

The Division of Cancer Etiology

National Cancer Institute

Announces To the Scientific Community The Availability of the Following
Resources/Services For Cancer Related Research As Noted Below:

Biological Resources

■ Cell Culture Identification Service Using Isozyme Analysis, Immunofluorescence and Karyotypic Analysis (Chromosome Banding)

Contact: Dr. Ward Peterson
Children's Hospital of Michigan
3901 Beaubien Boulevard
Detroit, MI 48201
(313) 745-5570

Citing Contract #N01-CP-85645

Cost: Inquire

■ Goat Antisera Against: Avian, Bovine, Feline, Murine, and Primate Intact Viruses and Viral Proteins; Antibodies to Immunoglobulins for a number of species. Preimmune Sera available for some Virus Antisera.

Contact: Alice K. Robison, Ph.D.
BCB Repository
Quality Biotech, Inc.
1667 Davis Street
Camden, NJ 08104
(609) 966-8000
(609) 342-8078 FAX
Citing Contract #N01-CP-15665

Cost: \$75.00/5 ml. (Antisera)
25 00/5 ml. (Preimmune Sera)
65 00/100 ml. (Immunoglobulins)
(Frozen Material)

■ Viruses: Avian, Feline, Murine, and Primate Viruses Produced in vivo and in vitro

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BCB Repository
Quality Biotech, Inc.
1667 Davis Street
Camden, NJ 08104
(609) 966-8000
(609) 342-8078 FAX
Citing Contract #N01-CP-15665

Cost: Inquire

■ Monoclonal Antibodies are available with specificities for synthetic peptides representing the amino acid sequences of the left end, right end and active site of the oncogene products of avian and mammalian retroviruses. Blocking peptides are also available, as are a limited number of cell lines producing the monoclonal antibodies.

Contact: Alice K. Robison, Ph.D.
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Quality Biotech, Inc.
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Camden, NJ 08104
(609) 966-8000
(609) 342-8078 FAX
Citing Contract #N01-CP-15665

Cost: Peptides — \$25 00/mg.
Ascites Fluid — 45 00/ml.
Cell Culture — 100.00/culture
(Plus Shipping and Handling)

■ Human sera from donors with various malignancies (including nasopharyngeal carcinoma), non-malignant disorders, and from normal individuals

Contact: Program Director, Research Resources, Biological Carcinogenesis Branch,
DCE, NCI, NIH
Executive Plaza North, Room 540
Bethesda, MD 20892
(301) 496-1951
(301) 496-2025 FAX

Cost: Shipping and handling charges only

■ The Division of Cancer Etiology's Registry of Experimental Cancers announces the availability of 16 different study sets containing histologic slides of rodent tumors. The study sets, with accompanying syllabi, illustrate a variety of spontaneous and induced tumors, chiefly of rats, mice, and mastomys. Each set is available to cancer investigators worldwide, without charge, for up to two months. Requests or inquiries should be addressed to

Contact: Registry of Experimental Cancers
National Cancer Institute
Building 41, Room D311
NIH, Bethesda, MD 20892
USA

Chemical Resources

■ Analytical support for the collection, separation, and elucidation of environmental carcinogens including combustion and smoking-related exposures. A contractor with experience in the development of analytical methods for the determination of constituents of cigarette smoke and cigarette smoke condensates, and of specialty instrumentation for inhalation toxicology is available to assist qualified investigators with particular interest in human and animal model exposure to environmental and sidestream smoke. An extensive chemical data base on smoke and smoke condensate components is available.

Contact: Harold E. Seifried, Ph.D.
Chemical and Physical
Carcinogenesis Branch, DCE, NCI
Executive Plaza North, Room 700
Bethesda, MD 20892
(301) 496-5471
(301) 496-1040 FAX

Cost: Inquire

■ Chemical Carcinogen Reference Standard Repository. Reference quantities of over 750 compounds are available. The newest additions are dilute aqueous standards of PAH deoxyguanosine-3'-monophosphates for Randerath ³²P post labelling assays. Other classes of available compounds are: fecapentaenes, food mutagens, polynuclear aromatic hydrocarbons (PAH), PAH metabolites, radiolabeled PAH metabolites, nitrogen heterocycles, nitrosamines/nitrosamides, aromatic amines, aromatic amine metabolites, azo/azoxy aromatics, inorganics, nitroaromatics, pesticides, pharmaceuticals, natural products, dyes, dioxins and chlorinated aliphatics. A number of radiolabeled PAH metabolites and nitrosamines are also available. Data Sheets provided with the compounds include chemical and physical properties, analytical data, hazards, storage, and handling information. Catalog available upon request.

Contact: Manager, NCI Chemical Carcinogen Repository
Midwest Research Institute
425 Volker Boulevard
Kansas City, MO 64110
(816) 753-7600, Ext. 523
(816) 753-3664 FAX

Manager, NCI Radiolabeled
Chemical Repository
CHEMSYN Science Laboratories
13605 W. 96th Terrace
Lexena, KS 66215
(913) 541-0525
(913) 888-3582 FAX

Cost: Subject to chemical class code and quantity (see catalog) includes handling and shipping charges

Epidemiology Resources

■ The Tumor Virus Epidemiology Repository (TVER) contains sera and other biological samples from more than 13,000 patients and controls obtained in 12 different countries. The TVER was established primarily to support collaborative research on the role of Epstein-Barr virus (EBV) in Burkitt's lymphoma, nasopharyngeal carcinoma, and related diseases.

The TVER is able to adjust its collection to facilitate the development of new collaborative studies. In addition, some samples are available for reagents and independent research. The most extensive collections are serum samples from patients with Burkitt's lymphoma (sera from more than 1,000 patients).

Contact: Dr. Paul H. Levine
Environmental Epidemiology
Branch, DCE, NCI, NIH
Executive Plaza North, Room 434
Bethesda, MD 20892
(301) 496-8115

Cost: Free to Collaborating Investigators;
Others: Dependent on Processing
Time

■ The National Institute of Allergy and Infectious Diseases and the National Cancer Institute have developed a repository of biological specimens from homosexual men. The specimens were collected through contracts with five major U.S. universities for studies of the natural history of acquired immune deficiency syndrome (AIDS).

Information about applying for collaborative use of these specimens is available from the NIAID Project Officer or the NCI Co-Project Officer.

Contact: Chief, Epidemiology Branch, AIDS
Program
National Institute of Allergy and
Infectious Diseases
CDC Bldg., Room 240
National Institutes of Health
Bethesda, MD 20892

or to
Chief
Extramural Programs Branch, EBP
Division of Cancer Etiology, NCI
Executive Plaza North, Room 535
Bethesda, MD 20892

■ Human fibroblast cultures from individuals at high risk of cancer, members of cancer-prone families, and normal family members are available. Collection is historical with unknown viability and contamination status. Catalogue unavailable. Information requests should include potential use of cultures.

Contact: Chief, Family Studies Section, EEB,
DCE, NCI, NIH
Executive Plaza North, Room 439
Bethesda, MD 20892
(301) 496-4375

Cost: Free to collaborating investigators.
Others: \$70/cell line.

■ The National Cancer Institute has available the Animal Morbidity/Mortality Survey of Colleges of Veterinary Medicine in North America (also known as the Veterinary Medical Data Program). This unique registry of veterinary medical information represents patient data on animals seen at collaborating veterinary teaching facilities; 3 million hospital episodes have been abstracted and computerized in a standardized record format. Disease information is coded using the scheme of the Standard Nomenclature of Veterinary Disease and Operations. The computer tapes will be made available upon request.

Contact: Dr. Howard M. Hayes
Environmental Epidemiology Branch
Epidemiology and Biostatistics
Program
Division of Cancer Etiology
Executive Plaza North, Room 443
Bethesda, MD 20892
(301) 496-1691

Cost: Inquire

■ The Epidemiology and Biostatistics Program of the National Cancer Institute has developed the Observed versus Expected (O/E) software system which calculates: (1) the number of observed events (e.g. cancer cases or deaths) in a study group at risk; (2) the number of expected events in a study group based on the rate of occurrence in some standard or referent population; (3) the ratio of observed to expected events; and (4) the significance of this ratio. The system is user friendly and capable of executing a series of calculations by different variables such as age, time group, date of exposure, age at date of exposure, duration of exposure, year relative to entry and cause of event. The O/E System provides tables by race, sex and user defined variables, allows user defined latency intervals and accepts standard or user prepared rates. O/E is written in COBOL and is exportable to most mainframes.

Contact: Ruth Wolfson
Epidemiology and Biostatistics
Program
Division of Cancer Etiology, NCI
Executive Plaza North, Room 531
Bethesda, MD 20892
(301) 496-1606

Cost: Free to investigators interested in epidemiologic research.

Environmental Cancer

■ NCI's Chemical Carcinogenesis Research Information System (CCRIS) is available online through the National Library of Medicine's Toxicology Data Network (TOXNET) system. Through an interagency agreement between NCI and NLM, the CCRIS database has been built and will be maintained and updated as one of TOXNET's sponsored databases in the broad areas of chemistry, toxicology, and hazardous waste information. The CCRIS database contains evaluated data and information on carcinogens, mutagens, tumor promoters, cocarcinogens, metabolites of carcinogens, and carcinogen inhibitors derived from published review articles, ongoing current awareness survey of primary literature, NCI/NTP's short- and long-term bioassay studies, the IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man, and special studies and reports.

Contact: Dr. Thomas P. Cameron
Office of the Director
Division of Cancer Etiology
National Cancer Institute
Executive Plaza North, Room 712
Bethesda, MD 20892
(301) 496-1625

Cost: Inquire

■ The Special Assistant for Environmental Cancer, Office of the Director, announces the availability of a limited number of copies of the following publications, which have been prepared under contract to NCI:

Survey of Compounds Which Have Been Tested for Carcinogenic Activity, PHS-149, 1987-1988 and 1989-1990.

Contact: Dr. Thomas P. Cameron
Office of the Director
Division of Cancer Etiology
National Cancer Institute
Executive Plaza North, Room 712
Bethesda, MD 20892
(301) 496-1625

Cost: Inquire

■ The National Cancer Institute, along with the National Institute of Environmental Health Sciences, the Centers for Disease Control, and the Food and Drug Administration, has, for many years, supported a study by the Michigan Department of Public Health dealing with an accidental exposure to polybrominated biphenyls.

The Michigan Long Term PBB Study is a well-maintained longitudinal database on 4,000 participants from rural farms in Michigan. This group was exposed to polybrominated biphenyls through consumption of contaminated farm animals and food products. The cohort was enrolled and characterized in 1975-76, establishing a database containing demographic, health history, medical condition, reproductive history, blood and tissue analyses, and chemical/environmental exposure information. Major life events—birth, death, cancer and major illnesses have been confirmed and updated annually. The project is currently completing a detailed recharacterization of all cohort members and their children. This longitudinal database is available for collaborative research investigating biological and human health outcomes from halogenated biphenyl exposure.

Contact: Dr. Harold E. B. Humphrey
Michigan Department of
Public Health
Division of Health Risk Assessment
3423 North Logan, P.O. Box 30195
Lansing, MI 48909
(517) 335-8350

Cost: Free to qualified investigators.

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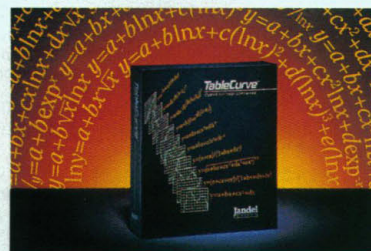
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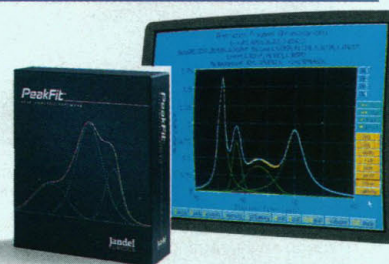


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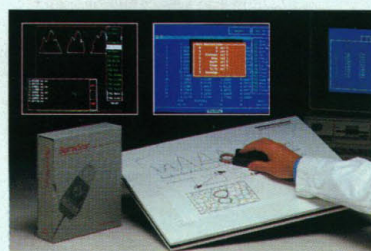


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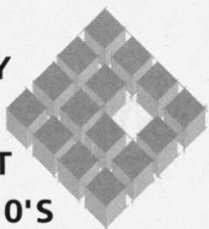
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Primers for Rapid Mapping

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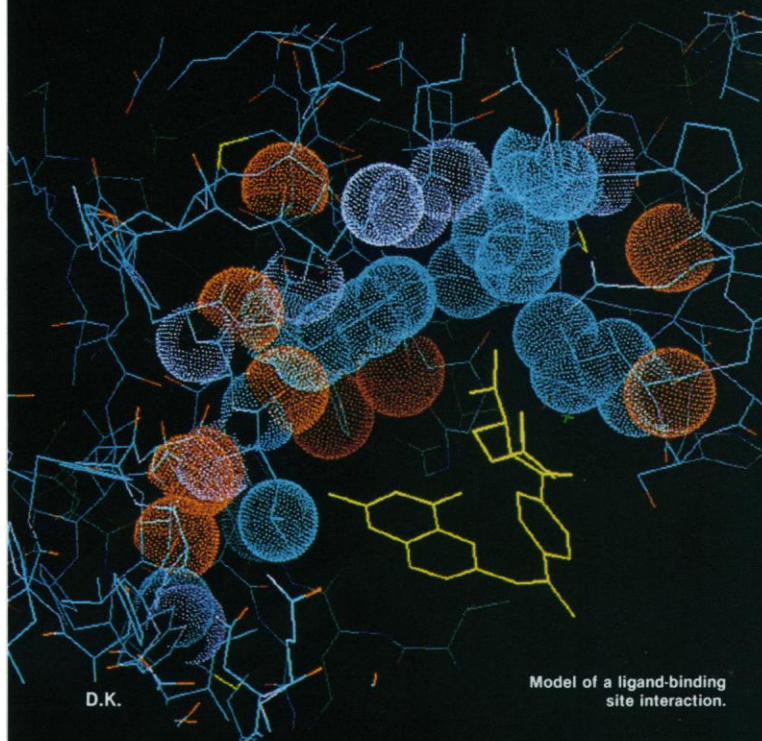
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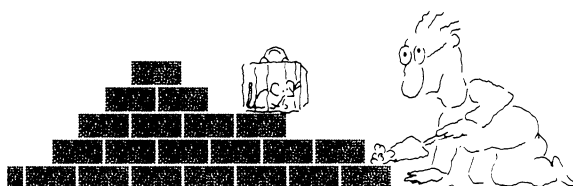


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Literature

Nucleic Acid Analysis contains a selection of products for this field. Biometra. Circle 94.

7 Ways to Save Costs (and Grief) on your Cleanroom Project is a 24-page guide to cleanroom construction planning. JMC Environmental Systems Division. Circle 95.

The ABCs of DMMs offers a short course on the operation, capabilities, and selection of a digital multimeter (DMM). Fluke. Circle 96.

Prognostic Markers in Tumor Pathology... describes the use of immunohistochemical markers to aid in the determination of cancer prognosis. Although their clinical application remains controversial, these monoclonal antibodies have been the subject in recent years of numerous studies, of which this brochure provides a brief compilation with color photomicrographs. BioGenex Laboratories. Circle 97.

1020 LC Plus Controller: The Intelligent Alternative to Conventional LC Controllers describes an instrument that provides complete local control and chromatography monitoring. Perkin-Elmer Corp. Circle 98.

ATCC Quality Control Methods for Cell Lines: Second Edition, 1992 is a technical manual that provides information and instruction for working with metazoan cell cultures and emphasizes procedures used at the American Type Culture Collection. American Type Culture Collection. Circle 99.

Tools for the Molecular Biologist is a catalog of products that includes polymerase chain reaction research products, DNA labeling products for automated DNA synthesis, biologically active peptides, 500 cDNA and genomic DNA libraries, and more. CLONTECH Laboratories. 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 OR ASSOCIATE PROFESSOR Positions in Immunology, Virology and Pathogenic Microbiology Department of Microbiology and Immunology Loyola University Chicago

Applications are invited for tenure and tenure-track faculty positions in the Department of Microbiology & Immunology at Loyola University Chicago, Stritch School of Medicine. We are seeking talented investigators whose research interests are in molecular aspects of the immune system, virology, or microbial pathogenicity to join a growing interactive group of investigators. Candidates are expected to develop independent, externally funded, high quality research programs. Excellent new facilities and attractive start-up funds are available.

Submit curriculum vitae, statement of research interest and a list of three references to: **Dr. Katherine L. Knight, Chairperson, Department of Microbiology and Immunology, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153.**

Loyola University Chicago is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS IN PHARMACOLOGY—Rush Medical College, Department of Pharmacology is seeking applications for **ASSISTANT PROFESSORS**. The candidate should hold a Ph.D. and/or M.D. degree and have several years of postdoctoral experience. The applicant's research should be in areas of vascular or lung cell and molecular biology in which modern techniques are used. In addition to having or developing a funded research program, the candidate will help the department fulfill its responsibilities in medical and graduate education. Candidates should submit curriculum vitae, a statement of research interests and accomplishments, a record of grant funds (if available), and a list of three references. Applications should be sent to: **Dr. A. B. Malik, Professor and Chairman, c/o Barbara Mack, Department of Pharmacology, Rush Medical College, 1653 West Congress Parkway, Chicago, IL 60612.**

Rush is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK POSITION

The Department of Physiology in the Medical School wishes to fill a tenure-track position at the **ASSISTANT PROFESSOR** level. Our focus in this recruitment is on aspects of membrane biophysics and cellular and molecular biology which can relate to established programs in cardiovascular physiology and pathophysiology (hypertension, coronary angiogenesis). The department also has a very active training program in cardiovascular physiology. A campus-wide program in molecular biology provides state-of-the-art facilities. The successful applicant will be expected to establish an independent laboratory. Other duties will include teaching in the medical physiology course and at the advanced graduate level. Requires Ph.D., M.D., or D.V.M. and at least two years of postdoctoral experience. Salary and start-up funds are competitive.

Send current curriculum vitae to:

Dr. Allan W. Jones
 Department of Physiology
 University of Missouri
 MA 415 Medical Sciences
 Columbia, MO 65212
 by January 1, 1993.

The University of Missouri is an Equal Opportunity Employer with special initiatives to recruit and encourage development of women and minorities.

