography and three references to: **Human Resources Manager, Ribi ImmunoChem, 553 Old Corvallis Road, Hamilton, MT 59840. Equal Opportunity Employer.**

Research Investigator Hematology

Searle, a world-wide leader in the research, development and manufacture of high quality pharmaceuticals, is seeking a Research Investigator who shares our vision of excellence.

The selected individual will be responsible for method development and problem solving of key issues in drug development in the areas of thrombosis, immunology, and biotechnology.

Qualified candidates will possess a B.S. or M.S. in life sciences or medical technology and experience in standard hematologic assays. Experience with novel techniques, including flow cytometry, is preferred.

In return for your expertise, Searle offers an outstanding salary/benefits package. For consideration, please send your resume to: **Searle, Human Resources, Dept. PB38, 4901 Searle Parkway, Skokie, IL 60077.** An equal opportunity employer M/F/H.



CELL BIOLOGIST

Unit of Bone Biology Cellular Biochemistry

SmithKline Beecham, a worldwide leader in pharmaceutical research, is seeking a Biologist to join our Cellular Biochemistry Department. The ideal candidate will be able to be part of a new growing team, working on a variety of aspects of the function and regulation of osteoblasts and osteoclasts.

Requirements include a Ph.D. in a relevant area of biology and a minimum of one year's postdoctoral experience. Ideally, the successful candidate will have experience in the study of bone cell differentiation, manipulation of cell function and/or gene expression, and excellent interpersonal skills.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, a stimulating team environment and the opportunity for personal and professional growth. For confidential consideration, please send your C.V. to: N. Hasson, H0197, Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.

DIRECTOR, SCHOOL OF MARINE AFFAIRS UNIVERSITY OF WASHINGTON COLLEGE OF OCEAN AND FISHERY SCIENCES

Applications are invited for the tenured positions of **DIRECTOR AND PROFESSOR OF MARINE AFFAIRS.** SMA is an interdisciplinary component of the College with the responsibility for education and research in marine affairs, including marine policy and institutions, management aspects of the coastal zone, marine pollution, marine resources, and ports and marine transportation. The School offers a masters degree in marine affairs (current enrollment is 69 students). Applicants must have a Ph.D. or equivalent degree in any natural or social science or professional field. Significant experience in research and/or teaching in a relevant marine affairs field is required. Previous academic administrative experience is highly desirable. The appointee will be considered for designation as the Virginia and Prentice Bloedel Professor, an endowed, University-wide 5-year appointment.

Applicants should send a curriculum vitae, statement of research and teaching interests, statement briefly identifying the most pressing problems in marine affairs, relevant recent publications, and the names, addresses and phone numbers of four referees to Professor William T. Burke, Chair, SMA Search Committee, School of Law, JB-20, University of Washington, Seattle, WA 98195. Applications from women and minority candidates are strongly encouraged. Affirmative action/equal opportunity employer. Closing date is November 1, 1992.

Vice President and Provost for Health Affairs and Executive Director University of Connecticut Health Center Proposed Advertisement

The President and the Board of Trustees of the University of Connecticut invite applications and nominations for the position of Vice President and Provost for Health Affairs and Executive Director of the University of Connecticut Health Center. The successful candidate will possess recognized qualifications of leadership and academic achievement to provide for further dynamic development of the Health Center as an institution of national renown.

The University of Connecticut Health Center is located in Farmington, Connecticut, seven miles west of Hartford, and is the only campus of the University solely devoted to the health sciences. It is the site of the School of Medicine, School of Dental Medicine, and a division of the Graduate School and offers advanced health professional degrees, doctoral degrees in the biomedical sciences, and fellowship and residency training in a wide range of medical and dental specialties. The Health Center also has major clinical activities with over 275,000 outpatient visits annually. The campus is a significant center for basic, clinical, and behavioral science research activities with greater than \$35 million in external funding support annually. The 1991-92 total student enrollment was approximately 1400. The Health Center employs more than 3,800 individuals and the campus annual operating budget is approximately \$300 million.

The Vice President and Provost reports to the President and is the chief executive officer responsible for all aspects of the administration of the University of Connecticut Health Center and two hospitals, the John Dempsey Hospital in Farmington and the Uncas on Thames Hospital in Norwich. Candidates should have demonstrated experience in the administration of substantial organizations, preferably in an academic health center environment, have demonstrated skills in development, have doctoral level education, and have a strong record of scholarship and research activity which would qualify them for a faculty appointment in one of the schools. Salary level is competitive.

