

Micro Flow-Through pH Electrode

The FTPH-1 Micro Flow-Through pH Electrode is designed for measuring pH changes in liquid chromatography (LC), high-performance liquid chromatography (HPLC), microprocess monitoring, biotechnology, and other applications requiring a precise microflow system. The pH electrode has an internal dead volume of less than 50 μ l. The system can be hooked up to any LC or HPLC system. The pH electrode plugs into any standard laboratory pH meter and can be hooked up to a strip chart recorder for continuous monitoring. A microflow system for oxidation-reduction potential is also available. Lazar Research Laboratories. Circle 91.

Controlled Rate Freezing System

Model 1010 features microprocessor technology to ensure greater cell viability during cryopreservation. A freezing rate of 0.01° to 99.9°C per minute can be achieved in a temperature range of +50° to -180°C. Six preset programs eliminate operator programming time and provide optimum cooling for common freezing applications, such as lymphocytes, bone marrow, spermatozoa,

embryos, tumor cells, and platelets. The system provides up to 81 sections of microcomputer memory for user-defined protocols. The unit comes with a stand; strip chart recorder; transfer hose; standard freezing racks for semen and embryo straws, plastic vials, and bone marrow bag freezing presses; and a choice among three sizes from 353 to 2197 cubic inches. Forma Scientific. Circle 92.

Fluorescent Nucleotides for in Situ Hybridization

Three fluorescent nucleotides for in situ hybridization facilitate rapid, sensitive multiple hybridizations to chromosomes and nuclei. Included in the range are Fluorescein (Fluorogreen), Rhodamine (Fluorored), and Coumarin (Fluoroblue). These nucleotides can be incorporated into probes using nick translation or polymerase chain reaction. Following hybridization to chromosomes or nuclei, the probe can be detected directly using fluorescence microscopy. The use of different dyes allows multiple hybridizations. Amersham International. Circle 93.

Dyed and Fluorescent Microparticles

Color-Rich dyed microparticles, designed for membrane-based applications, exhibit deep saturated color due to unique dyes and proprietary polymer particle formulations. Fluoro-Max fluorescent microparticles cover the most common excitation and emission ranges and can be detected with epifluorescence, fluorescent microscopes, fluorescence spectrophotometers, fluorescent cell sorters, and even black lights. Applications of the particles include membrane pore

size determinations, flow or fluid mechanism studies, flow cytometry, flow visualization, biological transport studies, filtration media analysis, particle size correlation, immunohistology studies, cell surface antigen markers, phagocytosis research, clinical diagnostic assays, and membrane-based diagnostics. Seradyn. Circle 94.

Eukaryotic Transcription and Translation System

The TNT Lysate System is a rabbit reticulocyte lysate system for in vitro protein production directly from protein encoding DNA cloned downstream from a T3 RNA polymerase promoter. This single-tube procedure eliminates the time and effort required to prepare RNA for reticulocyte translations. Starting with 1 μ g of circular plasmid DNA, in vitro translated proteins can be visualized by autoradiograph in 6 hours. Promega Corp. Circle 95.

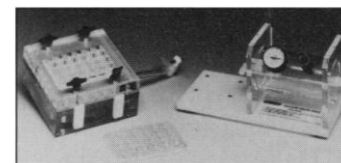
Cell Isolation Media

The new line of Nycomed Density Gradient Media features several products for cell separations. NYCOPREP 1.150 is a universal centrifugation medium for the isolation of cells. NYCOPREP Mixer is a nonionic medium for the isolation of human mononuclear cells. NYCOPREP 1.068 is a nonionic medium for the isolation of human blood monocytes. NYCOPREP 1.063 is a nonionic medium for the isolation of human blood platelets. NYCOPREPs are second-generation nonionic separation media. They offer all the advantages of metrizoate solutions, plus they have lower toxicity, are stable for autoclaving, and don't contain carbohydrates, which can bind to cell sur-

face receptors. They are buffered for pH balance and have low endotoxins to reduce mitogenic effects. GIBCO BRL. Circle 96.

Rapid DNA Template Purification

The GS Gene Prep manifold is a multiple-well, vacuum filtration manifold that allows simultaneous purification of 24 single- or double-stranded DNA templates



using Bio-Rad's patented Prep-A-Gene DNA purification matrix and an inert filter. Single-stranded DNA can be purified for DNA sequence analysis directly from phage supernatants in as little as 45 min. Double-stranded DNA can be purified for either DNA sequence analysis or restriction digestion from cleared bacterial lysates in less than 2 hours. The multiple-well format decreases the number of manipulations required to isolate large numbers of samples, while the collection rack allows the orderly elution of samples from the manifold wells. Bio-Rad Laboratories. Circle 97.

Literature

In Vivo Microdialysis Catalog discusses the emergence of microdialysis as a sampling technique and gives detailed descriptions of products. ESA. Circle 98.

1992 Electrophoresis Catalog details a comprehensive product line for protein and nucleic acid electrophoresis including precast gels, staining systems, and devices, presented with technical tips and references. Integrated Separation Systems. Circle 99.

Ion Chromatography Accessories and Instrumentation is a 64-page catalog. Alltech Associates. 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.

Science

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 Deborah Cummings
 Telephone: 202-326-6541

Janis Crowley, Recruitment
 Advertising Manager
 Telephone: 212-496-7704
 FAX: 202-682-0816

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

POSITIONS OPEN

Virginia Commonwealth University's Department of Pharmacology and Toxicology announces a tenure-track **ASSISTANT PROFESSOR** position. Applicant must have a Ph.D. or its equivalent and at least four years of relevant postdoctoral research experience. Requires ability to teach in graduate and professional schools and to secure research funding; outstanding record of research accomplishments and scientific reputation; experience training graduates and/or postgraduates; and an ability to function well in a multidisciplinary environment. Of great interest are those with backgrounds in molecular biological techniques and associated data processing and analysis. Send curriculum vitae, letter of research interests and three letters of reference, by 15 September 1992, to: **B. Caine, Box 613, MCV Station, Richmond, VA 23298-0613.** Complete position description available upon request. *Virginia Commonwealth University is an Equal Employment Opportunity/Affirmative Action Employer and encourages women, minorities and persons with disabilities to apply.*

ASSISTANT PROFESSOR TENURE-TRACK DEPARTMENT OF BIOCHEMISTRY AND BIOPHYSICS UNIVERSITY OF NORTH CAROLINA (UNC) AT CHAPEL HILL

The Department of Biochemistry and Biophysics seeks an investigator with expertise in high resolution NMR spectroscopy for a tenure track faculty position. Preference will be given to individuals with a strong record of accomplishment in elucidating structures of macromolecules or analyzing ligand- or nucleic acid-protein interactions. UNC has a staffed, state-of-the-art, NMR facility dedicated to biological macromolecules. Please send curriculum vitae and a two-page description of research plans, and arrange for three letters of reference to be sent to:

Dr. R.V. Wolfenden, Search Committee Chair
 Department of Biochemistry and Biophysics
 University of North Carolina Medical School
 CB# 7260
 Chapel Hill, NC 27599-7260

An Affirmative Action/Equal Opportunity Employer.