FACULTY POSITIONS

The School of Biology at Georgia Institute of Technology invites applications for positions at **ASSISTANT** or **ASSOCIATE PROFESSOR**. Successful applicants are expected to establish an active program of funded research and be committed to teaching in the B.S. and Ph.D. programs. Areas of research interest are: **microbial ecology/physiology** with preferred emphasis on bioremediation or bioproduct optimization, and **molecular genetics/biophysics** relating to signal transduction or gene regulation. Curriculum vitae, research plans and three letters of reference should be submitted by December 31, 1992 to: **Dr. Roger M. Wartell, Search Committee, School of Biology, Georgia Tech, Atlanta, GA 30332.** *Georgia Tech is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

AUBURN UNIVERSITY FACULTY POSITION ORNITHOLOGIST/AVIAN ECOLOGIST

Applications are invited for a 9-month tenure-track appointment at the **ASSISTANT PROFESSOR** level, Department of Zoology and Wildlife Science, Auburn University, effective March 16, 1993. Position requirements include a Ph.D. in the biological sciences with broad training in ornithology; potential for teaching excellence; postdoctoral experience helpful, not required; demonstrated potential to develop competitive research program in ornithology compatible with current departmental strengths. Position entails teaching undergraduate and graduate courses in ornithology and participation in lower division courses, development of vigorous externally funded research program, direction of graduate students, advising undergraduate zoology majors, and participation in position-related service activities. Salary will be commensurate with experience. Applicants should submit a letter outlining teaching/research interests and goals; curriculum vitae that includes education and experience, evidence of potential for teaching excellence, list of publications and grants, awards, and other pertinent information; all academic transcripts; three letters of reference. Send application materials and letters of reference to: **Dr. John F. Pritchett, Head, Department of Zoology and Wildlife Science, Auburn University, AL 36849-5414. Telephone: 205/844-4850, FAX: 205/844-9234.** Closing date December 1, 1992, or until acceptable candidate is identified. *Members of minority groups and women are encouraged to apply. Auburn University is an Affirmative Action/Equal Opportunity Employer.*

Lehman College, CUNY seeks an **ASSISTANT PROFESSOR** in Old World Archaeology, specialization in South Asia preferred. Ph.D. necessary. Extensive field research and demonstrated excellence in teaching required. *Lehman is an Affirmative Action/Equal Opportunity Employer.* Send curriculum vitae by November 10, 1992 to: **Lucie W. Saunders, Anthropology Department, Lehman College, Bedford Park Boulevard West, Bronx, NY 10468.**

ASSISTANT PROFESSOR, IMMUNOBIOLOGY OF INFECTIOUS DISEASES AND VIRAL OR BACTERIAL PATHOGENS, UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL. Applications are invited for a tenure-track position to complement existing strength in molecular and cellular immunology, immunopathology, virology, bacteriology, microbial pathogenesis, and cellular and molecular genetics. A doctoral degree and relevant postdoctoral experience are required. The candidate will be expected to lead a vibrant and independent research program, and will participate in graduate/medical teaching. Preference will be given to applicants who reply by December 1, 1992. *Minority and female candidates are asked to voluntarily identify themselves.* Interested candidates should submit curriculum vitae, description of current and future research goals, representative reprints and names/addresses of three references to: **Dr. Jenny Ting, Chair, Search Committee, Department of Microbiology and Immunology, CB# 7290, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7290.** *The University of North Carolina is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR, NEUROBIOLOGY

The Department of Biological Sciences, University of Illinois at Chicago (UIC), has a tenure-track position at the assistant professor level for the Fall of 1993. We seek a neurobiologist using cellular and/or molecular approaches to problems that may involve: neurophysiology and behavior, neurodevelopment, neurogenetics, or intercellular communication. The candidate will be expected to develop a strong research program and contribute to teaching undergraduate and graduate students in the neurobiology program. Consideration of candidates will begin on 19 October 1992. Application deadline is 27 November 1992. Send curriculum vitae, a brief statement of research plans and three letters of reference to:

Neurobiologist Search Committee
 c/o Dr. Sidney B. Simpson, Jr., Head
 Department of Biological Sciences (M/C 066)
 The University of Illinois at Chicago
 Box 4348
 Chicago, IL 60680

UIC is an Affirmative Action/Equal Opportunity Employer.

VIRAL IMMUNOLOGIST

The Henry M. Jackson Foundation, a non-profit research and education foundation, seeks a Ph.D level investigator with experience in cellular immunology to study human immune responses to a newly recognized hepatitis virus. Extensive experience in proliferation assays and chromium-release assays in other viral systems, cell separation techniques, and fluorescence activated cell sorting is essential. Additional experience in cloning of T cell effectors, and Northern and Southern blotting techniques is highly desirable. The position may be filled at either the postdoctoral level or at the Assistant Professor level with a non-tenure, adjunct appointment at the Uniformed Services University of the Health Sciences, depending on qualifications. Salary is commensurate with experience.

MOLECULAR MICROBIOLOGIST

The Henry M. Jackson Foundation, a non-profit research and education foundation, seeks a Ph.D level investigator with experience in microbiology and molecular biology to design PCR assays for various procaryotic organisms. Specific assays employing novel methods for the detection of PCR products will also be developed. Opportunity also exists for the study of new procaryotic genes and regulation of various procaryotic genes. Extensive experience in microbiology, PCR and diagnostic probe assays is essential. Additional experience in cloning and sequencing of procaryotic genes as well as the regulation of procaryotic genes is highly desirable. The position may be filled at either the postdoctoral level or at the Assistant Professor level with a non-tenure, adjunct appointment at the Uniformed Services University of the Health Sciences, depending on qualifications. Salary is commensurate with experience.

MOLECULAR VIROLOGIST

The Henry M. Jackson Foundation, a non-profit research and education foundation, seeks a Ph.D level investigator with experience in virology and molecular biology to study a newly recognized hepatitis virus. Recombinant viral vectors expressing foreign proteins will be developed for vaccine and diagnostic development. In addition, the opportunity exists to study regulatory effects of viral proteins. Extensive experience in generating recombinant plasmids, DNA sequencing, transfections, and *in vitro* growth of recombinant viruses in various cell lines will be required. The position may be filled at either the postdoctoral level or at the Assistant Professor level with a non-tenure, adjunct appointment at the Uniformed Services University of the Health Sciences, depending on qualifications. Salary is commensurate with experience. The Foundation offers an excellent benefits program. Please send curriculum vitae to:

Dr. Mitchell Carl
Accelerated Product
Development Program
C/O Human Resources
The Henry M. Jackson Foundation
1401 Rockville Pike, Suite 600
Rockville, MD 20852
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STEM CELL BIOLOGY

Amgen has distinguished itself as the industry leader in the development of human therapeutic products through applications of biotechnology. As a result of our continuing commitment to the discovery and characterization of novel hematopoietic growth factors, we are actively seeking Research Scientists and Research Associates to contribute to the development of this program.

Research Scientists

Candidates for the Research Scientist positions must have a Ph.D. in cell/molecular biology or biochemistry, preferably with an emphasis on hematopoietic cell growth and differentiation, and two to four years post-doctoral experience. Responsibilities for this position will include development of new research programs, in particular, the identification and characterization of new hematopoietic growth factors, stem cell and megakaryocyte biology and receptor biology, as well as complementing on-going projects.

Please respond to **Job Code #S-402**

Research Associates

Two Research Associate positions are available in the department of stem cell biology. These positions will require the candidates to be part of a research team whose goal is to increase our understanding of hematopoietic stem cell biology and develop assay/culture systems which will lead to the identification of novel cytokines.

Candidates for this position must have a B.S./M.S. in biochemistry, cell biology or a related field and at least two years of research experience, preferably with emphasis on hematopoiesis and/or immunology. Experience in protein characterization, assay development, and work with animals is desirable. Please respond to **Job Code #S-503**

Candidates for this position must have a B.S. in biology, biochemistry, microbiology, physiology or a related field. At least one year of research experience is required which must include cell culture and animal handling ability. Please respond to **Job Code #S-504**

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POSITIONS OPEN

FACULTY POSITION—Immunology of Infectious Diseases. The Department of Microbiology, The University of Texas Health Science Center at San Antonio, has a tenure-track faculty position (**ASSISTANT to FULL PROFESSOR**) for a person with interest and training in the immunobiology of host-pathogen interactions. Candidates with an accomplished record of research in the area of host immune responses to viruses, bacteria, parasites, or fungi are encouraged to apply. Successful candidates are expected to develop/maintain innovative research programs and to participate in departmental teaching activities. This is an exceptional opportunity to join a strong department committed to excellence in research and teaching and located in a desirable academic-geographic setting. Applicants should mail curriculum vitae, a statement of current and future research goals, and arrange to send three letters of reference by December 31, 1992 to: **Dr. Judy M. Teale, Chair, Immunopathogenesis Search Committee, Department of Microbiology, The University of Texas Health Science Center at San Antonio (UTHSCSA), 7703 Floyd Curl Drive, San Antonio, TX 78284-7758.** UTHSCSA is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR DEGENERATIVE RETINAL DISEASES

Ophthalmology Department, University of Utah School of Medicine looking for degenerative retinal diseases researcher. Assistant Professor level, tenure-track. Will work in new John A. Moran Eye Center. Should have Ph.D. and/or M.D. degree with training in molecular or cell biology. At least three years of postdoctoral experience. Expected to establish and maintain strong, viable research program capable of securing extramural funding. Research should include studies on some aspect of retinitis pigmentosa. Interested individuals should send curriculum vitae, names and addresses of three references, statement of research interest and goals, and one or two pertinent publications to: **Dr. Eric M. Lasater, Department of Ophthalmology, 50 North Medical Drive, Salt Lake City, Utah 84132.** Deadline October 31, 1992, or until suitable candidate is found. *Equal Employment Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, PLANT DEVELOPMENTAL BIOLOGY. Applicants for this tenure-track position must have a Ph.D. in Botany or other appropriate field of biology. Successful candidates will be expected to have an established research program focusing on aspects of plant development that contributes to an understanding of whole plant structure. Applicants must also show a commitment to excellence in teaching and to the training of graduate students. Teaching responsibilities will include a course that covers basic and contemporary aspects of plant anatomy, and participation in an undergraduate majors course on developmental biology. Preference will be given to applicants whose research can interface with the activities of current faculty. Submit curriculum vitae, reprints, grant proposals and/or manuscripts, a statement of research interests, a statement of teaching philosophy and experience, and at least three letters of reference to: **Dr. Meredith A. Lane, Chair, Search Committee, Department of Botany, Haworth Hall, University of Kansas, Lawrence, KS 66045-2106** before 15 November 1992. Telephone: 913-864-4493. *Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR, BIOCHEMISTRY, BEGINNING FEBRUARY 4, 1993. Applications are invited for a two and one-half year position with the possibility of renewal leading to tenure. While biochemistry will be the primary responsibility, a strong background in organic chemistry is required; the successful candidate will teach organic chemistry plus laboratory in Spring 1993. Other responsibilities include contributing to a team-taught advanced laboratory program and the establishment of a research program involving undergraduates. Postdoctoral research experience is desirable, and the Ph.D. degree, excellence in teaching, and a commitment to the liberal arts are essential. Sweet Briar College is a well-endowed four-year liberal arts college for women located in Central Virginia near the Blue Ridge Mountains. The College has an 8 to 1 student/faculty ratio and a significant endowment for scientific instrumentation. Candidates should send curriculum vitae, graduate and undergraduate transcripts, research plans, and arrange to have three letters of recommendation sent directly to: **Dr. Susan B. Piepho, Department of Chemistry, Sweet Briar College, Sweet Briar, VA 24595.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR/NEUROPHYSIOLOGY—Marshall University School of Medicine is seeking an individual with training and experience in whole cell and/or single channel recording. This is a tenure-track appointment currently available in the Department of Physiology. Candidates should hold a doctoral degree and have two or more years of postdoctoral training and interest in studying ion channel function and regulation. The individual is expected to develop a strong research program and participate in the neurophysiology instruction of medical and graduate students. The position is open until filled. Interested candidates should send curriculum vitae, statement of teaching and research interests, and the names of three references to: **Dr. Susan DeMesquita, Department of Physiology, Marshall University School of Medicine, 1542 Spring Valley Drive, Huntington, WV 25755-9340.**

Marshall University is an Equal Opportunity/Affirmative Action Employer of the State of West Virginia.

FACULTY POSITION IN NEUROCHEMISTRY

The Sanders-Brown Center on Aging and the Department of Biochemistry at the University of Kentucky invite applications for a tenure-track faculty appointment at the **ASSISTANT PROFESSOR** level from neurochemists with prime research interest in aging and Alzheimer's Disease. The appointee will be expected to develop a strong independent research program interacting with both the Center on Aging and the Department of Biochemistry. An excellent start-up package is available. The Sanders-Brown Center is one of the NIA-funded Alzheimer's Disease Research Centers and has a separate 40,000 square foot building with excellent laboratory facilities in close proximity to the Department of Biochemistry. Send letter of interest, curriculum vitae and three letters of recommendation to: **William R. Markesbery, M.D., Sanders-Brown Center on Aging, University of Kentucky, Lexington, KY 40536.** *An Equal Opportunity Employer.*

VISITING ASSISTANT PROFESSOR to teach introductory biometrics, zoology, and other courses at **BELOIT COLLEGE**, which emphasizes interdisciplinary studies, internationalism, and experiential learning. Three-semester appointment beginning January 1993. Ph.D., commitment to quality teaching, and ability to collaborate in undergraduate research expected. Applications completed by 13 November 1992 are assured consideration, but others may be considered until position is filled. Send statements of teaching interests/philosophy and research interests/experience, transcripts, and curriculum vitae to: **Ken Yasukawa, Chair, Biology, Beloit College, 700 College Street, Beloit, WI 53511.** *Beloit College is an Equal Opportunity/Affirmative Action Employer.*

ASSOCIATE PROFESSOR OF MEDICAL SCIENCE, SECTION OF PHYSIOLOGY

The Brown University Division of Biology and Medicine, Section of Physiology, plans an appointment at the level of Associate Professor for the 1992-93 academic year to participate in teaching physiology to undergraduate, medical and graduate students; to establish an externally supported research program in renal hemodynamics; and to serve as a member of the Graduate Program in Physiology. A special requirement of the search is to identify a candidate who is skilled in using mathematical models, solved either analytically or by numerical methods, in experimental design and in the evaluation and interpretation of experimental results. Responsibilities include participation in teaching of mammalian physiology, teaching a course in mathematical systems physiology, and in academic advising of students. Opportunities exist for interaction with programs in applied mathematics, biomechanics, and a wide range of biological and clinical areas. Candidates should have an M.D. or Ph.D. Applicants should submit a résumé including research and teaching experience, plans for teaching a course in mathematical physiology, future research plans, a list of publications, representative reprints, and arrange to have six letters of reference sent; all to be received by November 15, 1992. Send to: **Leon Goldstein, Ph.D., Chair of Search Committee, Brown University School of Medicine, Box G, Providence, RI 02912.** *Brown University is an Equal Opportunity/Affirmative Action Employer and actively seeks applications from qualified minorities and protected groups.*

POSITIONS OPEN

ECOLOGIST

The Department of Biological Sciences, University of Maryland, Baltimore County (UMBC) Campus, invites applications for a tenure-track position in ecology at the **ASSISTANT PROFESSOR** level. UMBC is located outside of Baltimore and provides ready access to coastal and Appalachian environments as well as the waters of the Chesapeake Bay. We seek an individual who will interact with current faculty in related areas such as invertebrate sensory physiology, food and host plant selection by insects, lepidopteran evolution, aquatic ecology, and the population genetics of stress tolerance. We are particularly interested in candidates with expertise in the behavioral ecology of invertebrates, physiology ecology, or animal-plant interactions. Postdoctoral experience is highly desirable. The candidate will establish a strong and independent research program, and will contribute to teaching in undergraduate and graduate courses in ecology. To apply, please send curriculum vitae, statement of research interests, reprints of recent publications, and the names, addresses, and telephone numbers of at least three references to: **Dr. Thomas W. Cronin, Search Chairman, Department of Biological Sciences, UMBC, Baltimore, MD 21228.** *UMBC is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITIONS IN BIOCHEMISTRY—MOLECULAR BIOLOGY University of California, Santa Barbara

The Interdepartmental Biochemistry and Molecular Biology Program and the Department of Chemistry invite applications for two tenure-track teaching/research positions. Research expertise and interest in structural study of proteins, nucleic acids, or novel catalytic structures, at the atomic level of resolution is desired, using x-ray crystallography. Crystallography facilities will be located in a new Physical Sciences Building. Appointment at the **ASSISTANT PROFESSOR** level is preferred, but outstanding senior applicants will be considered. Applicants must have a Ph.D. degree and recent relevant postdoctoral experience. The successful applicants will be expected to conduct vigorous independent research programs, and to participate effectively in the teaching programs of the Interdepartmental Biochemistry and Molecular Biology Program and the Department of Chemistry. These positions are effective July 1, 1993.

Submit curriculum vitae, selected reprints, and a brief description of previous and anticipated research, and arrange to have at least three letters of reference sent to: **Director, c/o Frances McCutcheon, Interdepartmental Biochemistry—Molecular Biology Program, c/o Department of Biological Sciences, University of California, Santa Barbara, CA 93106.** Application deadline is November 15, 1992, or until the positions are filled. *UCSB is an Equal Opportunity/Affirmative Action Employer.*

INORGANIC CHEMIST—The Chemistry Department of Williams College invites applications for an anticipated position in inorganic chemistry for Fall 1993. The position would be a regular, renewable appointment at the **ASSISTANT PROFESSOR** level. Candidates should have a Ph.D. (postdoctoral experience is preferred) and a strong commitment to teaching at the undergraduate level and developing a productive research program. The teaching assignments will include inorganic chemistry and instrumental methods of analysis. Additional assignments will be from other courses in the curriculum consistent with the individual's background and interests and the needs of the Department. A semester teaching load normally includes complete responsibility for one course, including the laboratory, and supervision of student research projects. Appointment is at the senior level is possible under exceptional circumstances. Williams College is a highly selective, coeducational liberal arts institution of approximately 260 faculty and 2000 undergraduates, located in northwestern Massachusetts. The Chemistry Department, with nine faculty members and 25 to 35 majors each year, is accredited by the ACS and has excellent facilities for teaching and research. Send résumé, undergraduate and graduate transcripts, description of research projects for undergraduates, and three letters of recommendation to: **Dr. Charles M. Lovett, Jr., Chairman, Department of Chemistry, Williams College, Williamstown, MA 01267,** by 30 November 1992. *As an Affirmative Action/Equal Opportunity Employer, Williams College is especially interested in identifying minority and women candidates.*



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Deadline January 15, 1993

**FACULTY POSITION:
CANCER RESEARCH—TRANSGENIC MICE**

The Department of Molecular Genetics at the Ohio State University, in collaboration with the OSU Comprehensive Cancer Center, is searching for a tenure-track faculty member at the Assistant, Associate or Full Professor level. We are interested in highly qualified applicants who are conducting basic investigations in the general field of cancer research and who use transgenic mice as the experimental system. The faculty member will be housed in a spacious, newly renovated laboratory in the Biological Sciences Building and will have excellent access to the recently completed transgenic mouse facility located at the OSU Biotechnology Center. The transgenic facility includes state-of-the-art equipment as well as technical support.

A generous recruiting package is available, including a highly competitive, hard money salary, as well as substantial funds for equipment purchase and initial operating expenses. The Ohio State University is in the process of a major expansion in Molecular Biology and Biotechnology, and a substantial number of additional positions are anticipated in the future. Research with transgenic mice is one of the areas targeted for expansion.

The Ohio State University is the flagship institution of the state's higher education system. It is located in the state capital, Columbus, which is a growing, yet highly affordable metropolitan area of about 1.3 million people. Columbus has been ranked by *Newsweek* as one of the country's best places to live and work.

Applications should include a detailed curriculum vitae, a description of research experience, a statement of the nature of the planned independent research program, and the name, address and telephone number of each of four scientists who have agreed to serve as references. Applications will be accepted until suitable candidates are hired, but recruiting is scheduled to begin in earnest by January 1993. Information about our Department can be obtained by calling our office at 614-292-8084.

Applications should be sent to: **Dr. Lee Johnson, Molecular Genetics Search, Department of Molecular Genetics, The Ohio State University, 484 W. 12th Avenue, Columbus, OH 43210.**

The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era Veterans, disabled veterans and individuals with disabilities are encouraged to apply.

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POSITIONS OPEN

ASSISTANT PROFESSOR BIOLOGICAL NMR SPECTROSCOPIST

The Department of Chemistry and Biochemistry invites applications for an Assistant Professor, Step I-III, beginning Fall 1993, dependent on availability of funding. Salary range: \$35,900 to \$38,800, 9-month basis. Candidates must have a Ph.D. or equivalent in Chemistry, Biology, or related field, a demonstrated record of research excellence, outstanding potential for independent research in the application of NMR spectroscopy to RNA structure and function, and a commitment to and talent for teaching at the undergraduate and graduate levels. Postdoctoral experience preferred. We are interested in candidates whose research centers on the application of NMR spectroscopy to the study of RNA structure and function, including RNA-protein interactions. This person will be affiliated with The Center for the Molecular Biology of RNA, funded by the Lucille P. Markey Charitable Trust. Research facilities include a state-of-the-art 500 MHz NMR spectrometer and ancillary computational facilities.