Applications, accompanied by current resumes, and nominations should be sent to:

Dean Robert Gray
Chair, Vice President Search Committee
Dental Student Affairs Office
MC 3905
The University of Connecticut Health Center
Farmington, Connecticut 06030

Screening will begin immediately and will continue until the position is filled. It is our goal to fill the position as early as January 1, 1993. The University of Connecticut has a strong commitment to the principle of diversity and, in that spirit, seeks a broad spectrum of candidates including women, members of minority groups, and people with disabilities.

Postdoctoral Fellows

The R.W. Johnson Pharmaceutical Research Institute in La Jolla, California has an opening for a two-year Postdoctoral Research Fellow appointment.

The position is available immediately in the Vascular Biology group to study novel molecular mechanisms that contribute to leukocyte infiltration during pathophysiologic inflammatory reactions. Current research efforts focus on structural and functional analysis of cell surface molecules involved in leukocyte-endothelial cell interactions. The work involves protein biochemistry and recombinant DNA technology. Applicants should have a strong background in molecular biology and cell biology.

This position provides liberal research support, excellent library facilities, and a good benefits package as part of Johnson & Johnson, the world's largest and most comprehensive provider of health care products. Please submit your curriculum vitae to: Human Resources Manager, R.W. Johnson Pharmaceutical Research Institute, 3535 General Atomics Court, Suite 100, San Diego, CA 92121. An Equal Opportunity Employer.



THE R.W. JOHNSON
PHARMACEUTICAL RESEARCH INSTITUTE
a Johnson & Johnson company

Excellent R&D opportunities with a rapidly growing biotechnology company developing bioreceptor ferrofluids for high value diagnostic and therapeutic applications.

Program Manager-PhD

We seek a Colloid Chemist who has 8-10 years experience working with immunoconjugates and will be responsible for directing the development of magnetic particles for medical applications.

Protein/Bio-Organic Chemist-PhD

Candidates must have 5+ years experience working with antibodies, protein/polymer modification and conjugation.

Protein/Polymer Chemists-MS

Several openings exist for Chemists with 3-5 years experience working with antibodies to include protein/polymer modification and conjugation. Product development/scale-up experience is desirable.

Research Scientist-BS/MS

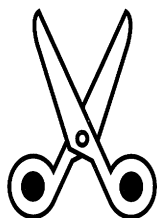
Position offers both research and product applications development opportunities. 4+ years R&D experience in cellular immunology, immunochemistry and protein chemistry with some knowledge of molecular biology are required.

Biochemist-BS

R&D opportunity for qualified individual to assist in characterization and sizing of magnetic particles.

At Immunicon, we provide competitive salaries and benefits in an invigorating research environment where new ideas are encouraged. Qualified candidates should submit resume, indicating position desired, to: Human Resources, Immunicon Corporation, 1310 Masons Mill II, Huntingdon Valley, PA 19006. EOE.

Immunicon Corporation



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DIRECTOR POLAR RESEARCH

The NATIONAL RESEARCH COUNCIL is seeking a Staff Director for its Polar Research Board. Responsibilities include management and development of new projects, supervision of professional and support staff, and interactions among relevant professional communities and government agencies. Requires an MA/MS or equivalent in the natural or social sciences or a related field pertinent to development and management of polar science programs; at least 8 years experience in research, policy analysis and formulation, and program management; knowledge and understanding of both scientific and policy issues associated with polar research activities; familiarity with relevant national and international scientific communities and government agencies; and effective oral and written communication skills. Please send resume and other supporting materials in confidence to: NRC/CGER-SR, HA 466, 2101 Constitution Avenue, N.W., Washington, DC 20418. EOE



MILESPharmaceutical
Division

Miles Inc., Pharmaceutical Division, has an exciting career opportunity for an independent, research-oriented individual at the Miles Research Center in West Haven, CT:

RESEARCH SCIENTIST

A molecular biologist is needed to conduct basic research on insulin action for the development of novel therapies for diabetes. The successful applicant will have two or more years of postdoctoral experience and will have extensive training in homologous recombination, anti-sense technology and other methods necessary to perform gene-knockout studies in eukaryotic cells. The candidate should demonstrate evidence of innovation and productivity by a strong publication record, and be able to work efficiently in a multidisciplinary team.