PHYSIOLOGIST/VERTEBRATE BIOLOGIST— Assumption College invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level, starting January or August 1993. A Ph.D. and a commitment to teaching are essential. Teaching duties include upper-level courses in physiology and vertebrate biology, and introductory-level courses for majors and/or non-majors. We expect the candidate to help expand the department's undergraduate research program. Send applications, including statements of teaching and research interests, curriculum vitae, graduate and undergraduate transcripts and three letters of recommendation to: **Dr. Allan Barnett, Department of Natural Sciences, Assumption College, Worcester, MA 01615** by September 15, 1992. Assumption is a Catholic liberal arts college dedicated to excellence in undergraduate education. *An Affirmative Action/Equal Opportunity Employer.*

Forestry, Fisheries and Wildlife (FFW): ASSISTANT PROFESSOR with responsibility in Landscape Ecology. University of Nebraska-Lincoln (UNL) has tenure-track 75% teaching/25% research position available. Will teach and advise in Natural Resources and FFW programs in Integrated Resources Management, Natural Resources Orientation, and Woody Plant Community Ecology. Will develop graduate course in landscape ecology or closely related course. Research to focus on relationship between environmental patterns and ecological processes, including pattern and distribution of habitat types and their influence on biodiversity. Requires Ph.D. in landscape ecology, forestry, botany, plant ecology, or related area; strong communication skills; and commitment to undergraduate education. Experience in application of GIS to large-scale ecological problems, remote sensing, vegetative community analysis and biodiversity preferred. Send letter of application, complete résumé, transcripts, statement of research interests and names of three references by September 15 to: **Gary Hergenrader, Head and State Forester, UNL, 101 Plant Industry, Lincoln, NE 68583-0814.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR TENURE-TRACK DEPARTMENT OF BIOCHEMISTRY AND BIOPHYSICS UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

The Department of Biochemistry and Biophysics is seeking applicants for a tenure track faculty position in the general area of cell signaling and regulatory processes associated with development or cell growth. Special consideration will be given to applicants who combine molecular genetic and biochemical methods in their studies. A generous start package and strong interdisciplinary program are available to the qualified applicant. Please send curriculum vitae, a brief description of your research plans, and arrange for three letters of reference to be sent to:

Dr. Patricia Maness, Search Committee Chair
 Department of Biochemistry and Biophysics
 University of North Carolina Medical School
 CB# 7260
 Chapel Hill, NC 27599-7260

The closing date for applications is October 1, 1992. *An Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR CARCINOGENESIS PROGRAM

The Fels Institute for Cancer Research and Molecular Biology and The Department of Biochemistry of the Temple University School of Medicine invite applications for tenure track Assistant Professor positions in the Carcinogenesis Program. Research areas of interest include, but are not limited to, the molecular biology of cancer chemotherapy especially with respect to mechanisms of growth control and gene expression, DNA replication, damage and repair. Of particular interest are those individuals whose research programs relate at the molecular level to susceptibility, sites of interaction and development of resistance to cancer chemotherapeutic agents. Successful applicants are expected to develop a strong independent research program. Interested candidates should send their curriculum vitae and the names of three references to: **Dr. Michael A. Sirover, Program Leader, Fels Institute for Cancer Research and Molecular Biology, TEMPLE UNIVERSITY SCHOOL OF MEDICINE, 3420 North Broad Street, Philadelphia, PA 19140.**

TEMPLE UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER AND STRONGLY ENCOURAGES APPLICATIONS FROM WOMEN AND MINORITIES.

STOCKTON STATE COLLEGE

BIOLOGY, One-year (1992-93), VISITING INSTRUCTOR (Salary: \$24,973 to \$28,678)/**ASSISTANT PROFESSOR** (Salary: \$30,312 to \$31,827). To teach introductory biology and courses for non-majors. One or more courses in area of specialty (neurobiology or animal behavior preferred) possible. Master's required, Ph.D. preferred. Salary may be higher depending on qualifications, experience and increases in the New Jersey Higher Education Compensation Plan. Screening begins immediately. Send résumé and three letters of recommendation to: **Dr. Barbara Byrne, Dean, Natural Sciences and Mathematics, Stockton State College, AA29, Pomona, NJ 08240.** *Stockton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

RESEARCH ASSISTANT PROFESSOR AND POSTDOCTORAL FELLOW

The Department of Neurological Sciences, Rush Presbyterian St. Luke's Medical Center, invites application for TWO POSITIONS beginning immediately to study A) primate neural transplantation, B) neurotrophic factors in primates and C) neurodegenerative diseases. Experience with molecular biological procedures is highly desirable. Individual will join an active well funded group of researchers in the field of neurodegenerative diseases and neural transplantation. Salary commensurate with experience. Submit curriculum vitae, three representative publications, names of three references and statement of research interests to: **Dr. Jeffrey Kordower, Rush Presbyterian/St. Luke's Medical Center, Tech 2000, West Harrison Street, Suite 200, Chicago, IL 60612.** *Rush Hospital is an Equal Opportunity/Affirmative Action Employer.*

IRRI is known world-wide as a center of research excellence dedicated to generating and disseminating rice-related knowledge and technology that are environmentally, socially, and economically sound and that benefit present and future generations of rice producers and consumers.

The Institute is an autonomous, nonprofit organization, one of 18 international centers of the Consultative Group on International Agricultural Research (CGIAR). The research center and administrative headquarters are at Los Banos, Philippines, with scientists posted in 12 countries of Asia, Africa, and Latin America. The Center seeks outstanding scientists with an ability to work in a multicultural and inter-disciplinary environment and with a strong desire to collaborate with colleagues in National Agricultural Research Systems.