Curriculum vitae, summary of research and teaching interests, reprints, and confidential letters of recommendation from three references must be sent to: **Biological NMR Search Committee, Department of Chemistry and Biochemistry, University of California, Santa Cruz, CA 95064.** Please refer to Provision #269-923 in your reply. Closing date for the receipt of completed application materials is December 1, 1992.

UCSC is an Equal Opportunity/Affirmative Action Employer. We especially welcome applications from qualified women and minority candidates.

ORGANIC CHEMIST—WELLESLEY COLLEGE: Wellesley College invites applications for a tenure-track position in organic chemistry, to be in Fall 1993. The position will be at the **ASSISTANT PROFESSOR** level. Applicants must hold a Ph.D. in organic chemistry or a closely related field and must have a strong interest in, and commitment to, teaching and research at the undergraduate level. The major teaching responsibilities will be in organic chemistry and the successful applicant will be expected to develop a strong undergraduate research program. Applications, including curriculum vitae, graduate and undergraduate transcripts, a statement of teaching and research interests and three letters of recommendation from individuals familiar with the applicant's teaching and research experience, should be sent to: **Professor William F. Coleman, Chair, Department of Chemistry, Wellesley College, Wellesley, MA 02181.** All materials must be received by November 10, 1992. *Wellesley College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

PLANT CELL/DEVELOPMENTAL BIOLOGIST. The Department of Biology, University of North Carolina at Chapel Hill, seeks an outstanding scientist studying problems in plant cell and/or developmental biology. Applications from investigators using modern genetic and/or cellular approaches to study developmental processes are especially welcome. This tenure-track appointment at the level of **ASSISTANT PROFESSOR** will be available July 1, 1993. Applicants should send curriculum vitae, a concise statement of research and teaching interests, selected publications, and four letters of recommendation to: **John R. Pringle, Chairman, Plant Cell/Developmental Biology Search, Department of Biology, CB# 3280, University of North Carolina, Chapel Hill, NC 27599-3280.** Priority will be given to applications received by November 20, 1992. *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and strongly encourages applications from women and minorities.*

ASSISTANT PROFESSOR, RUTGERS UNIVERSITY. The Department of Biological Sciences invites applications for an anticipated tenure-track faculty position in the area of Molecular Cell Biology beginning September 1993. Candidates should have significant postdoctoral experience and will be expected to develop a competitive research program. Send curriculum vitae, a summary of research plans and have three letters of recommendation forwarded to: **Dr. Harvey H. Feder, Department of Biological Sciences, Rutgers University, 101 Warren Street, Newark, NJ 07102.** *Rutgers University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

MOLECULAR BIOLOGIST/BIOCHEMIST

The Sealy Center for Molecular Science and the Department of Obstetrics and Gynecology invite applications for a joint appointment to a tenure-track position at the **ASSISTANT, ASSOCIATE or FULL PROFESSOR** level. The appointee will be expected to develop a strong independent research program in the area of molecular mechanisms of gene expression. The appointee will also be expected to interact with and establish collaborations with members of both departments. The Sealy Center has newly established core facilities with state-of-the-art equipment and services in molecular biology and protein chemistry. The appointee will have full access to these. Candidates must have the Ph.D. and/or M.D. degree, with appropriate postdoctoral training and publication record. Salary and start-up funds are highly competitive. The Department and the Center offer a stimulating environment and are deeply committed to high quality research and teaching. Send complete curriculum vitae, including publications list, brief statement of future research plans, and names and addresses of three references to: **Dr. Samuel H. Wilson, Sealy Center/OB-GYN Search Committee, Sealy Center for Molecular Science, Route H-51, University of Texas Medical Branch, Galveston, TX 77555-0851.** *Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the U.S.*

FACULTY POSITION

Department of Medical Biochemistry and Genetics

The Department of Medical Biochemistry and Genetics invites applications for a tenure-track **ASSISTANT PROFESSOR** faculty position. Candidates are expected to establish or maintain a vigorous research program and participate in medical and graduate instruction. Applications from individuals with research interests in any area of biochemistry, molecular biology, or molecular genetics are encouraged. Submit curriculum vitae, description of research interests, and names of three references to: **Dr. Garrett Ihler, Department of Medical Biochemistry and Genetics, Texas A&M College of Medicine, College Station, TX 77843-1114.** *Equal Opportunity through Affirmative Action.*

BIOLOGY: ASSISTANT/ASSOCIATE PROFESSOR, tenure-track. Ph.D. plus teaching experience. To teach undergraduate courses (such as General Biology, Botany, Microbiology, Genetics, Electron Microscopy); direct student research; develop curriculum; serve on faculty committees. Bingham Awards for Excellence in Teaching may provide substantial salary supplements for exceptional candidates or smaller start-up grants for recent Ph.D.'s. Application letter, curriculum vitae, statement of teaching philosophy, and three letters of recommendation by December 1, 1992 to: **Dr. James Miller, Chair, Division of Natural Sciences and Mathematics, Transylvania University, Lexington, KY 40508-1797.** *Transylvania is a small liberal arts college and an Equal Opportunity Employer.*

INFECTIOUS DISEASES—ID Section at Hospital of the University of Pennsylvania has opening for **ASSISTANT PROFESSOR** who is BC/BE in ID. Applicant must have excellent capabilities in basic research. Particular emphasis in recruiting will be placed on individuals experienced in herpes virology, retrovirology, or bacterial pathogenesis. Send curriculum vitae to: **Harvey Friedman, M.D., Chief, Infectious Diseases, 536 Johnson Pavilion, University of Pennsylvania, Philadelphia, PA 19104-6073.** *Equal Opportunity/Affirmative Action Employer.*

ANIMAL PHYSIOLOGIST

Full-time, tenure-track **ASSISTANT PROFESSOR;** begins August 1993. Teach upper division comparative/general animal physiology course with lab and participate in freshman level biology courses. May participate in interdisciplinary "Science in Context" course. Faculty are expected to develop research programs that involve undergraduate students in the process. Research interests at the organismal, system or cellular level considered. Ph.D. in the biological sciences, and commitment to liberal arts education and cultural diversity required. Submit interest letter, curriculum vitae and three reference letters by November 6, 1992, to: **Animal Physiology Search, University of Puget Sound, P.O. Box 7297, Tacoma, WA 98407.** *An Equal Opportunity/Affirmative Action Educator/Employer.*

POSITIONS OPEN

HOPE COLLEGE ASSISTANT PROFESSOR OF CHEMISTRY

Hope College, Department of Chemistry invites applications for a tenure-track position at the Assistant Professor rank beginning August 1993. A Ph.D. is required and postdoctoral experience is preferred. Candidates should show promise of developing a vigorous grant-supported experimental research program in either bio-organic or bio-analytical chemistry and of teaching effectively at the undergraduate level. Teaching responsibilities will include either organic or analytical chemistry, depending on the candidate's background, and general chemistry periodically. Hope College is recognized for excellence in chemical education and for its well-equipped research facilities. The Chemistry Department has ten full-time faculty and is ACS approved. Hope College is a distinguished undergraduate liberal arts college affiliated with the Reformed Church in America. Submit résumé, graduate and undergraduate transcripts, description of research plans, and statement of teaching competencies to: **IRWIN BRINK, CHAIR, HOPE COLLEGE DEPARTMENT OF CHEMISTRY, 35 EAST 12TH STREET, PO BOX 9000, HOLLAND, MI 49422-9000.** Arrange for three letters of reference to be sent to the same address. All materials should be received by November 15, 1992. *Hope College complies with Federal and State requirements for nondiscrimination in employment. Nomination of and applications from women and minorities are especially sought.*

MICROBIOLOGIST

FACULTY POSITION in the MOLECULAR AND CELLULAR BIOLOGY DEPARTMENT at the UNIVERSITY OF ARIZONA.

As part of a continuing expansion, the Department of Molecular and Cellular Biology, in collaboration with the new interdepartmental Undergraduate Microbiology Program, has an opening for a new tenure-track faculty member for appointment in 1993. We are seeking candidates with a broad interest in molecular approaches to understanding both basic and applied problems related to the physiology, development, regulation or genetics of prokaryotic systems. This faculty member will be responsible for teaching undergraduate bacterial physiology as part of the Undergraduate Microbiology Program. Outstanding candidates at either the **ASSISTANT or ASSOCIATE PROFESSOR** level are encouraged to apply. Successful candidates will be expected to establish a competitive research program and teach undergraduate and graduate students. Send curriculum vitae, a one to two page statement of research interests, and have at least three supporting letters sent to: **Chairman, Microbiology Search Committee, Department of Molecular and Cellular Biology, Life Sciences South Building, Room 444, University of Arizona, Tucson, AZ 85721, USA.** To ensure consideration, applications should be received by November 20, 1992, although applications will be accepted until the position is filled. *The University of Arizona is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

ASSISTANT PROFESSOR OF BIOLOGY VERTEBRATE BIOLOGIST

Applications are invited for a tenure-track position beginning either March 1, 1993 or September 1, 1993. Preference will be given to persons able to teach field courses in vertebrate biology and environmental biology, developmental biology, vertebrate anatomy and introductory biology. Ph.D. preferred; ABD considered. Graduate emphasis in field biology of vertebrates, with coursework in developmental biology and vertebrate anatomy expected. Teaching experience desirable. Rank and salary dependent upon qualifications and experience. Support of the institutional mission statement is expected. Central College is on the 3 x 3 modified quarter system; faculty normally teach seven courses per year with no more than three in a term. Central College is a private liberal arts college, affiliated with the Reformed Church in America, with study abroad programs in eight locations. Send résumé, transcripts, and three letters of recommendation to: **W. H. Bearce, Dean of the College, Central College, Pella, IA 50219.** *Women and minority applications encouraged. Affirmative Action/Equal Opportunity Employer.* Review of applications will begin November 15, 1992.

ROCHE

ROCHE INSTITUTE OF MOLECULAR BIOLOGY GRADUATE FELLOWSHIPS

Applications are invited for graduate fellowships in a program sponsored jointly by the Roche Institute of Molecular Biology and the Department of Biological Sciences at Columbia University. Selected students will complete their thesis research at the Roche Institute while academic requirements will be fulfilled in the Department of Biological Sciences at Columbia. This program is limited in size and highly competitive. Upon completion of the program, students will receive a Ph.D. degree from Columbia University. Persons holding a doctoral degree earned at any time and in any field are not eligible to apply. The Predoctoral Fellowships are intended for students who are at or near the beginning of their graduate study.

The Roche Institute of Molecular Biology, founded in 1967, is dedicated to basic research in emerging areas of molecular biology. Staff members enjoy complete independence in their choice and pursuit of research problems. The Institute is located in suburban New Jersey, approximately 10 miles west of Manhattan, making it readily accessible for lectures and courses at Columbia University and other educational centers in New York City.

Fellowships include stipend, paid tuition, scientific meeting travel support and additional benefits. GRE and TOFEL scores are required. Applications must be received by January 1 to be considered for the following academic year.

For further information and application forms contact: **Administrative Office, (201) 235-2783. Roche Institute of Molecular Biology, Nutley, New Jersey 07110.** We are an equal opportunity employer.

ROCHE

Roche Institute of Molecular Biology
Hoffmann-La Roche Inc.

**NYU
Medical
Center**

Assistant Research Scientist

NYU Medical Center currently has a post-doctoral position available in our Lipid Metabolism Laboratory. The successful candidate will conduct research in human vitamin E metabolism using deuterated tocopherols. Regulation of plasma, lipoprotein and tissue concentrations, as well as discrimination and function of the hepatic tocopherol binding protein. Training in biochemistry/molecular biology with emphasis on lipoprotein metabolism is desirable.

Please send your resume to Maha Singh, Human Resources Dept., NYU Medical Center, 550 First Ave., New York, NY 10016. EOE, MF.

Postdoctoral Scientists

Biotech Protein Development Center

The R.W. Johnson Pharmaceutical Research Institute (PRI) is a first-class worldwide research and development organization within Johnson & Johnson, the world's largest and most comprehensive provider of health care products. We have recently completed construction of a Protein Development Center with development labs, related environmental rooms, and pilot production facilities. We have 2 immediate opportunities for postdoctoral fellows to join us at our campus-like setting located in central New Jersey midway between New York City and Philadelphia.

- 1) Requires PhD in Protein Chemistry, Physical Biochemistry, Biochemistry or related field. The successful candidate will study the folding and structure function relationship of recombinant humanized antibodies. Experience in CD, fluorescence, light scattering, and HPLC is required. Knowledge of carbohydrate chemistry is desired. (HR Dept. 19A)
- 2) Requires PhD in Biochemistry or Molecular Biology with a thorough understanding of intermediary metabolism and experience with tracer studies. The successful candidate will study the intermediary metabolism of cells maintained under selective pressure for retention of glutamine synthetase activity. (HR Dept. 19B)

The positions provide liberal research support, excellent library facilities, and a good benefits package. Ours is a smoke-free workplace.

No phone calls please. Submit your curriculum vitae with the names of 3 references to: Ms. Gerry Scott-Higgins, indicate HR Dept. # for the position of your choice, R.W. Johnson Pharmaceutical Research Institute, P.O. Box 300, Raritan, NJ 08869-0602.

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PHARMACEUTICAL RESEARCH INSTITUTE
a Johnson & Johnson company

POSITIONS OPEN

DEVELOPMENTAL BIOLOGIST

ASSISTANT PROFESSOR, tenure-track position, Department of Biology at the University of Dayton. Responsibilities involve participation in the undergraduate and graduate teaching activities of the department, including an undergraduate course in Developmental Biology. Applicants with overlapping expertise in genetics, biochemistry, and molecular biology are strongly encouraged to apply. The successful candidate will be expected to actively participate in the departmental M.S./Ph.D. program and develop a strong extramurally funded research program that complements the current research programs in the department. Applicants must have a Ph.D. degree and at least two years of postdoctoral research. Interested persons should submit curriculum vitae, a statement of future research plans and three letters of reference by November 6, 1992 to: **Dr. Panagiotis A. Tsonis, Chair of the Search Committee, Department of Biology, University of Dayton, 300 College Park, Dayton, OH 45469-2320 (FAX: (513) 229-4000).** *The University of Dayton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.*

FACULTY POSITION IN GENETIC EPIDEMIOLOGY/STATISTICAL GENETICS

The Fred Hutchinson Cancer Research Center is developing new initiatives in the genetic epidemiology of cancer. One or more genetic epidemiologists or statisticians whose primary interest is in etiologic studies of cancer will be recruited. Applications are sought at both the junior (**ASSISTANT-ASSOCIATE PROFESSOR/MEMBER**) or senior (**ASSOCIATE-FULL PROFESSOR/MEMBER**) level. Familiarity with the techniques of segregation and linkage analysis is highly desirable.

Resources available include existing population-based data sets with biological specimens and laboratory facilities. These positions will carry a joint appointment with the University of Washington School of Public Health. Some participation in the teaching program is expected. Send curriculum vitae to: **Janet R. Daling, Ph.D., FH-CRC, 1124 Columbia Street, Seattle, WA 98104.** *The Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer. Closing date is November 15, 1992.*

ASSISTANT PROFESSOR Experimental High Energy Physics SYRACUSE UNIVERSITY

The Experimental Particle Physics group at Syracuse University has authorization for a tenure-track position, starting Fall 1993, at the rank of Assistant Professor. The group is engaged in hardware development and physics analysis with the CLEO experiment at CESR. We are particularly interested in the decays of B mesons and efforts that lead to the measurement of CP violation in the B system. The successful applicant should participate in the research program and provide leadership for our future efforts. We require the Ph.D. in Physics, or in a related area, at least three years of postdoctoral experience, and demonstrated exceptional abilities in research and teaching. Please send an application with three letters of reference to: **Professor Sheldon Stone, 201 Physics Building, Physics Department, SYRACUSE UNIVERSITY, Syracuse, NY 13244-1130.** *Affirmative Action/Equal Opportunity Employer.*

The University of San Diego (USD), Department of Biology, invites applications for a tenure-track position in **VERTEBRATE BIOLOGY** at the **ASSISTANT PROFESSOR** level beginning in September 1993. Teaching responsibilities include a course in comparative anatomy or functional morphology, vertebrate natural history, and an introductory biology course for majors. USD is an independent Catholic university whose primary aim is teaching excellence. Active scholarship by the faculty is considered essential to this aim, and the candidate is expected to maintain an active research program which has the potential for undergraduate involvement. Preference will be given to individuals with a strong field emphasis in their work. Teaching experience is desirable. *Women and minorities are particularly encouraged to apply.* Submit curriculum vitae, a brief description of teaching philosophy and research interests, and names and addresses of three references by 6 November 1992 to: **Chair, Department of Biology, University of San Diego, 5998 Alcalá Park, San Diego, CA 92110-2492.** *USD is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

STANFORD UNIVERSITY FACULTY POSITION IN INFORMATION STORAGE MATERIALS AND DEVICES

The Departments of Materials Science and Engineering and Electrical Engineering (EE) invite applications for a tenure-track faculty position in the area of magnetic or optical information storage. A Ph.D. and a strong interest in graduate and undergraduate teaching are required. The research activities of this individual should focus on the science and technology of information storage materials and devices and might embrace magnetic thin films, magneto optic materials, optical storage materials, or other relevant materials and techniques. The successful candidate will be embedded in an environment with substantial activities in surface and interface science, magnetism, solid state physics, advanced optics, information science and nanostructure science and technology and have an interest in the fundamentals and applications of both materials and devices. The opening is at the **ASSISTANT PROFESSOR** level. The appointment will be made either in the MS&E Department or the EE Department. Please send a complete résumé, a publication list, a statement of research and teaching interests, and the names of three references to: **Professor Robert L. White, Department of Materials Science and Engineering, MS 2205, Stanford University, Stanford, CA 94305,** by December 1, 1992. *Stanford University is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.*

FACULTY OPENING IN PHYSICS University of California at Berkeley

The Physics Department of the University of California at Berkeley, pending budgetary approval intends to make one or more faculty appointment(s) at the tenure-track **ASSISTANT PROFESSOR** level effective July 1, 1993. In exceptional circumstances appointment at a more senior level will be considered. We encourage applications from both theorists and experimentalists in condensed matter physics (including low temperature physics), astrophysics and space physics, particle physics, atomic physics, plasma physics and non-linear dynamics, and newly emerging subfields of physics.