We offer attractive compensation and generous benefits. Resumes, including salary history, should be forwarded in confidence to: **Miles Inc., Pharmaceutical Division, Dept. AANL, 400 Morgan Lane, West Haven, CT 06516.** No phone calls please.

An Equal Opportunity Employer M/F/D/V

RESEARCH SCIENTIST YEAST GENETICS

ZeaGen, Inc. (formerly Coors BioTech) is currently seeking a highly motivated scientist to join our Microbial Genetics Group. This position will play a key role in projects involving the modification of microbial metabolic pathways for the production of vitamins and specialty chemicals. The minimum requirement for this position is a Ph.D. with 2 years of postdoctoral training or equivalent research experience in a relevant industry. The successful candidate will have demonstrated excellence in yeast genetics and gene expression. Excellent communication skills are required, and a willingness to work as a member of a multidisciplinary project team.

We are also seeking qualified individuals at the BS/MS level with 1-2 years of research experience. These positions require a degree in Microbiology, Biochemistry, or Molecular Biology, and a desire for professional development in an industrial research environment.

ZeaGen's research facilities are located in Fort Collins, an attractive university community convenient to the recreational opportunities available in Colorado. We offer a competitive compensation and benefits package, as well as the opportunity to live in the affordable Rocky Mountain region.

Please submit your curriculum vitae and salary requirements to:

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NYU
Medical
Center

ASSOCIATE RESEARCH SCIENTIST

A recent PhD or Postdoc in neuroscience, neuropharmacology or related area is needed to take a leadership role in basic and clinical laboratory interacting with NYU's strong biological psychiatry group. Areas of major interest include schizophrenia, brain metabolism (PET), movement disorders, and substance abuse. Applicants must have strength in neuroscience and biochemical methodology, leadership talents, initiative in developing and implementing grants and projects, good writing skills, and good interpersonal skills.

ASSISTANT RESEARCH SCIENTIST

We're looking for a PhD in Pharmacology/Neuroscience to participate in neuroscience molecular pharmacology research. Experience in mammalian cell culture is required. Interest and/or experience in signal transduction, second messengers, and molecular neurobiology is desirable.

Interested applicants please send CV to **Maha Singh, Human Resources, NYU Medical Center, 550 First Ave., New York, NY 10016.** EOE, M/F.

Research Associates

Amgen is a recognized leader in the development of innovative human therapeutic products through applications of biotechnology. We foster quality research by giving our people the tools and support necessary to achieve excellence. Our continuing success has generated the following challenging opportunities:

DNA SEQUENCING

Responsibilities involve DNA sequencing in support of on-going research and product development programs. Qualifications include a BS or MS degree in Molecular Biology, Biochemistry or related discipline with at least two years' experience in the dideoxy chain termination method of DNA sequencing. Basic skills in Molecular Biology, cloning techniques and computer analysis of DNA sequencing are also essential. Experience with ABI 373 automatic sequencer preferred. **Code #S-807**

PHARMACOLOGY

This Research Associate position involves in vivo research and requires knowledge of surgical techniques, injection methods, tissue and blood sampling, as well as biochemical assays. Statistical analysis and computer skills are preferred. **Code #S-130**

Amgen offers a stimulating and challenging research environment on the leading edge of biotechnology, as well as an excellent compensation and benefits package that includes comprehensive relocation benefits. If you have the necessary qualifications and would like to be part of an organization that places its highest value on the contributions of its people, please send your resume, indicating appropriate code, to: **Amgen, Inc., Staffing Department, Amgen Center, Thousand Oaks, CA 91320-1789.** Amgen is an Equal Opportunity Employer.