IRRI ANNOUNCES THESE JOB OPPORTUNITIES

IRRI is seeking candidates for two positions in its Entomology Division.

- Entomologist and Head, Entomology Division
- Entomologist

Applicants for these two positions are expected to be specialists either in insect host plant resistance (HPR) or integrated pest management (IPM). As these searches are being conducted independently, candidates must specify which position they are seeking.

HEAD, ENTOMOLOGY DIVISION

Job description:

Gives disciplinary leadership for a team of 78 internationally recruited scientists, visiting scientists, postdoctoral fellows and national research scientists. Provides intellectual leadership for the division. Assists staff to implement problem oriented, well-defined projects. Manages the Division resources to develop environmentally sound rice insect pest management systems. Collaborates with research institutions to develop environmentally sound rice pest management systems. Provides technical assistance to national agricultural research systems (NARS).

Minimum position requirements:

- PhD in entomology
- Research experience on either host plant resistance (HPR) or integrated pest management (IPM) with an established publication record, and with the minimum position requirements in either of these areas as listed for the Entomologist position
- Experience in problems of tropical entomology, preferably with rice or related crops
- Proven managerial and inter-personal communication skills to provide leadership and vision to a research team
- Demonstrated capability to employ a systems perspective in designing and coordinating research

ENTOMOLOGIST

The successful entomologist candidate must meet the minimum requirements for one of the specialized positions, either HPR or IPM.

Specialist, Insect Host Plant Resistance

Job description:

Establish an innovative research program on the factors that determine the appearance of new insect pest genotypes. Develop strategies for slowing the rate of evolution in pest populations. Train and collaborate with scientists in the NARS. Increase understanding of genetic, chemical and physical bases of insect pest interactions in rice. Collaborate with crop protection specialists in making host resistance compatible with other integrated pest management studies.

Minimum position requirements:

- PhD or equivalent in the biological sciences with emphasis on entomology and genetics
- Strong background in evolutionary biology and insect/plant interactions desirable
- At least 3 years research experience and understanding of principles and techniques of modern plant breeding required

Specialist, Integrated Pest Management

Job description:

Develop and test innovative approaches for insect pest management implementation. Develop and validate integrated strategies for management of insect pests. Enhance the rice ecosystems capacity for natural regulation of insect pest populations. Collaborate with and train scientists in the NARS.

Minimum position requirements:

- PhD in entomology or related discipline
- Proven record of field-based research and strong quantitative skills
- At least 5 years of post PhD experience

Deadline for submission of applications: 31 October 1992

IRRI IS LIKEWISE SEEKING QUALIFIED CANDIDATES FOR THE FOLLOWING POSITIONS:

SOIL MICROBIOLOGIST/BIOLOGIST

Job description:

Assigned to the division conducting research on soil and water issues. Under IRRI's matrix system, he/she will contribute to projects of the irrigated, Rainfed Lowland and Upland Rice Programs. Will generate knowledge of biological/microbiological processes that govern nutrient cycling with emphasis on carbon, nitrogen and phosphorus in the upland, rainfed lowland, and intensive irrigated systems. The goals for irrigated systems is to quantify the biological impacts on the short and long term N and other nutrient supplying capacity and integrate soil biological components into soil, water and crop management technologies. For the rainfed lowlands, research will be directed to understanding the dynamics of microbial populations within a variable soil moisture regime and its impact on soil nutrient balances/supply. Collaborate with advanced institutions and NARS, as well as train NARS scientists in microbiology.

Minimum position requirements:

- PhD or equivalent in soil sciences or biology with specialization in soil microbiology and microbial ecology and proven excellence in science leadership and research management
- Good knowledge of methods for field studies in microbial ecology
- Experience in field research and/or rice research preferred
- English fluency is essential, further language abilities desirable

Deadline for submission of applications: 31 October 1992

INTERNATIONAL NETWORK ON GENETIC EVALUATION IN RICE (INGER) GLOBAL COORDINATOR

Job description:

Provide leadership for a global network on germplasm exchange and evaluation, work with NARS scientists in developing countries, and an interdisciplinary team at IRRI.

Minimum position requirements

- PhD in Genetics or Plant Breeding
- Experienced in working with NARS scientists in developing countries
- Capability to provide leadership for a global network on germplasm exchange and evaluation

Deadline for submission of applications: 31 October 1992

HEAD, INFORMATION CENTER

Job description:

Provide leadership and coordination to IRRI's information and knowledge exchange program. Activities are developed and implemented through the Library and Documentation Center, Computer Services, and Communication and Publication Services (CPS). Plan, coordinate and supervise specific programs of the CPS like public awareness, research communication, and information support services. Develop mechanisms for supporting national program development in research.

Minimum position requirements:

- Advanced degree in communication (journalism, public relations, technical or scientific writing) or a related field. PhD preferred but not conditional
- At least 10 years of progressively responsible experience in planning and producing communication and information programs and materials, including experience in executive/managerial position of a scientific institution, preferably dealing with agricultural and rural development; experience with computer and other related technologies for communication desirable
- Professional fluency in reading, writing and speaking English; knowledge of other languages desirable; excellent inter-personal communication skills

Deadline for submission of applications: 1 September 1992

VISITING SCIENTISTS

IRRI IS SEEKING SHORT-TERM VISITING SCIENTISTS WITH A PHD OR EQUIVALENT TRAINING TO WORK ON RICE AND RICE FARMING SYSTEMS FOR A MAXIMUM OF THREE YEARS.

Visiting Scientist-RESEARCH FARM SPECIALIST

Assist the Director for Operations and work with the Research Farm Manager in providing quality support services for research on rice and rice based cropping systems. Duties include development of programs for efficient manpower utilization in all farm activities of over 300 staff, for land utilization to ensure long term sustainability of the research farm, for mechanization to enhance labor productivity, and to install modern management (people) methods for enhanced efficiency and quality.

Visiting Scientist-STATISTICS/BIOMETRICS

Conduct statistical/biometrics research in the area of spatial distribution and variability genotype x environment study. Provide statistical/biometric inputs to research of the various projects and programs of IRRI. Supervise other activities of the Biometrics Unit which include development of statistical software, development of field plot techniques and training programs.