Please send curriculum vitae, bibliography, statement of research interests, and a list of references to: **Professor Herbert Steiner, Chairman, Department of Physics, Berkeley, CA 94720,** before November 13, 1992. *Applications submitted after the deadline will not be considered. The University of California is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF FOREST GENETICS

The Department of Forestry, University of Illinois at Urbana-Champaign, invites applications for a tenure-track position at the assistant professor level in forest genetics. The successful candidate will conduct an innovative, independent research program in the molecular genetics of forest trees and participate in the teaching program. Position requires a minimum of a Ph.D. with postdoctoral experience and at least one degree in forestry or related natural resources field. Salary commensurate with training and experience. Available August 21, 1993. Application deadline is January 15, 1993. Please send a letter summarizing professional interests, curriculum vitae, and names/addresses of three references to: **Dr. Jeffrey O. Dawson, Department of Forestry, W-503 Turner Hall, 1102 South Goodwin Avenue, Urbana, IL 61801, Telephone: 217/333-9281, FAX: 217/244-3219.**

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

FACULTY POSITION IN MOLECULAR BIOLOGY: Nine-month tenure-track opening at the **ASSISTANT PROFESSOR** level in the general area of eukaryotic molecular genetics. Starting salary, research facilities and start-up funds are competitive. Ph.D. in appropriate field required. To apply, send a letter of application, curriculum vitae, undergraduate and graduate transcripts, a statement of research plans, and have five letters of reference to: **Chair, Molecular Genetics Search Committee, Department of Zoology, Southern Illinois University at Carbondale (SIUC), Carbondale, IL 62901.** Application should be completed by December 15, 1992. *SIUC IS AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.*

POSITIONS OPEN

MICROBIAL GENETICS

The Department of Biological Sciences anticipates making a full-time tenure-track faculty appointment in the area of microbial genetics. This appointment is expected to be made at the **ASSISTANT PROFESSOR** level, but under exceptional circumstances experienced candidates with outstanding records will be considered for appointment at higher rank. Applicants using prokaryotic or eukaryotic model systems to study basic molecular or cellular problems are especially encouraged to apply. The successful candidate must have a Ph.D. and extensive postdoctoral experience and will be expected to establish an extramurally funded research program, train graduate students, and participate in undergraduate education. In order to ensure full consideration, applications must be received by December 11, 1992. Applicants should send curriculum vitae along with a summary of research interests and goals, and arrange to have at least three letters of reference sent to:

**Dr. Graham Hatfull
Genetics Search Committee
Department of Biological Sciences
University of Pittsburgh
Pittsburgh, PA 15260
Telephone: (412) 624-4266**

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

THE CHEMISTRY DEPARTMENT AT CLARK UNIVERSITY invites applications for an **ASSISTANT PROFESSOR**, tenure-track position in biological NMR, with a joint appointment at the University of Massachusetts Medical School. The applicant should be capable of leading development in NMR of structural/functional aspects of biological macromolecules, and of expanding existing collaborative ventures involving macromolecular structure with several biotechnology companies and other institutions in the Worcester area. Qualifications for appointment include evidence of promise for establishing an internationally recognized, funded research program, and previous postdoctoral, industrial, or academic experience in modern NMR techniques. Promise of excellent teaching of Organic Chemistry at both undergraduate and graduate levels, and of advanced courses in the candidate's area of interest is expected. The appointee will be the major user of the departmental Varian Unity 500 UNIX-based NMR system and will have access to Clark's AC200, and MSL300 spectrometers and the University of Massachusetts Varian Unity 300. Additional details are available by internet: "chemistry@vax.clarku.edu". Send résumé, publication list, summary of teaching experience, statement of research plans, and arrange for three letters of reference to be sent to: **D. J. Nelson, Department of Chemistry, Clark University, Worcester, MA 01610-1477.** Review of applications begins on November 1, 1992. *Clark is an Affirmative Action/Equal Opportunity Employer, and women and minorities are strongly encouraged to apply.*

DEPARTMENT OF BOTANY UNIVERSITY OF TORONTO ASSISTANT PROFESSOR IN APPLIED ECOLOGY

Applications are invited for a tenure-track position in Applied Ecology at the Assistant Professor level tenable from July 1, 1993. We are seeking applicants whose research interests are in one or more of the following areas: biodiversity and plant conservation, pollution ecology, renewable resources, vegetation and climate change or agricultural ecosystems.

The successful applicant will be expected to establish an active research programme, demonstrate good teaching ability including contributing to courses in terrestrial field biology, and to participate in developing interdisciplinary programmes in teaching and research. Further information may be obtained from Ms. M. A. Schafer at the address/FAX given below. Curriculum vitae, a statement of research and teaching interests and three letters of recommendation should be received no later than December 4, 1992 by: **Dr. V. J. Higgins, Chair, Department of Botany, University of Toronto, 25 Willcocks Street, Toronto, Ontario, Canada M5S 3B2. Telephone: (416) 978-3537; FAX: (416) 978-5878.**

The University of Toronto encourages both women and men to apply for this position.

RESEARCH SCIENTISTS

ICOS Corporation is a biotechnology company pioneering scientific development in the fields of cell trafficking and cell activation. We are establishing a product development program to integrate with our ongoing research in cell and molecular biology. To meet our expanding needs, we are interested in scientists with a minimum 3 years of industrial experience and expertise in one or more of the following program areas:

FERMENTATION DEVELOPMENT

Responsible for research, development and scale-up of mammalian and microbial fermentation processes.

QUALITY ASSURANCE AND ASSAY DEVELOPMENT

Responsible for development of product release assays and formulation development. Three years experience with physical and immunological assay methods development required.

ICOS offers a stimulating intellectual environment and a state-of-the-art research facility. Our compensation package includes a competitive salary and comprehensive benefits, which include stock options.

If the ICOS environment sounds appealing to you, please specify one of the program areas and send your C.V. with three letters of reference to:

(Program Area)
ICOS Corporation
22021 20th Avenue S.E.
Bothell, WA 98021
FAX: (206) 485-1911

ICOS is an Equal Opportunity Employer.
No Phone Calls Please.



ASSOCIATE DIRECTOR (EXPERT WITNESS)

Genetic Design, Inc., the country's leading parentage testing laboratory, currently has a position available in the department of paternity testing at its facility in Greensboro, North Carolina. The individual we seek will be principally involved in evaluation of genetic data and travel within the United States to provide expert witness testimony.

Requirements for the position include a Ph.D. in one of the biological sciences. Two years of experience in a licensed laboratory, preferably in a clinical setting or in human specimen testing is preferred. Experience in HLA serology and DNA probe technology is highly desirable.

Genetic Design, Inc. offers an excellent salary and benefits package, which includes relocation assistance.

If interested, please forward your resume immediately to:

**HUMAN RESOURCES DEPARTMENT
GENETIC DESIGN, INC.
7017 ALBERT PICK ROAD
GREENSBORO, NC 27409**

For faster consideration, you may fax your resume to (919) 668-1442.

Craniofacial Growth and Development Yale School of Medicine

Applications and nominations sought for a tenure track position at the **Assistant/Associate Professor level** in the Section of Plastic Surgery at the Yale School of Medicine. This individual will join in a collaborative research effort related to defining and manipulating normal and abnormal development of the craniofacial skeleton. The successful candidate will have had post-doctoral experience and the ability to conduct independent research related to the cell biology, growth factor analysis, and/or collagen/matrix interactions associated with bone growth. The position will be available January 1, 1993. Salary is negotiable, depending on the experience of the individual.

Application deadline is November 15, 1992. Please send letters of inquiry with CV; reprints from two previous publications; and the names, addresses, and telephone numbers of three references to:

Dr. John A. Persing
Chief, Section of Plastic Surgery
Yale University School of Medicine
P.O. Box 3333
New Haven, Connecticut 06510

Yale University is an equal opportunity/affirmative action employer, and specifically invites and encourages applications from women and members of minority groups.

National Institutes of Health Research Scientist/ Postdoctoral Fellow (Cell and Molecular Biologist)

The Bone Research Branch, National Institute of Dental Research seeks an outstanding candidate with graduate education in Biological Chemistry and experience in Cell Biology or Molecular Biology for a senior postdoctoral fellowship position. Applicants should have at least 5 - 6 years postdoctoral training and experience in endocrinology and connective tissue research. The applicant should be familiar with: tissue culture techniques in general, biological assays for metabolism and structure of matrix macromolecules such as proteoglycans, hyaluronic acid and collagen, protein chemistry techniques, and purification of protein receptor molecules. Knowledge in molecular biology techniques such as DNA recombination, construction of cDNA libraries and cDNA probes for matrix macromolecules is required. Extensive experience in the use of computers for analysis of ligand-receptor interactions, chromatography and electrophoresis analyses, immunoassays, and ELISA, and in the use of commercially available computer programs for word processing, scientific graphics, and spreadsheets is desirable. A substantial record of publications of original work in the corresponding areas is required. Starting salary will be commensurate with qualifications and experience. The range will be \$33,500 - \$84,000 per annum. Interested candidates should submit a curriculum vitae, several reprints, summary of research interests and names of three references no later than November 15, 1992.

Material should be sent to:

Faye M. Harbrant
Personnel Management Specialist
National Institute of Dental
Research
Building 31, Room 2C23
9000 Rockville Pike
Bethesda, Maryland 20892



NIH is an Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITIONS IN CHEMISTRY

THE CHEMISTRY DEPARTMENT AT THE UNIVERSITY OF CALIFORNIA, BERKELEY, solicits applications for positions as **ASSISTANT PROFESSOR** of Chemistry, beginning in the Fall of 1993. Creative and energetic candidates in inorganic and biological chemistry who show exceptional promise for research and teaching are sought, though truly outstanding persons in any area of chemistry will be considered. Individuals selected for these positions will be expected to establish an outstanding research program. Exceptional candidates with established programs may be considered for appointment with tenure as Professor or Associate Professor. Candidates should send curriculum vitae, a proposed research program, and arrange to have three letters of recommendation sent to: **Chairman, Faculty Recruiting Committee; Department of Chemistry; University of California; Berkeley, CA 94720.** The deadline for receipt of applications is December 1, 1992, and appointments are subject to budgetary approval. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

NEUROSCIENCE/PSYCHOLOGY FACULTY POSITION—Colgate University, an undergraduate institution where excellent teaching and research are integrated, offers a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek candidates with expertise in behavioral neuroscience who wish to join a department that has both psychology and neuroscience programs. Topical interests may include neurophysiology, neuroanatomy, psychopathology, psychopharmacology, and other areas of common interest to majors in psychology and neuroscience. Responsibilities will include teaching introductory and upper-level courses in neuroscience and psychology (some of which are team-taught), and supervising student research. Periodic participation in general education courses is expected after the first year. The teaching load is five courses per year. *Minorities and women are strongly encouraged to apply. Colgate is an Equal Opportunity/Affirmative Action Employer.* Send curriculum vitae, three letters of reference and other supporting material to: **F. Scott Kraly, Psychology Department, Colgate University, Hamilton, NY 13346.**

NEUROSCIENCE

Massachusetts General Hospital
Harvard Medical School

The Department of Neurobiology at the Massachusetts General Hospital is recruiting basic science faculty in neurobiology. The search is being conducted jointly with the Department of Neurobiology at Harvard Medical School and successful candidates will hold appointments in both departments. Laboratory space will be located at the Massachusetts General Hospital as part of a basic science research group there. We intend primarily to recruit candidates at the **ASSISTANT PROFESSOR** level, although more senior candidates may also be considered. Two and possibly three appointments will be made. The primary scientific area of interest is cellular neurobiology, especially as approached with molecular techniques.

Applicants should submit curriculum vitae, a brief statement of current research (including reprints, if available) and future plans, and the names of three individuals who might write on their behalf to:

Gerald D. Fischbach, M.D.
MGH Neuroscience Search
Harvard Medical School
Department of Neurobiology
220 Longwood Avenue, B2-420
Boston, MA 02115

Women and minority candidates are encouraged to apply. The Massachusetts General Hospital and Harvard Medical School are Affirmative Action/Equal Opportunity Employer.

SCIENCE

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POSITIONS OPEN

FOOD CHEMISTRY ASSISTANT/ASSOCIATE PROFESSOR

The DEPARTMENT OF FOOD SCIENCE, UNIVERSITY OF MASSACHUSETTS/AMHERST invites applications from qualified individuals to fill a tenure-track position approximately two-thirds research, one-third teaching in the area of food chemistry. The incumbent will develop a research program in an area of food chemistry, teach undergraduate and graduate courses, and advise students. A Ph.D. in Food Science, Chemistry, Biochemistry, Molecular Biology, or closely related area is required. Postdoctoral experience desirable as is evidence of scholarly accomplishment and an ability to sustain a research program with external funding. Salary is competitive and commensurate with qualifications and experience. Applications are requested by November 15, 1992, but the search will remain open until the position is filled. Applicants should submit transcripts, a résumé and have four letters of reference sent to: **Dr. H.O. Hultin, Chair, Search Committee, Department of Food Science, University of Massachusetts, Amherst, MA 01003.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology at the University of Texas M.D. Anderson Cancer Center invites applications for tenure-track positions at the **ASSISTANT PROFESSOR** level. The department contains a group of highly interactive cell and molecular biologists and has active graduate and postgraduate training programs. Individuals working in the areas of cell and developmental biology of mammalian and non-mammalian systems are especially encouraged to apply. Applicants should have a Ph.D. or M.D. and a proven record of accomplishments as a postdoctoral fellow or faculty member. Please send curriculum vitae with statements of future research plans and three letters of reference to:

Dr. Eric N. Olson
The University of Texas
M. D. Anderson Cancer Center
Department of Biochemistry and
Molecular Biology (Box 117)
1515 Holcombe Boulevard
Houston, Texas 77030

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

NUTRITIONAL BIOCHEMISTRY/ METABOLIC REGULATION

Applications are invited for two faculty positions in the field of Nutritional Biochemistry/Metabolic Regulation. The successful applicants will join a research group in Nutritional Biochemistry in a suite of newly constructed laboratories and associated animal facilities and will establish independent research programs in the areas of protein, lipid or carbohydrate metabolism. These tenure-track positions are funded by the Medical Research Council of Canada through its Development Grant Program. Successful candidates must qualify for support through this program.

Appointments may be made at either the **ASSISTANT or ASSOCIATE PROFESSOR** rank.

Memorial University is committed to the principle of equity in employment. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Applications, together with curriculum vitae, names of three referees and three representative publications should be sent no later than November 15, 1992, to: **Dr. W. S. Davidson, Acting Head, Department of Biochemistry, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3X9.** e-mail: willied@kean.ucs.mun.ca. Telephone: (709) 737-8529, FAX: (709) 737-2422.

PROFESSORSHIPS IN CHEMISTRY, PRINCETON UNIVERSITY. The Department of Chemistry at Princeton University seeks highly qualified applicants in all areas of chemistry broadly defined, for the position of Professor. Inquiries should be directed to: **Professor J. T. Groves, Chair, Department of Chemistry, Princeton University, Princeton, NJ 08544,** by November 1, 1992. *Princeton University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITION CELL/MOLECULAR BIOLOGIST DEPARTMENT OF PHYSIOLOGY McGILL UNIVERSITY

Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level. The successful applicant will be expected to initiate an independent research program emphasizing molecular biological techniques. Research areas of special interest include ion channels, receptor-mediated signal transduction, cytokines/growth factors, cell adhesion and molecular biology of the lung. Applicants should have a doctoral degree, significant postdoctoral research experience and a demonstrated record of research accomplishments. Send curriculum vitae, bibliography, statement of research interests and future plans, and the names of three references by January 15, 1993 to: **Dr. David Goltzman, Chairman, Department of Physiology, McGill University, 3655 Drummond Street, Montreal, Quebec, Canada H3G 1Y6.** *While all eligible candidates are encouraged to apply, initial preference will be given to applicants who are Canadian citizens or permanent residents of Canada in accordance with Canadian Immigration regulations.*

UCLA FACULTY POSITIONS BIOCHEMISTRY AND PHYSICAL CHEMISTRY

The Department of Chemistry and Biochemistry of the University of California, Los Angeles intends to make tenure-track appointments in physical chemistry and biochemistry at the **ASSISTANT PROFESSOR** level, depending upon the availability of resources. Candidates must give evidence of potential distinction in creative scholarship and undergraduate and graduate teaching. A complete application should include curriculum vitae, a description of proposed research, and letters of recommendation from three professional references. *The University of California is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minority candidates.* Applications should be completed by December 1, 1992 and directed to: **Dr. C.A. West (Biochemistry Search) or Dr. W. M. Gelbart (Physical Search), Department of Chemistry and Biochemistry, University of California, Los Angeles, CA 90024-1569; FAX: (310) 206-4038.**

EMINENT SCHOLAR CHAIR IN SPINE

The University of Florida Departments of Neurosurgery and Neuroscience are seeking applicants for a one-million-dollar endowed faculty chair for research in spinal cord and nervous system injury, regeneration, repair and recovery. The chair was established through the State's Eminent Scholar Program, and was made possible by a gift from Charlie Mack and Kathleen Overstreet. Mr. and Mrs. Overstreet were inspired out of deep personal concern to support the enhancement of spinal cord research because their son, Mark, is a paraplegic due to a spinal cord injury. The appointee should have an M.D. and/or Ph.D. The research should have application to central nervous system and spinal cord injury and its treatment.

The anticipated starting date is March 1, 1993 or as soon as possible thereafter.


Applicants should send curriculum vitae and bibliography by November 15, 1992 to:

Albert L. Rhoton, Jr., M.D.
Chairman, Search Committee
Department of Neurological Surgery
P.O. Box 100265
University of Florida
Gainesville, FL 32610

Equal Opportunity/Affirmative Action Employer.

The University of Florida invites nominations and applications for the **BACARDI FAMILY EMINENT SCHOLAR CHAIR IN LATIN AMERICAN STUDIES.** This position will be filled annually, for a one-semester appointment, by a scholar from any discipline that focuses on Latin America. Send letters of nominations and inquiry, accompanied by curricula vitae, to: **Professor Murdo MacLeod, Bacardi Scholar Advisory Committee, Center for Latin American Studies, University of Florida, Gainesville, FL 32611.** Telephone: (904) 392-0375; FAX: (904) 392-7682.

The University of Florida is an Equal Opportunity and Affirmative Action Employer.



Matritech Inc. is using patented technology involving the analysis of nuclear matrix proteins to develop innovative products for the diagnosis and monitoring of cancer. We currently have opportunities for highly motivated individuals in the following areas:

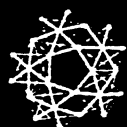
PROTEIN CHEMISTRY

The qualified individual should have three years post-doctoral experience plus one year of experience in an industrial setting. The qualified individual should have experience in the following areas: Protein purification, 1 and 2 D electrophoresis, column chromatography, western blotting, immunopurifications, and protein modifications. In addition, but not essentially, the individual should have experience in the following: nuclear protein isolation, northern/southern blotting, molecular biology, and cell fractionation.

RESEARCH ASSOCIATES

The qualified individuals should have experience in any of the areas listed above. In addition, these individuals should have experience in hybridoma technology, tissue culture, or product development in the in vitro diagnostics industry.

Qualified candidates please send resume to Vice President, Research and Development, Matritech, Inc., 763 Concord Ave., Cambridge, MA 02138. Matritech is an equal opportunity employer.



**Matritech
Inc.**

FACULTY POSITION IN ORGANIC CHEMISTRY

The Department of Chemistry at the University of Nebraska-Lincoln invites applications for a tenure-track position in *organic chemistry* at the assistant professor level with appointment to begin August 1993. Individuals with a commitment to excellence in research and teaching in any area of organic chemistry are encouraged to apply. Applications from individuals with research interests broadly relevant to macromolecular synthesis relating to materials science and/or biotechnology, women and minorities are especially encouraged. Applicants should submit a curriculum vitae, detailed summary of research plans, and three letters of recommendation to: Professor James M. Takacs, Department of Chemistry, University of Nebraska-Lincoln, Lincoln, NE 68588-0304 (Fax: 402-472-9402). Applications will be accepted until November 20, 1992 or until a suitable candidate is found. The University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodations under the Americans with Disabilities Act, contact Professor James M. Takacs.