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POSITIONS OPEN

ASSOCIATE RESEARCH SCIENTIST in the Department of Neurology, College of Physicians and Surgeons of Columbia University. Applicant must hold Ph.D. in one of the biological sciences with subsequent postdoctoral training or documented experience with cellular immunology and molecular biology. Preference given to individuals with research experience studying immunoglobulin genes and using transgenic animals. Salary based upon experience and credentials. Write to: **Norman Latov, M.D., Ph.D., Neurological Institute, 710 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

MOLECULAR BIOLOGIST/PHYSIOLOGIST: Tenure track appointment(s) at the University of Virginia. Rank dependent upon accomplishments and potential. The Department has a strong program in structural biology (atomic force microscopy, electron energy loss spectroscopy, cryoelectron microscopy, electron probe analysis and confocal microscopy), and wishes to recruit molecular biologists in the area of transporting enzymes, ion channels and/or receptors/G-proteins. An Investigator with an established track record is preferred, but consideration will be given to exceptional individuals at the beginning Assistant Professor level. A salary and benefits package commensurate with experience will be offered. Please send applications with curriculum vitae and three references to: **Gary K. Owens, Ph.D., Search Committee Chairperson, Department of Physiology, University of Virginia School of Medicine, 1300 Jefferson Park Avenue, Box 449 Jordan Building, Charlottesville, VA 22908. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.**

RESEARCH SCIENTIST MEDICINAL CHEMISTRY

Terrapin Technologies is developing anti-cancer drugs based on studies of cellular toxic agent defense mechanisms. The successful candidate will have a Ph.D. in synthetic organic chemistry with two to five years of industrial experience as a medicinal chemist. Primary responsibilities will include the design of short peptide mimetic compounds, in collaboration with a computational chemist, and synthesis and purification of the compounds at the bench. Working knowledge of protein biochemistry will be a plus. Interested parties should send their résumés, with salary history and three references to: **Matt Lyttle, Terrapin Technologies, 750H Gateway Boulevard, South San Francisco, CA 94080.**

STAFF POSITION

Available immediately for Ph.D. in cytokine research. The individual will join a research team studying the cellular and molecular mechanisms of human B cell differentiation. The candidate should have at least two years of postdoctoral training in immunology. Salary is negotiable. The interested candidate is encouraged to send curriculum vitae to:

Dr. Y. S. Choi
Director, Laboratory of Cellular Immunology
Alton Ochsner Medical Foundation
1520 Jefferson Highway
New Orleans, LA 70121
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The Centers for Disease Control (CDC), Retrovirus Diseases Branch invites applications for the position of **SUPERVISORY RESEARCH MICROBIOLOGIST**. Position will be responsible for directing studies of the immunoregulation of human retrovirus replication and expression and for supervising the staff of the Immunology Section. Applicants must have a doctoral degree in the biologic sciences, six years of experience as an independent investigator in an area of immunology, and two years of supervisory experience. Proven ability to guide strong HTLV research program and extensive publications in the field of retroviral immunology are essential. Salary: \$54,607 to \$70,987. Submit curriculum vitae and names of three references to: **Ms. Janie Oddy, Centers for Disease Control, Personnel Management Office, Building 1, Room 1058, 1600 Clifton Road NE, Atlanta, GA 30333.** For further information, contact: **Dr. Thomas Folks, Chief, Retrovirus Diseases Branch, CDC, at (404) 639-1024. CDC is an Equal Opportunity Employer and provides a smoke-free environment.** Applications must be received by September 1, 1992.

ANNOUNCEMENTS

GRADUATE FELLOWSHIPS

The University of Maryland, Center for Environmental and Estuarine Studies is pleased to announce the immediate availability of Fellowships in support of graduate student research as part of the Multiscale Experimental Ecosystem Research Center (MEERC), one of four Exploratory Environmental Research Centers established by the U.S.E.P.A. An interdisciplinary team of scientists will explore scale-dependent responses of land-margin ecosystems to nutrient and contaminant inputs. For information contact: **Dr. Thomas C. Malone, Director, Horn Point Environmental Laboratory, Box 775, Cambridge, MD 21613. Affirmative Action/Equal Opportunity Employer.**

REQUEST FOR PROPOSALS to conduct a theoretical review of the demographic approach to evaluating the population dynamics of the Northern Spotted Owl. The review must be completed by January 4, 1993. Applicants should submit a letter of intent, budget, and curriculum vitae by September 1, 1992. Proposals and inquiries should be sent to: **Dr. Robert J. Taylor, Director of Wildlife Ecology, California Forestry Association, 1311 I Street, Sacramento, CA 95814, telephone: (916) 444-6592.**

THE UNIVERSITY OF WISCONSIN

E. coli genome sequencing project has openings for: Scientist, postdoctoral, manager, programmer, technician with expertise in molecular biology, sequencing, biocomputing or informatics.