Visiting Scientist-AGRICULTURAL ENGINEERING

Work in an interdisciplinary team and provide engineering solutions in one or more of the following areas: land preparation; crop establishment, pest management, harvesting and post harvest handling of rice which leads to enhanced labor productivity, minimized health risk (in case of pesticide management), reduced drudgery; and added value for income generation of rice farmers.

SALARY AND BENEFITS:

The salary and perquisites for these positions are competitive with those of the Consultative Group and other international institutes in agriculture.

Applications

Applications must be received on or before the dates specifically stated for each position, and include the candidate's curriculum vitae, an indication of availability, and the names (including fax or electronic mail addresses) of three references. Kindly send all documents to:

Dr. Klaus J. Lamps
Director General
International Rice Research Institute
P.O. Box 933, 1099 Manila, Philippines
Telephone No. (632) 818-1926
FAX No. (632) 818-2087
Telex No. (ITT) 45365 RICE PM or 40890 RICE PM
(RCA) 22456 IRI PH
(EASTERN) 63786 RICE PN
(CAPWIRE) 14861 RICE PS

POSITIONS OPEN

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

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

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

MEDICAL COLLEGE OF GEORGIA ASSISTANT/ASSOCIATE PROFESSORS PHARMACOLOGY AND TOXICOLOGY

Applications are invited from individuals with Ph.D. and/or M.D. degrees and strong research accomplishments for tenure-track positions at the Assistant or Associate Professor level. The successful candidates will be expected to establish an independent, extramurally funded research program utilizing modern techniques and to contribute to our team teaching programs. Opportunities exist for interfacing with programs in cardiovascular, behavioral and neuropharmacology and pathophysiology. The Department currently employs eighteen full time primary faculty. Competitive salary, laboratory space and start-up funds are available. Please send detailed curriculum vitae, a letter describing professional goals and the names of three references to: R.W. Caldwell, Chairman, Department of Pharmacology and Toxicology, Medical College of Georgia, Augusta, GA 30912-2300. *The Medical College of Georgia is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT/ASSOCIATE PROFESSORS. Applications are invited from new and established investigators for positions in the Division of Pulmonary and Critical Care Medicine. Successful candidates are expected to carry out an independent research program with emphasis on airway inflammation/asthma. Interactions with other members of the Division and the Department of Physiology and Biophysics with research interests in molecular regulation of signal transduction pathways in lung and airway aerosol deposition are available. Candidates should possess an M.D. or Ph.D. degree, and have at least two years of postdoctoral training. Appointment at the rank of associate professor will be considered for applicants who demonstrate distinction in research. Interested individuals should send their curriculum vitae, a summary of research interests, the names of three references, and an indication as to the level of position for which they are applying to: F. Charles Hiller, M.D., Division of Pulmonary and Critical Care Medicine, Department of Medicine, Slot #555, 4301 West Markham Street, Little Rock, AR 72205 by 15 September 1992. *The University of Arkansas for Medical Sciences is an Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR to conduct research on recombinant choline acetyltransferase and the regulation of its gene. Applicant should have experience with the isolation and identification of transcription factors, site-directed mutagenesis, enzyme purification, and protein crystallization. Salary commensurate with experience. Send curriculum vitae and three letters of recommendation to: Dr. L. B. Hersch, Department of Biochemistry, University of Kentucky, Lexington, KY 40536.

An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

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

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

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

HUMAN GENETICS AT THE UNIVERSITY OF UTAH

The University of Utah, Department of Human Genetics would like to fill two faculty positions at the RESEARCH ASSISTANT PROFESSOR level. The Department would like to recruit candidates that have a Ph.D. with three or more years of research in creation of mice that carry various mutations in specific genes involved in inner ear development using gene targeting in embryonic stem cells. Analysis of mutant phenotypes presented by mice that carry targeted or spontaneous mutations in genes involved in inner ear development. Knowledge of mouse genetics, development and anatomy. Specific techniques used: DNA cloning and sequencing; Southern, Northern, and Western blotting; Mammalian cell culture; Histology, histochemistry and immunohistochemistry in situ hybridization.

Application deadline will be August 30, 1992. Applications submitted after the deadline may be considered if no qualified candidates have applied by the deadline. Send curriculum vitae and references to: Dr. Raymond F. Gesteland, Human Genetics Department, University of Utah, Building 533, Room 2100, Salt Lake City, UT 84112. *The University of Utah is an Equal Opportunity Employer.*

IVEAGH PROFESSORSHIP OF MICROBIOLOGY

The electors intend to proceed to an election to the Iveagh Professorship of Microbiology with effect from 1 October 1993 or such later date as may be arranged. The stipend of the professorship is currently £33,078 (under review).

A non-stipendiary professorial fellowship at Linacre College is attached to the professorship.

Applications (eight copies or one from overseas candidates), naming three referees, should be received not later than 14 September 1992 by the Registrar, University Offices, Wellington Square, Oxford, OX1 2JD, from whom further particulars may be obtained.

DIRECTOR (GM-0401-15), INSTITUTE OF PACIFIC ISLANDS FORESTRY, Honolulu, Hawaii. The USDA Forest Service, Pacific Southwest Research Station is seeking a biological scientist to head the Station's Institute in Hawaii. The mission of the Institute is to conduct research on the restoration and maintenance of tropical forest ecosystems in the Pacific. Duties include direction and conduct of a program of tropical forestry research, administration and supervision of the unit, and coordination with other institutions involved with tropical forestry. A background in tropical forestry research and program leadership is desirable. Salary: \$78,000 to \$84,000 per annum based on qualifications. For information, contact: Dr. Enoch Bell, 510-559-6312. For application procedures, contact: Yvette Erdman, 510-559-6355. *USDA is an Affirmative Action/Equal Employment Opportunity Employer.*

POSITIONS OPEN

HARVARD MEDICAL SCHOOL PROFESSOR OF PATHOLOGY

The Department of Pathology at Harvard Medical School is seeking to fill the Edward Mallinckrodt, Jr. Professorship in Immunology. Candidates should be dynamic scientific leaders in immunology as demonstrated by their scientific accomplishments and international reputation. The successful candidate is expected to undertake a major commitment in teaching immunology to medical students and to play a major role in the training of graduate students through the Committee on Immunology. The candidate is expected to direct a vigorous research program in immunology, and recently constructed laboratory space is available in the Center for Blood Research contiguous with the Department of Pathology at Harvard Medical School.