ASSISTANT/ASSOCIATE PROFESSOR

The Department of Chemistry at the University of Nebraska-Lincoln invites applications for a tenure-track position in *Theoretical Chemistry* with appointment to begin August 1993. Strong candidates from all areas of theoretical chemistry are encouraged to apply. Special consideration will be given to applications from those whose research plans complement departmental emphasis in materials science and/or biotechnology, women and minorities. Interested individuals who show a commitment to excellence in teaching and research should arrange to submit a letter of application, a curriculum vitae, a research summary and three letters of reference to Dr. Lawrence J. Parkhurst, Department of Chemistry, University of Nebraska-Lincoln, Lincoln, NE 68588-0304, FAX: 402-472-9402, E-mail address: ljip@unl.edu. Applications will be accepted until November 20, 1992 or until a suitable candidate is found. The University of Nebraska-Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodations under the Americans with Disabilities Act, contact Dr. Lawrence J. Parkhurst.



Universität Ulm

THE UNIVERSITY OF ULM GERMANY

FACULTY POSITION IN CLINICAL MOLECULAR BIOLOGY

The faculty is engaged in a major expansion of its facilities and scientific activities in regard to Clinical Molecular Biology. As part of the expansion a new faculty position is available in the University Hospital of Internal Medicine.

The position of Professor of Clinical Molecular Biology is of the highest faculty level and connected to the position of Head of Department of Clinical Molecular Biology.

Opportunities exist for collaborative interactions with basic research programs as well as clinical investigations in virology, immunology, oncology and haematology.

Candidates with comprehensive and international experience in molecular biology are particularly encouraged to apply.

Candidates should hold a university degree in human medicine.

In addition to the new facilities excellent start-up fund salaries are nationally competitive and include a generous benefits package.

A strong institutional commitment to its faculty ensures stability in program development and continuity of research activities.

Applicants should submit a full C.V. and a letter summarizing their research accomplishments and goals, a list of scientific publications and certificates of teaching appointments.

The application form should be addressed to:

Hans G. Beger, MD,
Professor of Surgery,
Dean of the Faculty of Clinical Medicine,
Postfach 40 66,
D-7900 Ulm,
Germany

Deadline for applications: 1st November 1992.

POSITIONS OPEN

CHAIRPERSON DEPARTMENT OF LIFE SCIENCES INDIANA STATE UNIVERSITY

The department is seeking a dynamic leader with proven administrative abilities, a strong commitment to graduate and undergraduate education, and a history of nationally recognized research. Candidates with a Ph.D. in any area of biology are encouraged to apply. The department, which consists of 25 full-time faculty with interests in ecology, physiology and cell and molecular biology, offers undergraduate degrees in biology and clinical laboratory science, and M.S., M.A. and Ph.D. degrees. The position is available beginning 23 August 1993. Please submit a letter of application, curriculum vitae, and the names, addresses and telephone numbers of five references to: **Dr. James P. Hughes, Chair, Search Committee, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809.** Screening of applications will begin on 15 November 1992 and continue until the position is filled. *Indiana State is an Equal Opportunity/Affirmative Action Employer.*

CHAIRPERSON DEPARTMENT OF BIOLOGY

ASSOCIATE PROFESSOR/PROFESSOR tenure-track Chair position in Biology at Juniata College starting August 1993. We seek a person with demonstrated teaching ability and the interpersonal and administrative skills requisite for leading a diverse and vigorous department with a large number of students. Qualifications include experience in recombinant DNA technology and the ability to conduct an effective undergraduate research program in neurobiology (vertebrate or invertebrate) or a related area. Start-up funds available. Teaching responsibilities include courses in neurobiology and animal physiology. Send letter of application, curriculum vitae, and statement of research and teaching interests by November 15, 1992 to: **Dr. Karen Wiley Sandler, Vice President and Dean of Academic Affairs, Juniata College, Huntingdon, PA 16652.** *Affirmative Action/Equal Opportunity Employer.*

DIRECTOR OF RESEARCH DEVELOPMENT

The American College of Sports Medicine is seeking highly accomplished individual to direct its newly established office of research development. Office will manage, coordinate all programmatic administrative aspects of a research program, including grants, public policy, an information center, liaison with NIH and other organizations, scientific meetings and development. Position requires a Ph.D. or equivalent and five years minimum of experience in biomedical research or substitute experience that relates directly to the field of exercise science. Preference will be given to those with capabilities in the design, implementation and management of research projects, particularly those with a director or principal investigator background. Grant writing and administration required, as are outstanding verbal and written communication skills. Candidates should submit letter of application, curriculum vitae, and three letters of recommendation to:

**Chairman, Research Search Committee
American College of Sports Medicine
P.O. Box 1440
Indianapolis, IN 46206**

Applications will not be processed without letters of recommendation. Screening will begin by November 15, 1992, but applications will be accepted until the position is filled.

COLUMBIA UNIVERSITY, Department of Psychology, anticipates making one or more **FACULTY APPOINTMENT(S)** in the area of Human Cognition, broadly defined. Areas of research specialization could include, but are not limited to: attention, cognitive development, cognitive neuropsychology/neuroscience, decision making, learning, memory, problem solving, perception and visual cognition. Rank of the position(s) is open; applications from senior scholar/scientists are particularly encouraged. Applicants should submit curriculum vitae and copies of recent publications, and have three letters of recommendation sent to: **Personnel Search Committee, Department of Psychology, Schermerhorn Hall—Box 29, Columbia University, New York, NY 10027.** *Applications from members of minorities and from women are encouraged. Columbia University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ENDOWED CHAIR OF MOLECULAR GENETICS. Applications invited for the **Lewis Lehr 3M Endowed Chair in Molecular Genetics and Biotechnology.** Seeking a molecular geneticist of international recognition focused on basic research in mammalian biology and primary interests in the study of gene expression and interaction of gene products pertaining to human health and development using a model mammalian system such as the mouse. Will be expected to provide leadership in developing the **Lewis Lehr 3M Program in Molecular Genetics and Biotechnology** in affiliation with the School of Biological Sciences, the Department of Biochemistry and the Center for Biotechnology. Will be housed in the new \$30.8 million Beadle Center for Genetics and Biomaterials Research. Teaching responsibilities include courses in genetics and molecular biology. Competitive salary, generous set-up funds and annual endowment for program operation provided. Applications from scientists with well established research records including curriculum vitae, statement of research interest, recent reprints and names and telephone numbers of three references by February 1, 1993 (or until a suitable candidate is selected) to: **Dr. T. Jack Morris, Director, School of Biological Sciences, 348 Manter Hall, University of Nebraska—Lincoln, Lincoln, NE 68588-0118.** *The University of Nebraska—Lincoln is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodations under the Americans with Disabilities Act. Contact Dr. T. Jack Morris.*

DIRECTOR DIVISION OF BIOLOGY UNIVERSITY OF TENNESSEE



The University of Tennessee, Knoxville (UTK), seeks a Director for its proposed Division of Biology, which includes the Departments of Biochemistry, Botany, Microbiology and Zoology, the Graduate Program in Ecology and other interdisciplinary life sciences graduate programs. UTK is the major research campus and center for graduate education of the University of Tennessee system and has numerous collaborative interactions with the Oak Ridge National Laboratory. The Director will have budgetary authority and will be responsible for future development and structure of the Division and its academic programs. Applicants should have a broad perspective on biology as well as the interactive skills necessary for dealing with a faculty having diverse scientific interests. Candidates should provide evidence of administrative skills and significant research achievement commensurate with a professorial appointment. The successful candidate will have an understanding and demonstrated commitment to equal employment opportunity and affirmative action. Inquiries and applications, with curriculum vitae and names, addresses and phone numbers of three individuals able to provide recommendation, should be directed to: **Professor Mary Ann Handel, Biology Consortium, M303 Walters Life Sciences Building, University of Tennessee, Knoxville, TN 37996-0830 (Telephone: 615/974-6841).** Review of applications will begin early in January 1993.

UTK is an Equal Employment Opportunity/Title IX/Section 504/ADA Employer.

Harvard Medical School/Brigham and Women's Hospital Department of Anesthesia invites applications for a **TENURE-TRACK POSITION.**

This position calls for an independent investigator with a Doctoral degree who has a proven record of excellence, originality and productivity. The recruited investigator will establish an independent program focusing on the role of leukocytes in the cellular and molecular mechanisms of ischemia-reperfusion injury.

Qualified candidates should send curriculum vitae, a description of current research and the names and addresses of three references to: **Simon Gelman, M.D., Ph.D., Anesthesiologist-in-Chief, Harvard Medical School, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

Harvard Medical School/Brigham and Women's Hospital are Equal Opportunity Employers.

POSITIONS OPEN

FACULTY POSITION: MOLECULAR VIROLOGY

The Division of Molecular Virology at Baylor College of Medicine invites applications for a tenure-track faculty position. Rank is open and dependent on qualifications. An innovative scientist is sought, and an established research program is desirable. Of particular interest are research topics involving viral receptors, persistent/latent infections, viral immunology, and molecular biology of viral replication. Outstanding applicants in other areas of virology also will be considered. Applicants should have a Ph.D. or M.D./Ph.D., postdoctoral experience in molecular virology, and demonstrated research productivity. The successful applicant is expected to pursue an independent research program and to participate in graduate training. This appointment offers an excellent opportunity to join an expanding academic department with newly renovated laboratories and well-equipped support facilities. Current faculty research activities focus on the molecular basis of viral replication, viral gene expression, viral oncogenes, viral pathogenesis, and disease prevention. Send curriculum vitae, names/addresses of at least three references, a statement of current research activities, and a description of future plans by December 1, 1992, to: **Dr. Mary Estes, Faculty Recruitment Committee, Division of Molecular Virology, Baylor College of Medicine, Houston, TX 77030.** *An Equal Opportunity/Affirmative Action Employer.*

Mansfield University of Pennsylvania seeks to fill a full-time tenure-track **FACULTY POSITION** in the Biology Department (immunology, microbiology, and genetics) for Spring or Fall 1993. Ph.D. (immunology) preferred. Rank/salary commensurate with qualifications and experience. Application deadline November 15, 1992. Submit letter of interest, résumé, transcripts, and three current letters of recommendation to: **Position F-142, Human Resources Department, G-1 Alumni Hall, Mansfield University, Mansfield, PA 16933.** *Mansfield University is an Affirmative Action Employer and encourages the applications of women, minorities, and persons with disabilities.*

POSTDOCTORAL FACULTY POSITION

Candidates are sought for a research associate/assistant professor level position to help run research programs focusing on accelerated atherosclerosis and left ventricular remodeling post infarction. A background in cardiovascular molecular biology is desirable. Position requires background in southern and northern blot analysis, reporter gene assays, RNase protection assays, gene sequencing, *in situ* hybridization, etc. The individual should expect to develop independent research projects within this program, have a Ph.D. or M.D./Ph.D., appropriate postgraduate training, and a publication record demonstrating productivity and expertise. The candidate will join a core group of four investigators working in this area. An attractive package of salary and benefits, start-up funds, and laboratory space is committed for this recruitment. Submit curriculum vitae, names of three references, and a short statement of research interests to: **Bernard R. Chaitman, M.D., Director, Division of Cardiology, Saint Louis University Medical Center, Cardiology Division, 3635 Vista Avenue at Grand Boulevard, P.O. Box 15250, St. Louis, MO 63110-0250.** *Equal Employment Opportunity/Affirmative Action Employer M/F/H/V.*

NEUROBIOLOGIST POSITION. A tenure-track research/teaching position in the Department of Biology at Marquette University to start in August 1993. A successful candidate has postdoctoral training and is expected to establish an independent, competitively funded research program and to train M.S./Ph.D. students. We seek a neurobiologist who will complement our present research programs (vertebrate physiology, cell and developmental biology, and molecular biology and genetics). The teaching responsibility is an annual one semester undergraduate laboratory course in neurobiology and, in alternate spring semesters, a graduate course in his/her speciality or a seminar course. Send complete curriculum vitae statement of research, and name and address of three references to: **Ms. Sandra Priegel, Biology Department, Marquette University, Milwaukee, WI 53233.** Application deadline is 1 December 1992. *Equal Employment Opportunity/Affirmative Action Employer.*

Radiopharmacologist Junior Level

Merck Research Laboratories in West Point, PA, is a recognized leader in pharmaceutical and biological research. Our Radiopharmacology Department has an excellent junior-level research opportunity available.

Selected candidate will evaluate test agents using nuclear medicine technology in anesthetized and/or conscious animals, and assist in the analysis of results and the preparation of reports.

Applicants must have a BS or MS degree in a related science along with 3-5 years experience in whole animal pharmacology. Experience in handling radioactive compounds and an understanding of counting technology is desired. Familiarity with computers helpful.

An excellent salary and benefits program accompanies this position at our modern research facilities located 25 miles northwest of Philadelphia. For consideration, please send C.V. with cover letter to: **Personnel Manager, Ad #D-23, MRL Human Resources WP42-2, MERCK RESEARCH LABORATORIES, P.O. Box 4, West Point, PA 19486.** An Equal Opportunity Employer.



GENETIC MEDISYN: OPPORTUNITIES IN PHARMACEUTICAL R&D

Genetic MediSyn Corporation, an antisense R&D company established in 1991, is committed to the discovery and development of oligonucleotide-based therapies for the treatment of significant human diseases. We are completing our relocation to a 40,000 sq. ft. facility in Columbia, Maryland that is conveniently located between Baltimore and Washington, D.C. With our expanded facility we are seeking to add to our R&D program a number of dedicated managerial and scientific personnel. We are seeking individuals who are committed to working together in an atmosphere of scientific excellence. The following opportunities are currently available:

Qualified candidates for the Senior Scientist positions should have a Ph.D., or equivalent degree, with a minimum of 2 years post-doctoral experience. Candidates should have a proven publication record as well as excellent oral and written communication skills.

Nucleic Acid Chemists: Senior Scientists

Synthetic organic chemists with experience in nucleic acid chemistry/biochemistry are being sought for the Medicinal Chemistry Department. Successful candidates should have a strong synthetic background in oligonucleotide modifications. Experience in medicinal chemistry would be highly desirable.

Endocrinologist/Immunologist: Senior Scientists

Successful candidates should have experience in the development of cell based assay systems and possess strong cellular and molecular biology skills. Endocrinologists should be experienced with various aspects of steroid-dependent diseases, steroid biochemistry, and receptor physiology. Immunologists should be experienced with mediators of the inflammatory response and the various aspects of inflammatory diseases.

Biology and Chemistry Research Associates

Candidates must have a BS/MS degree with a minimum of 2 years laboratory experience. Biology RAs should have a strong background in either molecular or cellular biology, with extensive experience in cell culture techniques. Chemistry RAs should have a strong background in synthetic chemistry. Experience in nucleic acid chemistry is preferred.

Prospective candidates should have excellent communication skills.

If you have the necessary qualifications and desire to accept the challenge of developing a new approach to drug therapy, please send a detailed CV, including references, and a statement of research interests to:

**Genetic MediSyn Corporation
Attn: Director of Human Resources
7101 Riverwood Drive
Columbia, MD 21046-1297**



RPI, a leader in the development of ribozyme-based pharmaceutical and agricultural products, has established a multi-disciplinary team of creative scientists in a new facility in Boulder, CO. We are seeking qualified applicants to join our Chemistry/Biochemistry group. Two positions are available immediately.

B.Sc./M.Sc. Scientist with experience in the solid-phase synthesis of nucleic acids (DNA/RNA), chemical synthesis of protected nucleic acid intermediates and familiarity with Macintosh and Silicon Graphics computer systems.

Ph.D. Scientist with 2+ years postdoctoral experience in the organic synthesis of modified nucleosides and/or carbohydrates. An understanding of, or experience with, structure/function studies of nucleic acid-nucleic acid or protein-nucleic interactions would be desirable.

We offer a competitive salary and benefits package, including a stock option plan. For consideration, please send a *Curriculum Vitae* including a publication list and the names of three references to:

**Dr Nassim Usman
Ribozyme Pharmaceuticals, Inc.
2950 Wilderness Place
Boulder, CO 80301
FAX 303.449.6995**

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SCIENTISTS

DRUG DISCOVERY & PRODUCT DEVELOPMENT

ICOS Corporation is a biotechnology company pioneering scientific development in the fields of cell trafficking and cell activation. We are establishing a drug discovery and product development program to integrate with our ongoing research in cell and molecular biology. To meet our expanding needs, we are interested in scientists with a minimum of 1 years experience and expertise in one or more of the following program areas:

- NATURAL PRODUCTS SCREENING
- DEVELOPMENT OF HIGH THROUGHPUT ASSAYS
- ANALYTICAL AND ISOLATION CHEMISTRY
- MICROBIOLOGY
- FERMENTATION DEVELOPMENT

ICOS offers a stimulating intellectual environment and a state-of-the-art research facility. Our compensation package includes a competitive salary and a comprehensive benefit program which includes stock options.

If the ICOS environment sounds appealing to you, please specify one of the five program areas and send your C.V. with three letters of reference to:

**(Program Area)
ICOS Corporation
22021 20th Avenue S.E.
Bothell, WA 98021
FAX: (206) 485-1911**

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POSITIONS OPEN

HARVARD/POSTDOCTORAL POSITIONS are available to study molecular mechanisms of atherosclerosis and hypertension with special emphasis on identification of *cis*- and *trans*-acting factors that regulate genes important for growth and differentiation of vascular endothelial and smooth muscle cells (*J. Biol. Chem.* 266:19034, 266:16188, 267:9467). Experience with molecular biology, protein chemistry, cell biology, or transgenic animals is desirable. Please send curriculum vitae and names of three references to: M. E. Lee, M.D., Ph.D., Cardiovascular Biology Laboratory, Building 2, Room 129 B, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.

POSTDOCTORAL POSITIONS

Two postdoctoral research associate positions are available in the molecular genetics and biochemistry of the yeast *Saccharomyces cerevisiae*. One position concerns analysis of site-specific translational frameshifting; the experimental aim will be to study the ways in which programmed translational frameshift sites manipulate the translational apparatus. The second position concerns lipid biosynthesis and function with the aim of understanding metabolic control in yeast. The work will involve yeast genetics, molecular biology and biochemistry. Experience in one or more of these areas is preferred, but not required, for both positions. The second position requires experience in HPLC analysis of phospholipids. Applicants should submit curriculum vitae and arrange for three letters of reference to be sent to: Dr. Philip Farabaugh (position one) or Dr. Patricia McGraw (position two), Department of Biological Sciences, University of Maryland, Baltimore, MD 21228, USA (FAX: 410-455-3875). UMBC is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study phosphotyrosyl phosphatases in human skin. Experience in molecular biology and biochemistry preferred. Project involves the expression and activity of phosphatases in keratinocyte proliferation. Send curriculum vitae and names two references to: Lloyd E. King, Jr., M.D., Ph.D., Department of Medicine, Division of Dermatology, Room 608 Medical Arts Building, Vanderbilt University Medical School, Nashville, TN 37235.

POSTDOCTORAL POSITION in nutrition and cancer to study the effects of energy intake and growth on carcinogenesis and growth factor receptors. Applicants must have experience in a relevant field such as nutrition, carcinogenesis, physiology, endocrinology, or molecular biology. Send curriculum vitae plus three letters of reference to: Dr. David Klurfeld, Department of Nutrition and Food Science, 3009 Science Hall, Wayne State University, Detroit, MI 48202. Wayne State University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

HUMAN GENE THERAPY PROGRAM AT UCLA

Available immediately to participate in multidisciplinary Human Gene Therapy Program at the UCLA Medical Center. The position involves design of novel mouse retroviral and adeno-associated virus vectors to be used in basic, preclinical and clinical programs employing tumor-infiltrating lymphocytes, genetically engineered tumor cell vaccines and *in vivo* liver transduction.

Applicant should have experience in molecular and cell biology. Send cover letter, curriculum vitae, and names and addresses of three references to: James S. Economou, M.D., Ph.D., Division of Surgical Oncology, 54-140 CHS, UCLA Medical Center, Los Angeles, CA 90024-1782. FAX: 310-206-3610. UCLA is an Equal Opportunity/Affirmative Action Employer.