Submit letter of application and curriculum vitae to:

**Frederick Blattner, Laboratory of Genetics,
445 Henry Mall, Madison, WI 53706**

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COURSES AND TRAINING

POSTDOCTORAL TRAINING PROGRAM IN CLINICAL CHEMISTRY HEALTH SCIENCES CENTRE/ ST. BONIFACE GENERAL HOSPITAL UNIVERSITY OF MANITOBA WINNIPEG, MANITOBA

Applications are now being accepted for a position in a three-year postdoctoral training program in Clinical Chemistry (approved by the Canadian Academy of Clinical Biochemists and the American Association for Clinical Chemistry) to start July 1, 1993.

Candidates must have a Ph.D. with a good background in either Chemistry, Biochemistry, Pharmacology, Immunology, or a related discipline, or an M.D. degree. The Departments of Clinical Chemistry provide service, research, and teaching for two University Hospitals with a total of 1,750 beds, and a School of Medicine. Starting salary will be approximately \$30,000.00. Applications including curriculum vitae and three letters of reference should be sent by November 1, 1992 to: **Dr. P. Desjardins, Department of Clinical Chemistry, Health Sciences Centre, 820 Sherbrook Street, Winnipeg, Manitoba, Canada, R3A 1R9; telephone: (204) 787-2843, FAX: (204) 787-3846.**

RESEARCH TRAINING IN GERONTOLOGY

Positions available in NIA training program directed toward basic research in gerontology with special emphasis on the nutritional manipulation of the aging processes. General areas include metabolism and exercise, endocrinology and neuroendocrinology, free radicals and membrane lipid peroxidation, immunology, cellular calcium and bone metabolism, molecular biology and regulation of gene expression. Send curriculum vitae, description of research interests and the names of three references to: **Dr. Byung P. Yu, Department of Physiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. An Affirmative Action/Equal Opportunity Employer.**