Candidates should send curriculum vitae and statement of research interests to: Mallinckrodt Search Committee, c/o Dr. Karin Wetmore, Harvard Medical School, 25 Shattuck Street, Building A, Room 206, Boston, MA 02115.

Harvard Medical School is an Affirmative Action/Equal Opportunity Employer. Qualified female and minority applicants are encouraged to apply.

DEPUTY DIRECTOR, National Coastal Resources R&D Institute (NCRI). NCRI, established by U.S. Congress, supports national program of innovative research/technology application and transfer to enhance coastal economies, e.g., aquaculture, fisheries, business/community development, tourism, maritime products, seafood technology. Deputy Director is the principal technical administrator and analytical staff to the Director; manages proposal process, project activities, and technology transfer. Ph.D. or equivalent experience in coastal/marine sciences, policy, and/or economic development; broad background in disciplines related to NCRI responsibilities. Substantial record in program development, research administration, and federal relations. Closing date: August 21, 1992. Request application materials from: NCRI, 528 SW Mill, Suite 250, P.O. Box 751, Portland, OR 97207, telephone: (503) 725-5725. *The Oregon State System of Higher Education, which administers NCRI, is an Equal Opportunity/Affirmative Action Employer.*

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

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Science New Lab Service Department
1333 H Street, NW
Washington, DC 20005

SE POST DOCTORAL FELLOWSHIPS IN AGING RESEARCH

The University of Missouri-Kansas City (UMKC), the University of Kansas (KU) and Marion Merrell Dow Foundation have established a *Scientific Education Partnership* dedicated to developing a regional center of excellence in modern biological and biomedical research related to diseases and treatment of the aging population.

A key element of the Partnership continues to be the awarding of Post Doctoral Fellowships in the following areas of basic research:

- Molecular immunobiology
- Protein structure and function
- Neuroscience
- Molecular genetics
- Molecular pharmacology
- Developmental molecular biology

Research activities may be conducted in the laboratories of university mentors at either UMKC or KU.

Appointments will be for 2 years at a stipend of \$30,000 (year 1) and \$35,000 (year 2), less fringe benefits costs.

For further information, individuals with background and interest in these areas of basic science should write or fax (816-966-4400):

Anthony J. Hancock, PhD
Director, Scientific Partnerships
Marion Merrell Dow Inc.
P.O. Box 8480
Kansas City, MO 64114-0480

*Inquiry for information should be received no later than September 15, 1992.
Deadline for completion of application is February 1, 1993.*

MARION MERRELL DOW FOUNDATION
THE UNIVERSITY OF KANSAS
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CATVAX will treat people who are allergic to cats. Estimated 5 million allergic people in the U.S. alone. Causes rhinitic and asthmatic symptoms.



GRASS allergy affects 25 million Americans. All species of grass are highly similar; one single therapy may be effective against allergy to several grasses.



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Research Associate/Assistant You'll assist in the purification and characterization of native and recombinant proteins. A B.S. or M.S. in Biochemistry, with a minimum of 2-4 years protein purification experience required. Knowledge of molecular biology a plus. **Dept. PR/A.**

We're in a position to offer you exceptional opportunities and support for your professional stature, as well as an excellent compensation and benefits package. Please send your resume, referencing the department, to: *Beth Block, Human Resources Manager, ImmuLogic Pharmaceutical Corporation, One Kendall Square, Building 600, Cambridge, MA 02139.* An Equal Opportunity Employer.

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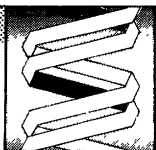
Research Assistant and Postdoctoral Positions in Molecular Biology

One research assistant and two post-doctoral positions in molecular biology are available immediately at the new Research Building of the Children's Hospital Research Foundation in Cincinnati. Research areas include molecular mechanisms of eukaryotic gene regulation and development using yeast and *Drosophila* as model systems. Candidates for the research assistant position should have a Bachelor's degree in Biology, Biochemistry or Chemistry and should be committed for at least 3 years. Candidates for the postdoctoral positions should have a recent Ph.D. or M.D. degree with strong background and research experience in Biochemistry, Molecular Biology or Genetics. Interested individuals should send curriculum vitae, a brief statement of research interest (post-doctoral applicants only), and names and addresses of three references to:

Dr. Jun Ma

**Division of Basic Science Research
Children's Hospital
Research Foundation
Elland and Bethesda Avenues
Cincinnati, OH 45229-2899
Tel: (513) 559-4544
FAX: (513) 559-4317
EOE M/F/D/V**

Research Opportunity



Professional positions are available in an informatics program project funded under the Genome Initiative. These positions entail literature searching, acquiring and analyzing data to be incorporated into a major database of mammalian genetics, and providing genetic information and database support for users. Applicant must be versed in classical and molecular genetics. Other desirable attributes include writing and communication skills and experienced computer use.

MS degree in life sciences preferred.

The Jackson Laboratory, located on the coast of Maine, adjacent to Acadia National Park, is a world-renowned center and resource for mammalian biology and genetics.

Qualified candidates should send resume to: Harold Wheeler, Manager of Human Resources, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609, (207) 288-3371.

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The Jackson Laboratory

NRC-CMRC

NRC - Canada's top R&D organization - helps its industry partners become stronger global competitors. Currently, NRC's Biotechnology Research Institute are looking for those rare people who can help further our record of excellence.

The Biotechnology Research Institute (BRI) is one of the National Research Council's (NRC) research Institutes. It is a dynamic research centre committed to pursuing, together with industrial and University partners, biotechnological research oriented towards industrial application. Created in 1983, the Institute now occupies a 19,000^m² facility equipped to reflect the multidisciplinary nature of biotechnology: research and development is conducted in biochemical engineering, molecular genetics and protein engineering.

The Institute has limited term and continuing positions available in the Molecular Biology Sector.

Crystallographers

Limited Term - 3 years RB-92-01.SCI
Continuing RB-92-06.SCI

Two positions are available in the Macromolecular Structure Group. The candidates will participate in setting up the image plate area detector system equipped with a low temperature device and will help in operating this equipment in the future. They will actively participate in the ongoing research projects in the area of protein crystallography. These include the crystallographic analysis of proteins, such as lipases, proteases, antibody F_{ab} fragments, etc., leading to the determination of their 3-D structures. Some of the duties will require performing final stages protein purification.