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POSITIONS OPEN

POSTDOCTORAL POSITION studying catecholamine enzyme expression, with particular focus on mechanisms regulating transcription and functional enzyme. Experience in biochemistry and molecular biology required. Ph.D., M.D./Ph.D. or M.D. with neuroscience training preferred. Send curriculum vitae and three letters of recommendation to: Dr. Dona Lee Wong, Nancy Pritzker Laboratory, MSLS Building, Room P-106, Stanford University School of Medicine, Stanford, CA 94305-5485.

POSTDOCTORAL POSITION. Two-year benchwork-intensive position available immediately in the Institute for Cancer and Blood Diseases of Hahnemann University to join a group focusing on the expression and transposition of human endogenous retrovirus elements, especially with regard to carcinogenesis and ICL. Candidates should have a Ph.D. and/or M.D. degree, be experienced in cloning and expression of transfected sequences, and be a U.S. citizen or permanent resident. Please send a curriculum vitae and a list of 3 references to: Dr. Isadore Brodsky, Department of Neoplastic Diseases, Hahnemann University, Broad and Vine Streets, MS 412, Philadelphia, PA 19102-1192. Hahnemann University is an Equal Opportunity Employer.

TRUDEAU INSTITUTE

A **POSTDOCTORAL POSITION** in IMMUNOLOGY is available for a person with training in cellular/molecular immunology or parasitology to study the immune response to experimental *Toxoplasma gondii* infections.

THE TRUDEAU INSTITUTE is a not-for-profit, basic research institute with modern facilities, in-house animal production, and efficient management. The Trudeau Institute is located on the shore of Saranac Lake, eight miles from Lake Placid. Competitive salary and fringe benefits are offered and institute housing will be made available.

Applications consisting of curriculum vitae and the names and addresses of three references should be sent to:

Lawrence L. Johnson, Ph.D.
Trudeau Institute, Inc.
P.O. Box 59
Saranac Lake, NY 12983

POSTDOCTORAL POSITION funded by NSF available in early 1993 to study molecular indicators of condition in zooplankton. Biochemical and sea-going experience are assets. Send curriculum vitae, selected reprints, and names, addresses, telephone numbers of references to: Dr. Patrick J. Walsh, Chairman, Division of Marine Biology and Fisheries, Rosenstiel School of Marine and Atmospheric Science, 4600 Rickenbacker Causeway, Miami, FL 33149. The University of Miami is an Equal Opportunity/Affirmative Action Employer and smoke/drug-free workplace. We do not discriminate on the basis of race, religion, color, sex, age, national origin or disability. We encourage applications from females, veterans, disabled and minority group applicants.

POSTDOCTORAL POSITION IN HISTOPATHOLOGY to study malaria parasite invasion of liver, and inflammatory response to parasite by immunized rodents. Requires experience in immunohistology or electron microscopy; parasitology background not necessary. Must be U.S. citizen or permanent resident. Send curriculum vitae and names of three references to: Dr. Jerome Vanderberg, Department of Medical and Molecular Parasitology, New York University School of Medicine, 550 First Avenue, New York, NY 10016.

MOLECULAR ENDOCRINOLOGY DEVELOPMENTAL BIOLOGY

POSTDOCTORAL POSITION is available Spring 1993 to study the placental prolactin gene family. See our recent review [Endocrine Reviews 12:402-423, 1991] for background information regarding the research project. Experience in molecular biology and protein chemistry preferred. Send curriculum vitae and names of three references to: Dr. Michael J. Soares, Department of Physiology, University of Kansas Medical Center, Kansas City, KS 66103, Telephone: (913) 588-5691; FAX: (913) 588-5677. The University of Kansas Medical Center is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS available immediately for molecular studies of transcription factor expression and function in hematopoiesis. Research will include characterizing recently cloned transcription factors and identifying additional transcription factors important in lymphokine gene expression and leukemogenesis. Applicants should have a Ph.D. degree and background in gene expression, DNA-protein interactions, signal transduction, or protein purification. Send a letter of interest, curriculum vitae and names and phone numbers of two references to: Dr. Stephen D. Nimer, C/O Memorial Sloan-Kettering Cancer Center, Department of Medicine, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITION. Available now to study the regulation of mucin secretion from cultured cells. Strong background in biochemistry or pharmacology required. Experience in PKC is highly preferred. Send a résumé and names of three references to: Dr. K. C. Kim, Department of Pharmacology and Toxicology, University of Maryland School of Pharmacy, 20 North Pine Street, Baltimore, MD 21201. Telephone: (410) 328-5097.

POSTDOCTORAL POSITION

Research on structure/function relationships in eukaryotic RNA binding proteins with emphasis on hnRNP and other related proteins containing the RNP consensus sequence. Approaches being used include *in vitro* mutagenesis, synthetic peptide analogues and a variety of biophysical techniques including fluorescence, CD and NMR. Experience in *in vitro* mutagenesis and biophysical methods of protein characterization would be useful but not absolutely essential. Applicants should send curriculum vitae to: Dr. Kenneth Williams, Department of Molecular Biophysics and Biochemistry, Yale University, 333 Cedar Street, New Haven, CT 06510. Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the mechanism of regulation of H-2 gene and retrovirus expression in murine tumor cells. Experience in molecular biology is required. Send curriculum vitae to: Dr. Eli Gorelik, Pittsburgh Cancer Institute, Biomedical Science Tower, Room W954, University of Pittsburgh, Pittsburgh, PA 15213. FAX: (412) 624-7736.

The University of Pittsburgh is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

A position is available to study the metabolism in *E. coli* and *Corynebacterium* for industrial production of biochemicals. Candidates must have experience in molecular biology and bacterial genetics. Applicants should have résumé and name of three references sent to: Dr. James Liao, Department of Chemical Engineering, Texas A&M University, College Station, TX 77843-3122. Telephone: (409) 845-9807. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP. Applications are invited for a postdoctoral research position available immediately in pharmacokinetics. The research work will include clinical and animal studies focusing on the mechanism of drug transport across the mammary endothelium, pharmacokinetics and dynamics in the neonate. Applicants should have a Ph.D. in pharmaceutical sciences, pharmacology, biochemistry or drug metabolism. Experience with cell culture systems is desirable. Interested individuals should submit curriculum vitae and three letters of reference as soon as possible to: Patrick J. McNamara, College of Pharmacy, University of Kentucky, Lexington, KY 40536-0082, or call (606) 257-8656. An Equal Opportunity/Affirmative Action Employer.

LASER PATHOLOGY/MORPHOLOGY FELLOWSHIP. The Wellman Laboratories of Photomedicine are offering a one-year research position to study the pathology of laser-tissue interactions. The current areas of research include a variety of organ systems and processes. Inquiries should be directed to: Thomas J. Flotte, M.D., Massachusetts General Hospital (MGH), Boston, MA 02114. Call: (617) 726-3991 or FAX: (617) 726-3192. MGH is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Become a vital member of a team dedicated to identifying new antiviral compounds.

At the Medical Research Division of American Cyanamid Company, we're making important strides in developing a new generation of therapeutics. From the creation of materials that allow for longer periods of chemotherapy at lower doses to the discovery of new antiviral agents, our scientists are making significant contributions in drug discovery and development. We invite you to consider these opportunities in our Molecular Biology Section:

Antiviral Chemotherapy

The **Senior Research Scientist** we seek will direct automated antiviral screens against several unrelated human pathogenic viruses. To accomplish this, we will look to you to develop a broad expertise in the biology of these viruses and to use this expertise in implementing other screens and in analyzing the large body of data produced. The challenge is to identify antiviral compounds and to interact directly with the sections of molecular biology, pharmacoresearch, chemistry, and toxicology to investigate mechanisms of action to further drug development.

Successful candidates must have a PhD with several years of postdoctoral experience and have expertise in some aspect of virology.

An opportunity also exists for a **Research Scientist** to assist in directing this effort. Applicants must have a MS or BS, preferably with experience in virology.

Molecular Biologist

We seek a MS/BS level Research Scientist with prior molecular biology experience to study the function of viral RNA-dependent RNA polymerases.

We are located at the Lederle Laboratories campus of American Cyanamid in Rockland County, only 25 miles north of New York City. The salaries are fully competitive and include comprehensive benefits. For consideration, please send your resume, indicating the position of your choice, to: Professional Employment, Dept. OH, Lederle Laboratories, 401 N. Middletown Road, Pearl River, NY 10965. An Equal Opportunity Employer.



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SIBIA

SIBIA is expanding its interdisciplinary research and development on therapeutics for neurodegenerative diseases. We are currently seeking candidates for:

VICE PRESIDENT AND MEDICAL DIRECTOR

This key executive will supervise Data Management and Biostatistics, Regulatory Affairs, and Clinical Trial Management for phase I-IV trials. Responsibilities will include planning, design, budgeting, oversight and reporting on clinical trials with novel therapeutic agents for the treatment of neurodegenerative disorders. The ideal candidate will be board certified in neurology with an MD or MD and PhD and 5+ years' relevant and successful experience in the pharmaceutical industry, including evidence of managerial skills;

MOLECULAR AND CELLULAR BIOLOGY,

including cloning, cell culture and mammalian cell expression techniques;

NEUROPHARMACOLOGY, including *in vitro* and *in vivo* functional assay techniques ranging from single cell studies on cloned receptor subtypes to behavioral paradigms; and

MEDICINAL CHEMISTRY, including organic synthesis, peptide synthesis and modeling as it relates to receptor ligands and enzyme inhibitors.

SIBIA offers a salary commensurate with experience, excellent benefits, a superior work location and a national reputation. Send CV with names of three references to: Lynn Alba, c/o SIBIA, 505 Coast Boulevard South, Suite 300, La Jolla, CA 92037. EOE.

ASSISTANT PROFESSORS

The Department of Biological Sciences, Mississippi State University, invites applications for 2 tenure-track, 9-month faculty positions. Starting date: 16 August 1993.

DEVELOPMENTAL BIOLOGIST. Preference will be given to applicants working at the cellular, genetic, or molecular levels. Research involving transgenic animals, cell-cell interactions, or morphogenesis would be especially appropriate, but other areas will be considered fully. Teaching responsibilities include basic and graduate cell biology courses and a course in the area of expertise. Chair of Search Committee, Dr. Dwayne Wise.

PLANT ECOLOGIST. We are seeking a broadly trained individual who uses quantitative approaches to study any area of plant ecology. Preference will be given to applicants working at the community or ecosystem level. Teaching responsibilities include undergraduate and graduate courses in botany and ecology. Chair of Search Committee, Dr. Michael J. Sullivan.

Qualifications. Completed Ph.D. in a relevant field; teaching and post-doctoral experience desirable. Successful candidates are expected to develop an externally funded research program and direct graduate students. Applications should include a curriculum vitae, a concise statement of research and teaching interests, selected reprints, and three letters of reference. Screening will begin 15 December 1992 and will continue until the positions are filled. Applications should be sent to the appropriate Search Committee Chair: **Department of Biological Sciences, P.O. Drawer GY, Mississippi State University, Mississippi State, MS 39762. Phone: 601-325-3120. Mississippi State University is an Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

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 A93113PH, P.O. Box 5510, Livermore, CA 94550. Equal Opportunity Employer. M/F/D/V.**

University of California

**Lawrence Livermore
National Laboratory**

POSTDOCTORAL FELLOW

Position available in the laboratory of Dr. John Krupinski. The successful applicant will have a Ph.D. in biochemistry, cell biology, or pharmacology with experience in molecular biology. The project will involve the expression and characterization of novel forms of adenylyl cyclase. Emphasis will be placed on determining those structural features of the adenylyl cyclases that are responsible for mediating unique physiological responses. Competitive salary and fringe benefits are available. Please send curriculum vitae with the names and telephone numbers of three references to:

**Geisinger Human Resources Department (JK)
100 North Academy Avenue
Danville, PA 17822-1529
Equal Opportunity Employer.**

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

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE to work in laboratory at Harvard Medical School investigating the transcriptional regulation of genes encoding regulatory peptides. Experience in molecular biology and cell culture desirable. Salary commensurate with qualifications and experience. Send curriculum vitae and the names of three references to: **Dr. Michael Wolfe, Brigham and Women's Hospital, GI Division, 75 Francis Street, Boston, MA 02115. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE. Available from the Winter of 1992 for a recent graduate with a Ph.D. in molecular biology/cell biology interested in malignant transformation and cellular differentiation. Send curriculum vitae to: **Mark A. Israel, M.D., University of California, San Francisco Brain Tumor Research Center, HSE-722, 3rd and Parnassus Avenues, San Francisco, CA 94143-0520. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE. The University of Nebraska Medical Center's Department of Ophthalmology is looking for a researcher with an interest in the factors that affect the successful outcome of glaucoma surgery and on the pathophysiology of optic nerve damage in glaucoma. Ph.D. in physiology, or M.D. in ophthalmology is required. Prior experience in the area of eye research is preferred. Position available from November 1, 1992 through November 1, 1993. Salary: \$16,000 plus benefits, 40 hours per week. Send curriculum vitae to: **Michael Yablonski, M.D., Ph.D., Professor and Chairman, Department of Ophthalmology, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-5540. Equal Opportunity/Affirmative Action Employer. Minorities and Women Are Encouraged to Apply.**

POSITIONS OPEN

GRADUATE FELLOWSHIPS/ASSISTANT-SHIPS AVAILABLE for Health and Environmental Chemistry Ph.D. program, Oakland University. Graduates are well prepared for work in the increasingly important areas of environmental and health-related chemistry. Faculty research interests include analysis and molecular biology of environmental pollutants, DNA radiation damage, inorganic antiviral/antitumor agents, air pollution studies, fatty acid metabolism, biosensors, steroid hormone action and signal transduction, cellular and molecular immunology, and carcinogenesis mechanisms. For information, write: **Mark Severson, Chemistry Department, Oakland University, Rochester, MI 48309. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE, Brookhaven National Laboratory. The Biology Department at Brookhaven National Laboratory (BNL), Long Island, New York, is seeking to fill a position as part of a collaborative effort with the Biomolecular Structure Analysis Center of the University of Connecticut School of Medicine. The state-of-the-art facilities at BNL include X-ray and neutron diffraction instruments at the National Synchrotron Light Source and High Flux Beam Reactor. The Biomolecular Structure Analysis Center supports X-ray diffraction, molecular modeling, scanning electron microscopy (SEM) and NMR approaches, and a variety of physical chemical methods for studying drug-membrane interactions. The successful candidate will be involved in the following projects: (1) isolation, purification and structural studies of photosystem II particles from cyanobacteria; and (2) X-ray, neutron diffraction and SEM studies of synaptosome membranes. Candidates should submit a résumé or curriculum vitae outlining research interests and the names of three professional references to either: **Leo G. Herbert, Director, Biomolecular Structure Analysis Center, University of Connecticut School of Medicine, 263 Farmington Avenue, Farmington, CT 06030-2017; or F. W. Studier, Chair, Biology Department, Building 463, Brookhaven National Laboratory, Associated Universities, Inc., Upton, NY 11973. Equal Opportunity Employer M/F/D/V.**

RESEARCH ASSOCIATE

An individual with a Ph.D. degree and postdoctoral experience is desired for a Research Associate position in the Department of Medicine at the University of Colorado Health Sciences Center. Candidate must have considerable experience in molecular biology, particularly in the regulation of gene expression in mammalian cells. Position is available October 1, 1992, to study the regulation of early response genes in activated macrophages (*J. Biol. Chem.* 266: 5929, 1991). Opportunity for independent funding will be strongly supported. Salary: \$32,000 to \$35,000 per year plus benefits. Send curriculum vitae and names of references to: **David Coleman, M.D., Infectious Disease Division, B-168, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Denver, CO 80262. The University of Colorado is committed to Equal Employment Opportunity/Affirmative Action.**

RESEARCH ASSOCIATE to conduct research on the effects of oxidized lipids on atherosclerosis; develop protocols and execute experiments under the direction of a principal investigator; test effects of oxidized lipids *in vivo* and *in vitro* on artery wall cells; maintain cultures of endothelial and smooth muscle cells; prepare and provide defined diets to rats and mice; analyze vessel wall cells for induction of specific messenger RNAs associated with the interaction of endothelium with blood cells; clone genes related to this interaction; keep records of rat and mice strains tested and evidence of vessel damage; keep notes on laboratory protocols and results; assist in technical and scientific training of graduate students and fellows.

Requires: M.S. in biomedical science or public health; experience in biomedical research using rodents; preparing and monitoring regulated nutrition; recognizing ill health in experimental animals; performing rodent surgery to isolate heart and aorta, and culturing vessel wall cells; isolation and study of M-RNA for Northern Blotting; transfection of COS cells with C-DNA.

Salary: \$28,400 per year. Job location: Los Angeles, California. Send this ad and résumé to: **Job #AM 7809, P.O. Box 9560, Sacramento, CA 95823-0560, no later than October 24, 1992.**

POSITIONS OPEN

RESEARCH ASSOCIATE. Available January 1, 1993, or until filled for studies on cellular differentiation and development in the eucaryotic microorganism, *Neurospora crassa*. Project involves characterization of genes involved in the transition of dormant cells into rapidly growing vegetative hyphae. Applicant should have a Ph.D. in molecular biology or related field with experience in the regulation of gene expression. Send résumé and names of three references by November 23, 1992, to: **Dr. Joseph C. Schmit, Medical Biochemistry, Southern Illinois University at Carbondale, Carbondale, IL 62901. An Affirmative Action/Equal Opportunity Employer.**

ASSOCIATE RESEARCH SCIENTIST: Investigate mechanisms by which intracellular second messengers regulate ion transport in epithelia and the structure-function relationship of calcium hormone receptors. Position requires M.D./Ph.D. and a minimum of four years of demonstrated research experience in fluorescence microscopy, video analysis, radioimmunoassay, molecular biology, and biochemical purification of membrane proteins. Send résumé to: **Herbert Chase, M.D., Columbia University, Department of Medicine, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.**

BEHAVIORAL PHARMACOLOGIST

University of Chicago Department of Psychiatry continuing search for Behavioral Pharmacologist with interests in drug abuse research and/or behavioral neuroscience. Must have strong record of original research demonstrated by publication and grant support. This appointment will be made in conjunction with the Department of Pharmacological and Physiological sciences, which has active research and training programs in neuropharmacology and psychopharmacology. Applicants must have Ph.D. or M.D. with relevant experience. Send curriculum vitae and letter outlining research interests and plans to: **H. de Wit, Ph.D., Search Committee Chair, Department of Psychiatry (MC 3077), The University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637. Equal Opportunity/Affirmative Action Employer.**

BIOTECHNOLOGIST: Laboratory position with rapidly growing biotechnology company in Madison, Wisconsin. Applicant must have good working knowledge of hybridoma technology and have at least five years of laboratory experience in production, cloning and growth of hybridoma cell lines. Salary based on experience. Excellent benefits. Send résumé to: **HARLAN Bioproducts for Science, Personnel Department, P.O. Box 44220, Madison, WI 53744-4220. Telephone: 608/277-2060, FAX: 608/277-2120.**

CYTOGENETICIST

The Department of Pediatrics and Human Development, Michigan State University, has an opening for a **CYTOGENETICIST**. This person's primary responsibility will be to direct the clinical Cytogenetics Laboratory. This laboratory currently karyotypes about 2,400 specimens a year including amniocentesis, blood, tissue and marrow samples. The Cytogenetics laboratory is part of the Clinical Genetics Unit and the laboratory Director will interact closely with other faculty and staff in that unit. There will also be significant interaction with other individuals in this department and with other departments on campus. The successful candidate will be expected to develop and introduce new cytogenetic technology as it becomes available. They will be expected to pursue scholarly activity either in their own research program or in collaboration with others. It is also anticipated that they will spend a small amount of time teaching medical students and residents. A full-time, 12-month academic appointment is jointly offered with the Department of Pathology. Academic position and salary according to experience.