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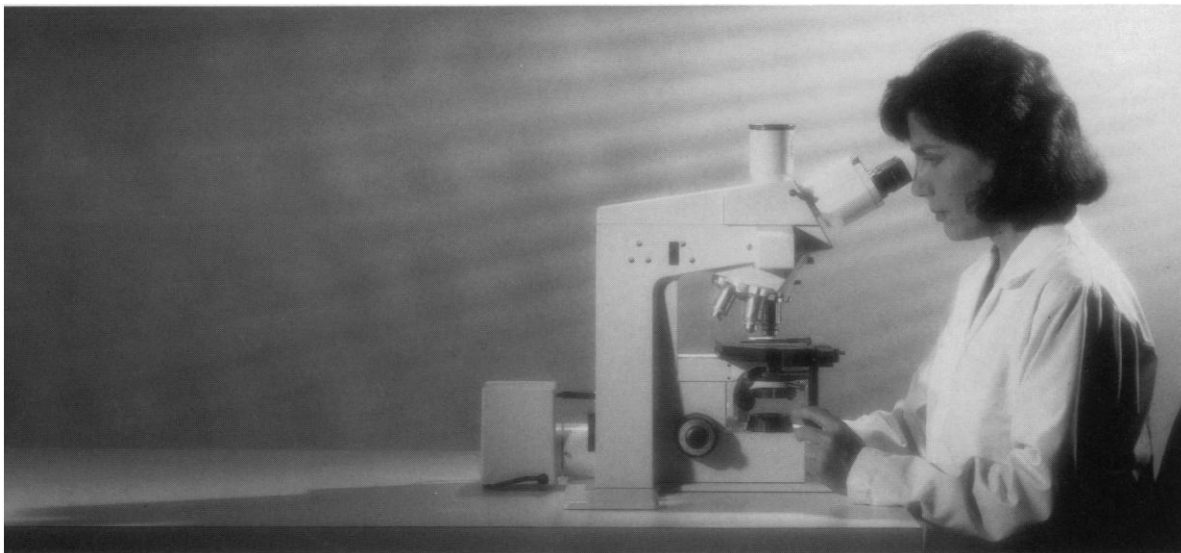
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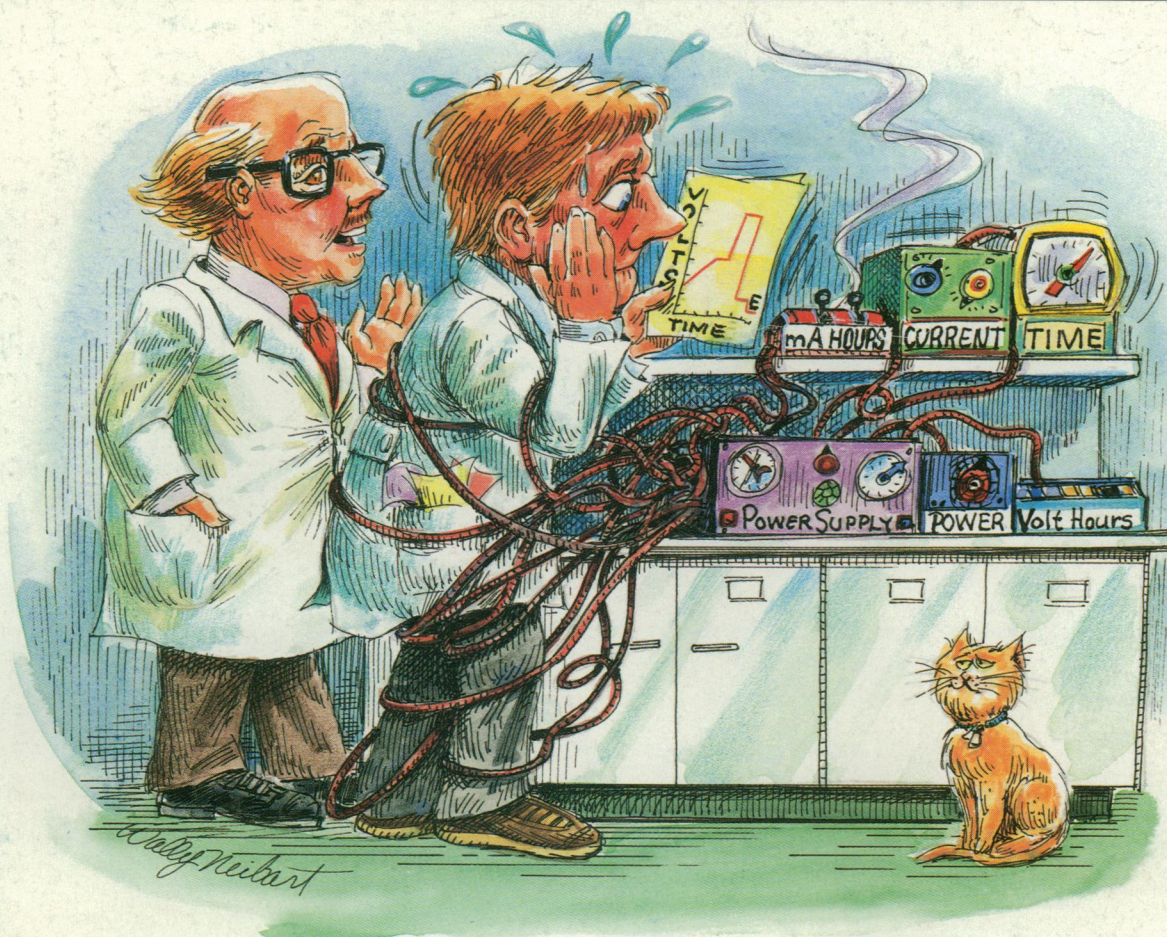
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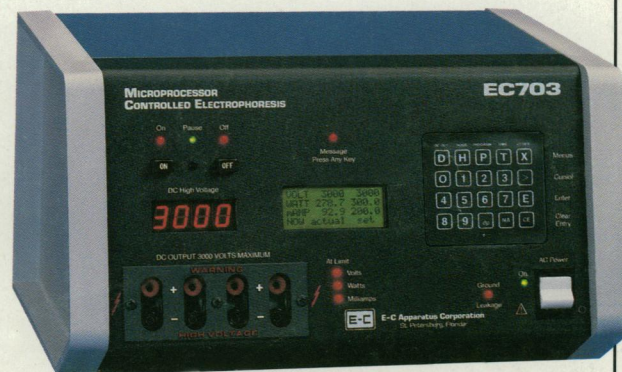
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