Ph.D. in Biochemistry, Protein Crystallography or in a related field. Post-doctoral experience, some of which has been obtained in a protein crystallography laboratory. Familiarity with data collection using area detectors, Multiple Isomorphous Replacement and Molecular Replacement methods, as well as the variety of graphics software for protein crystallography.

Protein Chemist

Continuing RB-92-07.SCI

The successful candidate will develop technologies of ionspray mass spectrometry, gas-phase protein sequencing and amino acid analysis, lead research projects combining these techniques and carry out interdisciplinary collaborations with other members of the Institute.

Ph.D. in biochemistry, analytical biochemistry or in a related discipline and extensive relevant post doctoral research experience in biochemistry or analytical biochemistry. Candidates must have expertise in developing technologies in ionspray mass spectrometry, gas-phase protein sequencing, amino acid analysis and protein characterization and in leading scientific projects with these techniques.

Molecular Biologist

Continuing RB-92-13.SCI

The Receptor Group requires an experienced molecular biologist to contribute to ongoing projects on growth factor receptors and growth factor signalling pathways. Ongoing projects are on the EGF receptor system and TGF- β receptor system.

Ph.D. in Molecular Biology or in Biochemistry. Demonstrated postdoctoral experience. The individual should have extensive knowledge of molecular biology techniques including DNA cloning, mRNA isolation, sequencing, PCR, etc. Some knowledge of protein purification and receptor assays would be an asset. The individual should be interested in applying the techniques of molecular biology to study the growth factor receptors and their signalling pathways.

Molecular Biologist

Continuing RB-92-08.SCI

The Virology Group requires an experienced molecular biologist to contribute to ongoing projects involving insect virus expression vectors, transcriptional control, and host cell receptor. Ongoing projects include the refinement of baculovirus expression vectors and the production of proteins of commercial and academic relevance in insect cells.

Ph.D. in Molecular Biology or in Molecular Virology. Demonstrated postdoctoral experience. Extensive knowledge in the field of molecular biology - mRNA isolation, DNA cloning, sequencing, PCR, DNA purification techniques. Some knowledge of transcriptional activators, bank retardation assays, DNA footprinting and in vitro transcription assays is desirable. Some knowledge of protein purification. Experience with transgenics (mice, drosophila, fish or plants) or insect cell culture techniques and mammalian and insect viruses would be an asset but a firm grounding in DNA technology is essential.

NMR Manager

Limited Term - 2 years RB-91-12.SCI

The duties include support activities such as troubleshooting, maintaining cryogenic fluid levels, acting as the primary liaison with spectrometer companies, implementing and testing new pulse sequences and data processing software, assisting users in their use of the NMR facility. The NMR manager is expected to keep up-to-date on NMR technology development and, in consultation with other members of the group, seek to acquire the technology that would benefit ongoing research. Aside from these support functions, the manager is also expected to carry out collaborative research on the development of NMR methods and the application of these methods to the study of biomolecular systems.

Ph.D. in Chemistry, Physics or related field with research in the area of NMR spectroscopy. Candidates must be conversant in the theory and practice of multidimensional NMR experiments, preferably with experience in protein NMR spectroscopy. They must have basic electronics skills and a knowledge of NMR spectrometers at the level of being able to implement hardware modifications in order to carry out specialized experiments.

Protein NMR Spectroscopist - Research Associate

Limited Term - 2 years RB-XX-110.SCI

The Biomolecular Interactions group is seeking a protein NMR spectroscopist to carry out structural studies of proteins and protein-ligand complexes as part of an interdisciplinary research effort in the rational design of novel drugs, inhibitors and biomolecules.

Ph.D. in Biochemistry or in a related field with research in the area of protein NMR spectroscopy. The individual must be conversant in the application of multidimensional NMR experiments to protein structural problems. The individual must have initiative, good communication and interpersonal skills, and must be comfortable working in a team environment.

SALARY RANGE: Commensurate with qualifications.

Apply in writing, giving complete details of education and experience to: The Recruitment and Staffing Section, National Research Council of Canada, Ottawa, Ontario, K1A 0R6. In reply, please quote the appropriate reference number.



National Research Council Canada
Conseil national de recherches Canada

Canada

National Institutes of Health

POSTDOCTORAL POSITION IN MUCOSAL IMMUNOLOGY

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

Material should be sent to:

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

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TOXICOLOGICAL RISK ASSESSMENT SCIENTIST—A senior research position is available immediately with ManTech Environmental in their Risk Assessment Research Program of the Toxic Hazards Research Unit (THRU) located in Dayton, Ohio. The minimum qualifications for this position are (1) Doctoral Degree in toxicology, chemistry, epidemiology, mathematics, or computer science plus 7 years' experience; Master's Degree in same disciplines plus 10 years' experience; or Bachelor's Degree plus 15 years' experience with evaluation; and (2) experience in toxicological risk assessment. Preferred candidates will have (1) demonstrated experience in the scientific direction of research activities in toxicological risk assessment and physiologically based pharmacokinetic modeling; and (2) be recognized authorities in toxicological risk assessment. Duties and responsibilities, in addition to requirements stated above, will include planning, analyzing, and directing technical, administrative, and research activities of the Risk Assessment Research Program; supervising and evaluating the performance of personnel within that Program; participating in the establishment and development of research efforts to meet program needs; managing program resources in a manner that facilitates progress on contract initiatives as prioritized by the THRU Director; as a scientific expert, advising management and colleagues on projects involving toxicological risk assessment; and presenting study results and research programs both orally and in written reports and publications. ManTech Environmental offers competitive salaries and a complete benefits package. Qualified applicants please submit current resume, with cover letter including salary requirements, to: **Ms. Lois Doncaster, Human Resources/04, ManTech Environmental Technology, Inc., a ManTech International Company, P.O. Box 31009, Dayton, OH 45431-0009**. ManTech Environmental Technology, Inc. is an Equal Opportunity Employer.

Affymetrix is the diagnostic subsidiary of Affymax, a drug discovery company. At Affymetrix we will develop new diagnostic products that combine photolithography from the semiconductor industry with solid phase organic chemical synthesis [Fodor et al., Science, 251,767 (1991)].

Affymetrix has the following positions open:

Staff Scientist

Design, characterize and evaluate optical detection schemes for diagnostic instrumentation. The successful candidate must be capable of coordinating the research, development, and integration of new chemistries with optical instrumentation, and should have experience in photo-chemistry, luminescence, spectroscopy and optical techniques. Experience in assay methodology and biological measurements is preferred; Ph.D. required in Physical Chemistry or related field.