Requirements: M.D. and/or Ph.D. in an appropriate Biological Science, certification in Cytogenetics from AAHG.

For further information please contact: **Dr. Rachel Fisher, Search Committee Chair, Department of Pediatrics/Human Development, Michigan State University, B245B Life Sciences, East Lansing, MI 48824. Telephone: (517) 353-2008.**

Michigan State University is an Affirmative Action/Equal Opportunity Institution.

VZV

ANNOUNCING APPLICATIONS FOR THE VARICELLA-ZOSTER VIRUS POSTGRADUATE FELLOWSHIPS Two \$50,000/Year Awards

The VZV Research Foundation announces an international competition for two postgraduate fellowships to study the pathogenesis of the varicella-zoster virus (VZV) and associated sequelae.

Applicable research areas include: virus host interactions; neuron growth; nerve cell interactions; post-herpetic neuralgia and pain management.

Each \$50,000 grant includes \$35,000 annual salary plus benefit allowance, and research allowance for the sponsoring lab. Second year support is contingent on satisfactory progress.

Foundation requires mentor letter of intent and evidence of external funding for research on VZV or allied field.

Applications available October 1, 1992.

Filing deadline January 31, 1993.

Fellows will be notified April 1, 1993.

Funding starts July 1, 1993.

For application, write: Fellowship Committee-S, The VZV Research Foundation, Inc., 40 East 72nd Street, New York, NY 10021.

The VZV Research Foundation, established in 1991, is the only non-profit organization fighting all manifestations of VZV. Guided by 24 international physicians and scientists.

MOLECULAR GENETICS

Postdoctoral Scientists

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has exciting opportunities for two postdoctoral scientists to join its Molecular Genetics research team. The two scientists will characterize the function of the protease and the tat transactivator from the human immunodeficiency virus using molecular biology techniques.

Requirements for this position include a Ph.D. in Molecular Biology or a related biological science and a strong background in recombinant DNA techniques. Experience in gene expression in microbial and/or eukaryotic systems, cDNA cloning and/or protein purification is highly desirable. Postdoctoral scientists are strongly encouraged to publish research findings.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, as well as a stimulating and challenging work environment. For confidential consideration, please submit your C.V. and the names of three references to: SmithKline Beecham Pharmaceuticals, Employment Administrator, #H024, PO Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/D/V.



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Products.
Diversity
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Syntex has earned its reputation in the pharmaceutical industry for significant and innovative research with a continuing commitment to excellence in R&D. Consider these exciting research opportunities located at our Palo Alto, California headquarters.

Behavioral Pharmacologist

As a behavioral pharmacologist, you will establish and conduct in vivo and operant techniques to facilitate the discovery and evaluation of novel therapeutic agents for central nervous system disorders. These include anxiety, dementia, schizophrenia and depression.

The candidate should have a Ph.D. in Pharmacology with a background in neurophysiology and neurochemistry. Also required is at least 2 years of related post-doctoral experience, preferably in an industrial setting. Expertise in operant conditioning, drug discrimination, and in animal models of anxiety, depression, learning and memory is essential.

Behavioral Scientist

This position calls for a behavioral scientist working in the same area as our Staff Researcher (see above). The successful candidate will conduct in vivo studies for the discovery and evaluation of novel therapeutics, and be involved in experimental design, data collection and management, statistical analysis and presentation.

This position requires a BS in Pharmacology or Experimental Psychology with specialized coursework in animal psychology, neurophysiology or general neuroscience. Also required is 0-2 years of experience in a behavioral pharmacology lab.

Syntex offers a challenging environment, excellent compensation, relocation and benefits package. For immediate consideration, please send your resume to: Syntex Corporate Employment, Job # MCS7109, 3401 Hillview Avenue, Suite A2-130, Palo Alto, CA 94303. Syntex is an equal opportunity employer committed to the values of a diversified workforce.

**See us at the Neuroscience Conference
October 25-30
in Anaheim, California.**



SYNTEX

BIOANALYTICAL CHEMIST

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an exciting opportunity available in its Analytical Chemistry Department for a Bioanalytical Chemist. The selected candidate will assume responsibility for the supervision of a Bioanalytical Group. Duties include developing and validating methods for biopharmaceutical proteins, providing in-process analytical support to the protein purification group and contributing to IND/NDA/PLA submissions.

The qualified candidate will possess a Ph.D. in Chemistry, Biochemistry, or a related field, and two to five years' postgraduate experience. A thorough knowledge of protein characterization, SDS-PAGE, IEF, Western Blotting, ELISA and other immunochemical techniques is essential.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. We offer a stimulating, innovative work environment as well as a competitive compensation/benefits/relocation package. For confidential consideration, please submit your C.V. to: Employment Administrator, #H430, 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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ELECTROPHYSIOLOGIST

DowElanco, a global research-based agricultural products company, is seeking an Electrophysiologist to join the entomologists, biochemists and chemists of the Insect Management Group and participate in the discovery of novel insect control agents and technologies.

Primary responsibility will be performing electrophysiological measurements on insect tissues and cultured cells, using patch clamp and microelectrode techniques.

Qualified candidates will have a Bachelor's or Master's degree in a biological science, with course work and/or experience in electrophysiology. Experience with insects and cell culture is desired, and strong analytical, computer and interpersonal skills are necessary.

DowElanco offers an excellent salary and benefits package, outstanding opportunities for advancement and an exciting interactive research environment at our new state-of-the-art research facility in Indianapolis, Indiana. Please send your resume and three references to: John Weseloh, R&D Recruitment, DowElanco, 9002 Purdue Road, Indianapolis, IN 46268-1189. An Equal Opportunity Employer.

 **DowElanco**

Cognitive Neuroscience Individual Grants-In-Aid

The McDonnell-Pew Program in Cognitive Neuroscience is accepting proposals for individual grants-in-aid to support research and training in cognitive neuroscience. Applications are sought for projects of exceptional merit that are not currently fundable through other channels and from investigators who are not at institutions already funded by the program. Preference will be given to projects that are interdisciplinary in character involving two or more of the subfields of cognitive neuroscience: clinical and basic neuroscience, computer science, psychology, linguistics and philosophy.

Research support is limited to a maximum of \$30,000 per year for up to two years. Training support and postdoctoral stipends are limited to a maximum of \$30,000 per year for up to three years. Training grants to support Ph.D. thesis research of graduate students will not be funded. Submissions will be reviewed by an advisory board chaired by Professor George Miller of Princeton University.

Applications must be postmarked on or before February 1, 1993.

For proposal guidelines, contact:
 McDonnell-Pew Program in Cognitive Neuroscience, Green Hall 1-N-6, Princeton University, NJ 08544-1010, (609) 258-5014, fax: (609) 258-3031, email: cns@clarity.princeton.edu.

MOLECULAR BIOLOGIST

The Department of Biology of The University of Akron has a tenure-track position available January 18 or August 30, 1993 for an ASSISTANT OR ASSOCIATE PROFESSOR. A Ph.D. with post-doctoral experience in molecular biology is preferred. Departmental interests in molecular biology include: genetics of hypertension, mammalian gene mapping, biology of lymphokines, protein phosphorylation in signal transduction and steroid action in the CNS. Responsibilities will include: development of an active externally funded research program, development of a specialty course for graduate students, supervision of graduate student research, and participation in undergraduate education. The University is the third largest state university in Ohio with an enrollment over 28,000 and a consortium member of the Northeastern Ohio Universities College of Medicine. The Department has 22 faculty members and grant support from NSF, NIH, the American Heart Association, and the Ohio Board of Regents—Programs of Excellence. Send curriculum vitae, description of research interests, and three letters of recommendation to: Dr. Daniel Ely, Chair of Search Committee, Department of Biology, The University of Akron, Akron, OH 44325-3908, FAX: 216-972-6990, by October 22nd, 1992. The University of Akron encourages applications from the disabled and veterans as well as minorities and women. The University of Akron is an Equal Education and Employment Institution.

POSTDOCTORAL POSITIONS

Gladstone Institute of Cardiovascular Disease, University of California, San Francisco. In the laboratories of:

Israel F. Charo, M.D., Ph.D.: Research on the molecular and cellular biology of monocyte-endothelial cell interactions. Project will involve cloning and mutagenesis of novel receptors by expression in xenopus oocytes. Background in molecular biology is highly desirable.

Thomas L. Innerarity, Ph.D.: Research on apo B RNA editing and mutations of apo B that disrupt LDL receptor binding.

Robert E. Pitas, Ph.D.: Studies of the regulation of expression of the acetyl LDL (scavenger) receptor in smooth muscle cells and macrophages and of the role of the receptor in atherogenesis.

Karl H. Weisgraber, Ph.D.: (two positions) 1) Studies on the effect of overexpression of human genes on lipoprotein metabolism in transgenic mice.

2) X-ray crystallography of apolipoprotein E variants and other proteins involved in lipoprotein metabolism. Prior experience in protein crystallography desired.

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

Cellular or Molecular Neurobiologist Cell Biologist

The Department of Anatomy and Cell Biology in the Faculty of Medicine at the University of Alberta invites applications for two faculty positions in (a) either cellular or molecular neurobiology (with preference given to those working on vertebrate systems), or (b) either cellular or molecular biology relating to cell function. Appointments may be made at levels of Assistant Professor (\$40,035–\$57,003), Associate Professor (\$49,423–71,725) or Professor (\$61,593 and up). Successful candidates will be expected to carry on independent research programs, but will also have the opportunity for collaborative interactions with several multidisciplinary research groups within the University. Applicants should have proven records of research achievement and will be eligible for funding by the Alberta Heritage Foundation for Medical Research. Candidates should be capable of teaching graduate courses in cell or neurobiology or medical school courses in the disciplines of anatomy. Deadline for receipt of applications is **December 30, 1992**. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

Please send a curriculum vitae, statement of research interests, and ask three to five referees to send letters to: **Dr. David A. Begg, Professor and Acting Chair, Anatomy and Cell Biology, University of Alberta, Edmonton, Alberta, Canada, T6G 2H7.**

The University of Alberta is committed to the principal of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities, and women.

Ph.D. Scientist—Mycologist Natural Products Discovery (#92-40S)

Opportunity exists for an individual having a thorough grounding in general microbiology or microbial ecology and experience in devising isolation schemes for unique microorganisms from a variety of different sources. Familiarity with the isolation and taxonomic determination of unusual fungi is highly desirable. Also responsible for culture collection maintenance. Requires Ph.D. in Microbiology, good communication skills and ability to work in team setting.

Ph.D. Scientist Fermentation Microbiology (#92-48S)

Individual will develop industrial fermentation strains and processes. Responsibilities will include strain improvement, medium optimization, development and optimization of fermentation processes at the small scale fermentor level. Ph.D. or equivalent with background in microbiology or chemical engineering. **PANLABS** is an international company providing R&D services to the pharmaceutical industry worldwide for 22 years. Located north of Seattle, PANLABS offers competitive salaries and benefits. Submit CV with 3 references to:



PANLABS, INC.

**Attn: Human Resources Manager, Include #
11804 North Creek Parkway South
Bothell, Washington 98011-8805**

An Equal Opportunity Employer

Postdoctoral Fellow in Molecular Hematopoiesis

Amgen is an innovative leader in the discovery, development and marketing of human therapeutics. Our advanced research in biotechnology has resulted in such breakthrough products as EPOGEN (recombinant human Erythropoietin) and NEUPOGEN (recombinant human Granulocyte Colony Stimulating Factor).

We currently seek a postdoctoral fellow with a recent Ph.D. in Molecular/Cellular Biology. This individual will have experience in cDNA cloning, PCR, and other molecular biology analytical skills. Some cell culture experience and an interest in hematopoiesis would be desirable. The selected fellow will be involved in an interactive program studying the molecular regulation of hematopoietic stem cell migration, proliferation and differentiation.

Amgen offers a very competitive compensation and benefits package in addition to a stimulating work environment. 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, send your resume to: **Amgen Inc., Staffing Dept., (Mail Code 10-1-A-411), Job Code# S-505, Amgen Center, Thousand Oaks, CA 91320-1789.** Amgen is an equal opportunity employer.

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Principals only, please.

CHAIR EGG RESEARCH

The University of Guelph is seeking to fill an industry-supported "Chair" in Egg Research. The incumbent will be responsible for conducting and coordinating research to develop knowledge of the composition and functional properties of the egg. He/she will be expected to work with the poultry and allied industries to develop advanced technologies which would enhance the uses for eggs in the food and related industries. The Chairholder will also establish communication channels with the industry to transfer scientific and technical knowledge accruing from the work of the research team, respond to strategic industry needs, and contribute to the training of skilled manpower through the supervision of graduate students and post-doctorate fellows. Therefore, the University is seeking a scientist with recognized skills at team research management and experience in industrial applications of new technology. It is the intent of the industry sponsor and the University to select a candidate who would qualify for an industrial Research Chair Award from the Natural Sciences and Engineering Research Council.

The University of Guelph is committed to an employment equity program that includes special measures to achieve diversity among its faculty and staff. We therefore, particularly encourage applications from qualified aboriginal Canadians, persons with disabilities, members of visible minorities and women.

Applicants should submit a Curriculum Vitae and the names of three references before **December 31, 1992**, to:

**Dr. J.B. Stone, Chair
Selection Committee
Ontario Agricultural College
University of Guelph
Guelph, Ontario N1G 2W1.**

**UNIVERSITY
OF GUELPH**

POSITIONS OPEN

CONSULTANT

Our client is seeking part-time consultants to advise on the feasibility of biotechnology ventures in developing markets in India, China, and Myanmar. Requirement is for **BIOCHEMISTRY/MICROBIOLOGY** Ph.D.'s or doctoral candidates with specialization in Immunology, Toxicology/Neurotoxicology, or Genetics/Genetic Engineering. Native language ability, current area familiarity, and English language skills a must. Flexible hours; relocation/travel not required. Send résumés and pertinent abstracts/research papers (confidentiality assured) to: **T. J. Lynn & Sons, Attn: Mr. Clark, P.O. Box 301, Savage, MD 20763.** Written responses only.

DEVELOPMENTAL NEUROBIOLOGIST

Department of Physiology & Biophysics and the Regional Primate Research Center
UNIVERSITY OF WASHINGTON

Candidates sought at a junior faculty level in fields of neurobiology, neurogenetics, neuroembryology, and related disciplines. Possible research areas include genetic control of neural development, determinants of migration of neural elements, fetal neuroimmunology, neurotransplantation and others. Focus on candidates who see opportunity to work with nonhuman primate models as essential to their research career goals. Background in primate research desirable but not necessary. Primary selection criteria will be history of scientific excellence and promise of continued research performance of highest scientific and academic standard. Send letter of application, curriculum vitae, and three personal references to: **Albert F. Fuchs, Ph.D., Chair, Search Committee, Regional Primate Research Center, SJ-50, University of Washington, Seattle, WA 98195. Telephone: (206) 543-8014. U. Wash. is an Affirmative Action/Equal Opportunity Employer.**

FIELD RESEARCH SPECIALIST. An individual is needed to join one of the corn breeding research teams with ICI Seeds at Slater, IA, in a unique position assisting in the application of biotechnology to commercial corn breeding. The individual will be responsible for data collection in field experiments, and will assist with various breeding activities. B.S. or M.S. degree in a plant science-related field required, with experience in agricultural research. Send résumé and letter of application to: **ICI Seeds, Bioscience Secretary, Box 500, Slater, IA 50244. Equal Opportunity Employer.**

FOREST VEGETATION MODELER—The College of Forest Resources has a tenure-track position available in its Forest Biology Department for a person with expertise in vegetation modeling. Candidates should be qualified to work cooperatively in multidisciplinary research to examine long-term effects of global change on forest resources and vegetation patterns, with particular emphasis on vegetation changes that could occur in the northeastern United States. Applicants should be well-versed in mathematical modeling techniques associated with the projection of vegetation distribution. Ph.D. in appropriate field is a minimum requirement. Send letters of application, which should include qualifications, research and teaching goals and the names of three references, by December 31, 1992 to: **Dr. Richard Jagels, Department of Forest Biology, University of Maine, 5755 Nutting Hall, Orono, ME 04469-5755. The University of Maine is an Equal Opportunity/Affirmative Action Employer.**

IMMUNOLOGIST/NEUROSCIENTIST

Position available immediately for Ph.D./M.D. at the **RESEARCH INVESTIGATOR/ASSISTANT RESEARCH SCIENTIST** level to direct the Psychoimmunology Laboratory at the Department of Psychiatry, University of Michigan Medical Center. Current research focuses on immune regulation in psychiatric disorders, immunopharmacology, stress and the immune system, and neuroendocrine-immune interactions. Background in cellular immunology and/or molecular biology desired. Excellent opportunities for collaboration with the existing Mental Health Research Institute, the Alcohol Research Center, the Cancer Research Center, and the Geriatric Research and Training Center. Send curriculum vitae and the names of three references to: **Ziad Kronfol, M.D., Director, Psychoimmunology Program, 1500 East Medical Center Drive, AGH-9D, Box 0118, Ann Arbor, MI 48109-0118. The University of Michigan is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

COGNITIVE NEUROSCIENTIST

Excellent career opportunity for a recent Ph.D. to help develop advanced systems for measuring human neurocognitive processes. Background in cognition, and psychophysiology required. **SAM TECHNOLOGY, 51 Federal Street, San Francisco, CA 94017; FAX: 415-546-7122; EMAIL: jane@ecg.com.**

ENVIRONMENTAL SPECIALIST III

Melbourne, FL; Minimum salary: \$27,700. This is a professional position for a wetlands scientist with knowledge and experience in wetlands ecology and/or water quality. Duties include: assist in a study of water quality in a large marsh ecosystem impacted primarily by agricultural drainage, including field sampling, data entry and analysis. Qualifications include: A Bachelor's Degree in Biology, Limnology, Chemistry, Botany, or Environmental Science and four years of professional experience in the environmental field. Send résumé identifying source of Ad by November 13, 1992 to: **St. Johns River Water Management District, Office of Human Resources, P.O. Box 1429, Palatka, FL 32178-1429.**

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DRUG-FREE WORKPLACE.