Process Chemist

Responsible for the development, optimization, and maintenance of a chemical process to derivatize glass with functional groups for polymer synthesis. This is an opportunity for a Chemist or Chemical Engineer who has experience with synthetic organic chemistry and the demonstrated ability to sustain a process. The successful candidate will be familiar with analytical chemical techniques and statistical analysis. Some knowledge of GMP and PQA in the clinical diagnostic or pharmaceutical industries will be advantageous.

We offer many of the benefits of a world class academic environment and the potential to develop innovative diagnostic products. If you would like to join our fast growing company, we invite you to send your resume to: **Affymax Research Institute, Job Code S/BB, Human Resources Department, 4001**

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RESEARCH SCIENTISTS

ICOS Corporation is a biotechnology company pioneering scientific development in the fields of cell trafficking and cell activation. Positions are available for scientists with postdoctoral experience in the following areas:

ANTIBODY ENGINEERING

Molecular Biologist with a minimum of 2 years experience in the engineering and humanization of monoclonal antibodies. Ref. #TSD1AE

CADHERINS

Cell Biologist/Protein Biochemist/Molecular Biologist with experience in the biology of cadherins or other junctional molecules. Ref. #T591CA

SIGNAL TRANSDUCTION

Molecular Biologist with experience in receptors, G proteins, and protein kinase signalling mechanisms with special emphasis on structural definition of protein-protein interactions. Ref. #JH91ST

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.

Please send your C.V. with job reference number to:

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

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DIRECTOR, VASCULAR GRAFT PROGRAM

Creative and challenging opportunity to direct and manage all aspects of program to develop a small diameter vascular graft. Responsibilities include the basic scientific research and development challenges including preclinical and clinical studies. Ideal candidate has experience in vascular biology and management skills in product development programs. Must have ability to interact effectively and manage supporting groups intramurally and extramurally. Ph.D. degree required. Interested applicants should send resume to: **Organogenesis Inc., 83 Rogers Street, Cambridge, MA 02142.**

DIRECTOR, Office of Animal Care Services. Responsibilities include delegated authority for policy and programs in: 1) medicine, surgery and training, 2) diagnosis and research, 3) facilities, 4) program administration. Will develop/supervise training program in laboratory animal medicine and occupational health education/screening program. Must have D.V.M. or equivalent; licensure or eligibility for license in State of California. Advanced degree or ACLAM board certification preferred. September 30, 1992 deadline. Send letter with qualifications, curriculum vitae and three or more references to: **Paul Sypherd, Ph.D., Vice Chancellor for Research, 155 Administration, University of California, Irvine, CA 92717-3175.**

CATCH THE MOMENTUM

Celite Corporation, an aggressive and rapidly growing international producer of industrial minerals, has an opening in its Research and Technical Services Department for a **MANAGER OF TECHNICAL SERVICES**. Responsibilities include the supervision of all technical service activities in the department, including those associated with the support of the sales, marketing, manufacturing, and geology departments. Some domestic and overseas travel may be required. Strong analytical, interpersonal, and communication skills, five years or more of work experience, laboratory project management experience, and a graduate degree in physical science or engineering required. Minerals industry experience strongly preferred. The position is based in Celite's state-of-the-art laboratory located in a small town on the beautiful Central Coast of California. Send resume with salary history and requirements to: **Box 23, SCIENCE Classified Advertising, 1333 H Street, N.W., Room 814, Washington, DC 20005. Equal Opportunity Employer, M/F/V.**

USDA/FOREST SERVICE

STATION DIRECTOR. Northeastern Forest Experiment Station. Position is located in Radnor, Pennsylvania. The position is responsible to the Chief of the Forest Service for providing leadership in the formulation and direction of research and scientific activities in natural resources. Responsibilities encompass the important forest areas consisting of the States of Connecticut, Kentucky, Maine, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Vermont, and West Virginia. This position is in the Senior Executive Service, salary range is \$90,000 to \$112,100 per annum. All applicants must submit: 1) application for Federal employment (SF-171) typed, 2) Supplemental Applicant Statement, 3) Copy of most recent supervisory appraisal of performance, 4) Senior Executive Candidate Development Program graduates must provide proof of OPM certification, 5) Form AD-779, Biographical Sketch. To obtain the application forms or if you have questions, please contact: **Denise Howell, (703) 235-3440, USDA Forest Service, P.O. Box 96090 (Room 913 RPE), Washington, DC 20090-6090.** Position closes August 19, 1992.

FACULTY POSITION available immediately to work with research group directed by Dr. Donald Gilden using cDNA expression libraries to study neurologic disease. Candidates should be experienced in cloning, expression and transcript analysis. Sequencing experience desirable. Rank and salary commensurate with experience. Submit curriculum vitae, representative publications and reference letters by September 21, 1992, to: **Dr. Donald Gilden, Chair, Department of Neurology, University of Colorado School of Medicine, 4200 East 9th Avenue, Box B-182, Denver, CO 80262.** The University of Colorado Health Sciences Center is committed to Equal Employment Opportunity and Affirmative Action.

POSITIONS OPEN

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

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

Botany/Cell Biology: The Biology Department of the University of Central Arkansas (UCA) invites applications for a full-time temporary (sabbatical replacement) **FACULTY POSITION** for 1992-93 with opportunity for competitive renewal. Highest consideration will be given to applicants qualified to teach Botany, Cell Biology, and Biology for General Education. Submit curriculum vitae, copies of transcripts, a description of previous teaching experience and three letters of recommendation to: **Dr. Edmond E. Griffin, Department of Biology, University of Central Arkansas, Conway, AR 72035.** Deadline for applications is August 21, 1992. *UCA is an Affirmative Action/Equal Opportunity Employer.* Telephone: 501-450-3146; FAX: 501-450-5208.