INORGANIC/ANALYTICAL/ENVIRONMENTAL CHEMIST. Applications are invited for a tenure-track position at the **ASSISTANT PROFESSOR** level available for January or September 1993. A Ph.D. in Inorganic Chemistry or Analytical Chemistry is required. Preference is given to candidates with a research interest in Environmental Chemistry. Successful candidate must establish a research program that will involve undergraduate students and be able to teach courses in Advanced Inorganic, Analytical, Environmental, and Introductory Chemistry. Send résumé, transcripts, summary of research plans and teaching interests, and three letters of recommendation to: **Dr. Thomas Nalli, Division of Natural Sciences, State University of New York (SUNY) at Purchase, Purchase, NY 10577.** Closing dates are November 9, 1992 for a January appointment and December 31, 1992 for a September appointment. *SUNY Purchase is an Equal Employment Opportunity/Affirmative Action Employer.*

MEDICAL PHYSICIST (Hershey, PA): Resolves problems related to radiation therapy and treatment of cancer by application of the knowledge and methodology of physics. Advises and consults with physicians regarding use of ionizing radiation in therapy, computer treatment planning with externally and internally implanted radiation sources, calibration of linear accelerators and simulators, and utilization of thermoluminescent and film dosimetry equipment and HDR. Development of instrumentation for improved patient care and clinical service. Plans, directs, conducts programs to ensure effective and safe use of radiation and radionuclides by physicians. Teaches principles of medical physics to residents, medical students and technologists by means of lectures, problem solving and laboratory sessions. Forty hours per week, 9:00 a.m. to 5:00 p.m.; salary \$58,000 per year. Requires: Ph.D. in Nuclear Engineering with concentration in nuclear physics plus one year of experience in the job offered. Must be willing to travel throughout Pennsylvania and Maryland. Must sit for American Board Certification within one year or be eligible for Board Certification. Send résumés to: **Lebanon Job Center, P.O. Box 780, 35 East Cumberland Street, Lebanon, PA 17042. REFER TO: J.O. # 4511079.**

POSTDOCTORAL RESEARCH POSITIONS available immediately to study the physiology-biophysics of different ionic channels (Na, K, Ca-release channels) employing patch-clamp and reconstitution techniques. Please send curriculum vitae, statement of research interests and goals, and names of three references to: **Dr. Samuel Cukierman, Loyola University Medical Center, Department of Physiology, 2160 South First Avenue, Maywood, IL 60153. Loyola is an Equal Opportunity/Affirmative Action Employer.**

PROTEIN CRYSTALLOGRAPHER

Postdoctoral position in x-ray crystallography of **Cell Cycle Proteins.** Experience preferred. Minority applicants encouraged. Excellent environment and facilities. Send curriculum vitae and names of three references to: **John Tainer, Ph.D., Molecular Biology MB4, The Scripps Research Institute, La Jolla, CA 92037. FAX: (619) 554-6880. Internet: jat@scripps.edu.**

POSITIONS OPEN

Highly regarded Boston area patent law firm seeks scientists with Ph.D.'s in **biotechnology fields** (e.g., Molecular Biology, Biochemistry, Immunology or Microbiology) who would like to pursue a second career in the **challenging and lucrative field of patent law.** Firm will compensate qualified candidates with a **competitive salary** while at the same time **finance his/her law school education.** No commitments required. Similar opportunities available in **New York City and Washington, D.C.** Send résumé in strict confidence to: **Box 25, SCIENCE, 1333 H Street N.W., Suite 814, Washington, DC 20005.**

TRANSLATION EDITORS, FREELANCE. Soil scientists (all specialties) with excellent knowledge of Russian and native knowledge of English needed as editors (technical reviewers) of existing translations of Russian journal articles in various areas of soil science. Work at your home/office and at your leisure. Write to:

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USDA/FOREST SERVICE

Pacific Northwest Research Station

QUANTITATIVE GENETICIST/POPULATION GENETICIST, (GS-12/13). Salary range \$38,861 to \$60,070. Position is located with the Genetics and Tree Improvement Unit at Corvallis, Oregon. A highly qualified candidate is sought to direct, design, and conduct research centered on geneecology of forest tree species, their contribution to biodiversity, and responses to changing environments. Has additional responsibility of providing technical liaison and cooperative support to tree breeding programs in the Pacific Northwest. All candidates must possess the following: (1) *Must be a U.S. citizen;* (2) professional knowledge of quantitative plant genetics; (3) a degree in a directly related field, or (4) a combination of education or professional experience; (5) additional directly related graduate education and/or directly related professional experience. All applicants should submit: (1) application for Federal employment (SF-171); (2) college transcripts or OPM form 1170/17, List of College Courses; (3) GPA for college must be documented—official transcript will be required for verification prior to appointment; (4) copies of three to five of your most significant publications; (5) Applicant Supplemental Sheet, Demo Form 001. For more information about position contact: **Don Copes, Telephone: (503) 754-7291.** For complete qualification requirements and copy of job announcement or application forms contact: **Jewel Dahl, Telephone: (503) 750-7033, USDA.**

RESEARCH SCIENTIST

The tumor biology and biophysics section of the Department of Radiation Oncology at the Fox Chase Cancer Center requires a **Research Scientist** with training in tumor biology to initiate his/her independent research program. Applicants should have a Ph.D. or M.D./Ph.D. degree from a recognized university and have five or more additional years of laboratory research experience. Appointment can be made at levels equivalent to Assistant or Associate professorships in a university setting. Preference will be given to applicants with demonstrated ability to obtain grant support from competitive agencies and research experience in (1) measurements of intrinsic radiosensitivity of human tumor cells, (2) molecular characterization of host or tumor cells in solid tumors, (3) fluorescent probes of tumor cell metabolism and kinetics, (4) human tumor xenografts in immune deficient animals, or (5) another area of solid tumor biology research related to radiotherapy. The tumor biology and biophysics program is housed within new laboratory space commissioned in 1990. It is well equipped and supported by several core facilities including a laboratory animal facility, cell sorting and flow cytometry service, 2 Cesium-137 irradiators and a state-of-the-art laser light source. Applications including curriculum vitae and names of three references should be sent to: **Research Scientist Search Committee, c/o Personnel Department, Attention: Dr. J. D. Chapman, Director Tumor Biology and Biophysics Section, Department of Radiation Oncology, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.**

**UNIVERSITY OF CALIFORNIA,
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ASSISTANT/ASSOCIATE
PROFESSOR IN
MOLECULAR BIOLOGY (RNA)**

The Biology Department, University of California, Santa Cruz, invites applications for a faculty position in Molecular Biology beginning Fall, 1993, contingent on availability of funding. We are seeking an individual whose research centers on the structure and function of RNA. This person will be associated with the Lucille P. Markey Center for the Molecular Biology of RNA, and will have research space in the recently completed Sinsheimer Laboratories. Candidates will be considered at the Assistant and Associate level, commensurate with experience. Candidates should have a Ph.D., postdoctoral research experience and university teaching experience or demonstrated potential for university teaching. The successful candidate will be expected to mount a vigorous externally funded research program, and contribute to teaching at the graduate and undergraduate levels. Salary range is \$38,800-48,300 for 9 months. Applicants should send curriculum vitae, a brief description of research and teaching interests, publications, and three letters of recommendation. Please refer to position #231-901 in your application. Send applications and letters of recommendation prior to the closing date of December 1, 1992, to:

**RNA Molecular Biologist
Search Committee
Department of Biology
Sinsheimer Laboratories
University of California
Santa Cruz, CA 95064**

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

**Eukaryotic Molecular
Developmental Biology**

University of Illinois at Chicago

The Laboratory for Molecular Biology of the Department of Biological Sciences invites applications for a tenure track faculty position at the Assistant Professor level available for the Fall 1993. The Laboratory wishes to complement its active molecular genetics program by expanding its expertise in eukaryotic molecular development.

Candidates using transgenic organisms (plant or animal) as well as other approaches are encouraged to apply. Promising research programs in any area of eukaryotic molecular development will be considered.

Successful candidates must have postdoctoral experience, and show evidence that they can pursue a vigorous, independent research program. Contribution to the Department's coursework offerings is also expected. Please send curriculum vitae, description of research interests, and names and addresses of three references to:

**Eukaryotic Molecular Development
Search Committee
c/o Dr. Sidney B. Simpson, Head
Dept. of Biological Sciences (M/C 066)
University of Illinois at Chicago
P.O. Box 4348
Chicago, IL 60680**

ATTENTION: Therese Roschay

Application deadline is 12/1/92. UIC is an AA/EOE.

Upjohn

**REGULATORY
TOXICOLOGIST**

The Upjohn Company, a recognized leader in the research, production and marketing of quality pharmaceuticals, invites applications for the position of Regulatory Toxicologist in our Drug Safety Research Group.

As a member of the Regulatory Toxicology unit, you will be involved in the preparation of drug safety assessment documents which are required for regulatory filings (IND's, NDA's, IIND's, IPRD's, NADA's, etc.) for the worldwide pharmaceutical and animal health businesses. Such documents integrate and evaluate toxicology/pharmacology data generated in the DSR units, pharmacology data generated by the Discovery units, drug disposition and pharmacokinetics data from DMR, published data from similar compounds, and information from a variety of other sources for human and animal drugs.

Additionally, this individual will participate in the preparation of safety assessments of impurities in bulk drug, respond to queries from worldwide regulatory agencies, serve as a toxicology consultant to other departments and participate in review of potential acquisition candidates. Excellent writing and oral skills are a requirement for preparation of documents and instructions across disciplines. A Ph.D. in Toxicology or related field, or D.V.M. is required, as is 2 years experience in the conduct of animal safety studies. ABT eligibility is a plus.

Upjohn offers a competitive compensation and benefits package in addition to a stimulating, multidisciplinary research environment at our modern laboratories in Kalamazoo, Michigan. You are invited to send your curriculum vitae to: **The Upjohn Company, Corporate Recruiting, 7000 Portage Road, Kalamazoo, MI 49001-0199.** Refer to Position #128 in your cover letter. An Equal Opportunity Employer M/F.

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Lead the development of chromatography or immunoassay based automated diagnostic systems or controls for urine and serum analytes from product concept through market release. You must have a PhD in Analytical Chemistry, Life Sciences or equivalent and previous experience developing clinical diagnostic methods. Dept. #415a.

Regulatory Affairs / Quality Assurance Manager

Monitor all pertinent regulations and manage tracking/control systems. Conduct internal audits and inspections. Interface with regulatory agencies on defined matters. Develop plans for clearance of documentation submissions. Help direct ISO 9000 certification activities. Requires BS or equivalent in Biology, Medical Technology or related field. 7+ years quality assurance experience in a designing and manufacturing medical device environment. Dept. #415b.

Marketing Specialist

Utilize your HPLC and clinical drug toxicology experience in managing a state-of-the-art product line consisting of HPLC system/reagents. You will have worldwide marketing responsibilities for the continued growth and expansion of this product line. This position requires a BS or equivalent in Life Sciences, 2+ years clinical toxicology experience and 1+ years sales/marketing experience. An MBA and proficiency in a foreign language are a plus. Dept. #415c.

Please send your resume to: Bio-Rad Laboratories, *please indicate appropriate dept. #*, 4000 Alfred Nobel Dr., Hercules, CA 94547. An Equal Opportunity Employer, M/F/D/V.

BIO-RAD

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POSITIONS OPEN



USDA, Agricultural Research Service, Leptospirosis/Mycobacteriosis Research Unit, National Animal Disease Center, Ames, IA, is seeking a **MICROBIOLOGIST** or **VETERINARY MEDICAL OFFICER** to conduct basic and applied research on mycobacterial infections of livestock. Current diagnostic tests for diagnosis of *Mycobacterium bovis* infection will be evaluated, new immunoassays will be developed, and techniques to differentiate strains of *M. bovis* will be established. Candidates must have knowledge of microbiology, immunology, and immunoassay development. For Veterinary Medical Officer position a D.V.M. degree is required. Ph.D. is desirable for Veterinary Medical Officer or Microbiologist. *Must be a U.S. citizen.* Salary is commensurate with experience, \$32,423 to \$60,070. For information on research program or position, contact: **Dr. Carole Bolin** at (515) 239-8325. For information on application procedures/forms contact: **Janie Carr** at (301) 344-1258. Applications should be marked 2N067 and must be postmarked by November 30, 1992.

Mailing Address: **USDA, Agricultural Research Service, Personnel Operations Branch, 6305 Ivy Lane, Room 325, Greenbelt, MD 20770.** An Equal Opportunity Employer.

RESEARCH SCIENTIST—Design, execute, and interpret scientific experiments to develop, validate, and document analytical methods for chemical purity, residual solvents, enantiomeric purity and stability of new drug substances and products using HPLC, GC, TLC, IR, GC/MS. Prepare documents in support of IND, NDA, and international regulatory submissions. Collaborative with scientists for medicinal chemistry, synthetic chemistry and pharmacology to design and implement experiments for the purification, evaluation and development of optical isomers of new drug substances. Represent Analytical Research and Development Department on interdisciplinary product development teams. Conduct a research program on new techniques for the purification and analysis of enantiomers. Train and direct laboratory personnel. Responsible for the proper recording of raw stability data.

Ph.D. in Analytical Chemistry required with an emphasis on the theoretical and practical aspects of chiral separations, and two years of experience in the job offered or two years of experience conducting research in Enantioselective Separations. Must have experience in advanced gas and liquid chromatography methods for chiral separations and practical experience and theoretical knowledge of enantiomeric separation mechanisms by capillary gas chromatography. Must have research experience in HPLC, TLC, NMR, FTIR and GC/MS equipment and interpreting skills. Must demonstrate an understanding of the kinetic mechanisms and degradation of organic compounds. Must demonstrate ability to perform chiral separations to isolate pharmacological compounds. Skills using a calorimeter for studying binding constants between cyclodextrin and enantiomers. Knowledge of GMP and GLP regulations. Excellent written and oral communication skills required and experience in working in a team environment. Hours 8:00 a.m. to 4:30 p.m., salary \$53,000. **Job Order #4487983.** Submit résumé or curriculum vitae to: **The Philadelphia Job Bank, 444 North 3rd Street—Third Floor, Philadelphia, PA 19123.**

COURSES AND TRAINING

FLOW CYTOMETRY COURSE January 11–15, 1993—Colorado Springs

An intensive introductory course covering the theory and practice of flow cytometry will be held at the University of Colorado. Instrumentation, sample preparation, data acquisition and analysis and hands-on applications are included in this limited enrollment (10) class. \$1,250 includes tuition, instructional materials, housing, breaks and Thursday dinner at the Broadmoor Hotel. For more information, contact:

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

ANNOUNCEMENTS

RESEARCH INQUIRIES INVITED

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

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

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

Deadlines for submission of grant applications are **December 31, 1992** for July 1, 1993 funding and **June 30, 1993** for January 1, 1994 funding. Address inquiries or requests for applications to: **The Smokeless Tobacco Research Council, Inc., 420 Lexington Avenue, New York, NY 10170.** Telephone: (212) 697-3485.

MEETINGS

FELLOWSHIPS FOR POSTDOCTORAL TRAINING in Neural Development, Plasticity, and Regeneration at **The Ohio State University.** Systems, cellular, and molecular approaches are available for trainees supported by an NINDS training grant. Faculty include K. Alley, M. Beattie, G. Bishop, J. Boulant, R. Boyd, J. Bresnahan, R. Burry, H. Cooke, M. Hadjiconstantinou-Neff, R. Ho, L. Horrocks, J. King, D. Lim, G. Martin, N. Neff, R. Nordlander, R. Rogers, A. Rotter, B. Stokes, R. Tassava, S. Tjoe, J. Wood, and A. Yates. Fellows supported by the training grant must be U.S. citizens or permanent residents; however, other positions may be available which can be supported by funds available to individual investigators.

Applications, including curriculum vitae, statement of research interests, and three letters of recommendation, should be sent to: **Drs. G. F. Martin & M. S. Beattie, at the Department of Cell Biology, Neurobiology & Anatomy, The Ohio State University, 333 West 10th Avenue, Columbus, OH 43210.** Potential applicants are encouraged to contact the program directors and prospective faculty sponsors for detailed information. **Telephone: Dr. Martin (614) 292-1667, Dr. Beattie (614) 292-1781.** *The Ohio State University is an Affirmative Action/Equal Opportunity Employer and encourages women and minorities to apply.*

PHARMACEUTICAL DESIGN USING EPITOPE SELECTION TECHNOLOGIES

February 1–2, 1993; Hyatt Ricketts, Palo Alto, CA.
SPEAKERS: G. Smith, M. Geysen, R. Balint, R. Houghten, J. Wells, R. Hoess, K. Lam, R. Ladner, M. Kahn, W. Dower, J. Winter, C. Craik, L. Loeb, A. Ellington, L. Griffin, J. Szostak, S. Fodor, C. Tuerk, J. Blaney, C. Barbas, F. Cohen, D. Burton, B. McDowell, J. Marks. **Organizers:** James Larrick; Robert Balint. **Abstracts due:** January 15, 1993. **Sponsor:** Palo Alto Institute of Molecular Medicine; 2462 Wyandotte Street, Mountain View, CA 94043; FAX: 415-851-3959; Telephone: 415-694-4996.

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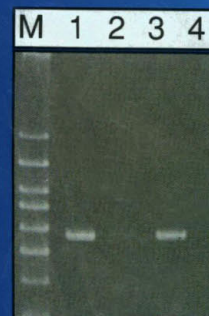
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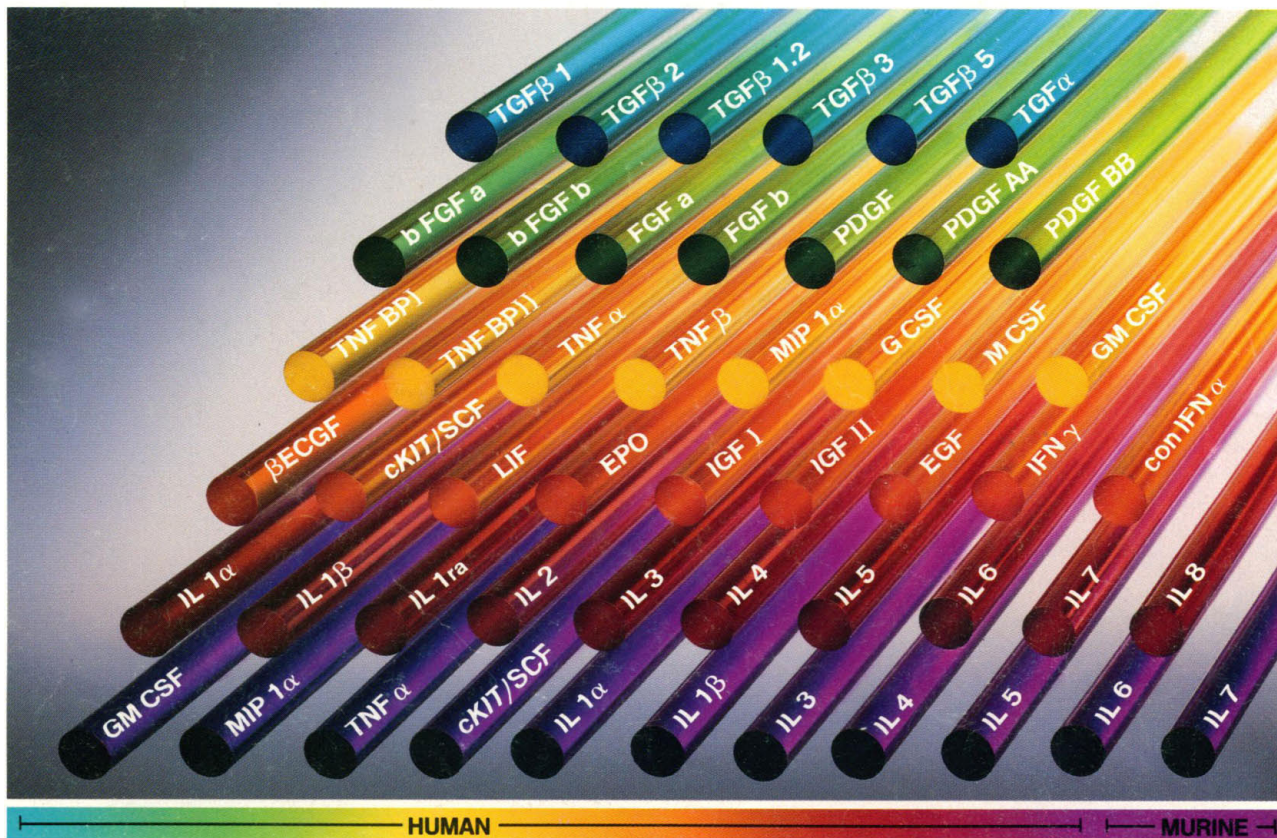
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