FACULTY POSITIONS

The Department of Pharmacology and Molecular Biology at The Chicago Medical School is initiating the third phase of faculty recruitment for tenure track positions at all levels. Preference will be given to candidates with experience in the molecular aspects of cancer, cardiovascular diseases, toxicology and endocrinology. A funded, independent research program will be an additional consideration. Selected candidates are expected to contribute to teaching Medical Pharmacology and Molecular Biology courses. The school is located in a modern facility adjacent to the very pleasant North Shore community of Lake Bluff, 38 miles from downtown Chicago with proximity to forest preserves and Lake Michigan. The department under new leadership has already recruited several faculty of high caliber. Excellent core facilities and strong graduate program (Ph.D. and M.D./Ph.D.) are available. Please send curriculum vitae, research plans and three names for reference to: **Dr. Samson T. Jacob, Chairman, Department of Pharmacology and Molecular Biology, The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064.** *The Chicago Medical School is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION—Massachusetts General Hospital and Harvard Medical School, Boston. Postdoctoral position in antibody engineering for candidates with appropriate experience in molecular biology, immunochemistry, protein chemistry. Research involves structural and functional characterization of mutant antibody combining sites at protein and DNA level. Send curriculum vitae, statement of research interests, and names of three references to: **Dr. Michael N. Margolies, Jackson 14, Massachusetts General Hospital, Boston, MA 02114.** Telephone: 617-726-8552, FAX: 617-726-4811.

POSTDOCTORAL POSITION available to study the effects of a newly cloned natural killer enhancing factor and cytokines on lymphocyte function. Background in **molecular biology** and **immunology** preferred. Please send curriculum vitae and list of references to: **Hungyi Shau, Ph.D., Division of Surgical Oncology, 54-140 CHS, UCLA Medical Center, Los Angeles, CA 90024-1782.** *Affirmative Action/Equal Opportunity Employer.*



GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

Research at the Glaxo Institute in Geneva is focussed on discovering the molecular mechanisms of diseases of the CNS, allergies and inflammatory conditions. We have an outstanding opportunity for a

POST-DOCTORAL BIOCHEMIST POSITION

to study the role of protein tyrosine phosphatases in signal transduction

The ideal candidate will have research experience in receptor-linked signalling pathways involving tyrosine phosphorylation/dephosphorylation. The successful applicant will investigate protein tyrosine phosphatases recombinantly expressed in yeast and particularly their interactions with mammalian receptor tyrosine kinases and transcription factors.

The Institute provides a dynamic international research environment and actively encourages collaborative projects with academic groups as well as the publication and presentation of results at scientific meetings. The Glaxo Institute is part of the Glaxo group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live.

If you are interested in this position, please send your curriculum vitae with a list of publications and the names of three referees to: **Rita Gloor, Personnel Manager, Glaxo Institute for Molecular Biology, 14 chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland.**

Make A Difference In The Quality of Life

Baxter Biotech Immunotherapy Division, a leader in the area of human plasma-derived protein therapeutics, is undertaking the development of its next generation of therapeutics with the aid of state-of-the-art biotechnology. We seek an energetic individual who can contribute effectively in a multi-disciplinary R&D environment:

MANAGER

Protein Characterization

The successful candidate will lead/coordinate R&D activities, identifying project requirements for the development of clinical products, including timeline, activity plan, staffing and budgeting. We require indepth knowledge of protein characterization, including protein structure, post-translational modification and structure/function relationship. General knowledge of immunology, cell culture and recombinant technology is also needed. Applicants must have management experience with multiple projects, including projection of timeline, budget and staffing requirements leading to IND submission. Familiarity with FDA requirements of product characterization leading to IND and PLA submission is essential. Computer literacy desirable.

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

Immunotherapy Division

Baxter

Molecular Biosystems, Inc. (MBI), a leader in the development and manufacturing of contrast agents for medical imaging, including ultrasound and MRI, is seeking qualified candidates for the following positions:

- **SCIENTIST:** Responsible for development of final formulations for MRI & CT products. Must be familiar with drug delivery systems & tissue targeting. Requires a Ph.D. in Pharmacy or Medicinal Chemistry with 5 years lab experience formulating organic & inorganic based drugs for solubility & tissue specific delivery. Also requires knowledge of pharmaceutical operations, sterilization & cGMP regulations.

- **SCIENTIST:** Responsible for developing analytical methodology in support of process and product development & assembling the technical portions of regulatory filings (IND, NDA). Requires Ph.D. in Analytical Chemistry with 5 years experience in analytical method development within the pharmaceutical industry.

- **RESEARCH ASSOCIATE II:** Will assist in developing novel biochem assays for ultrasound imaging products. Requires experience in chromatography (HPLC or FPLC) and electrophoresis. BS Biochemistry with 3+ years lab experience or MS with 1 year lab experience.

We offer competitive salaries, a comprehensive benefits package & a pleasant working environment. Qualified candidates should submit résumé with salary history to:

Molecular Biosystems, Inc.
Human Resources Department A65-93
10030 Barnes Canyon Road
San Diego, CA 92121.



An Equal Opportunity Employer

Professor and Head Department of Biochemistry University of Minnesota Medical School

The University of Minnesota Medical School invites applications for the position of Professor and Head of the Department of Biochemistry. Major research efforts in the Department span a wide variety of disciplines, including molecular biology, molecular biophysics, enzymology and biological regulation. Teaching of graduate biochemistry is shared among 45 research colleagues in the campus-wide biochemistry graduate program, which currently is training over 125 Ph.D. students. The Department is also responsible for teaching of medical/dental and allied health students.

We seek a candidate with outstanding scientific credentials to lead the Department and stimulate interactions with the community of biological scientists within the Medical School and the broader University. Candidates must have a doctoral degree, an internationally-recognized, active research program and qualify for appointment as a tenured Professor in accordance with University and Medical School policies.

Qualified candidates should submit a curriculum vita documenting their qualifications and professional accomplishments. **The deadline for receiving applications is September 15, 1992.** Please send to:

David W. Hamilton, Ph.D.
Chairman, Search Committee for
Head of Biochemistry
UNIVERSITY OF MINNESOTA
4-135 Jackson Hall
321 Church Street S.E.
Minneapolis, MN 55455

This is to announce the extension of an on-going search

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equal opportunity educator and employer.*



MOLECULAR MECHANISMS OF AGING

October 15-18, 1992
Kansas City, Missouri

Symposium Registration:
Scientific Education Partnership
9300 Ward Parkway, P.O. Box 9627
Kansas City, Missouri 64114-0480

Symposium Sponsors:
Marion Merrell Dow Foundation
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*MMD SEP grant projects

Molecular Alterations in Antibody Generation with Aging

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Diana J. Bigelow

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Molecular Mechanisms of Complement-Mediated Cell Death*

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Ron W. Oppenheim

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Molecular Mechanisms for Neuronal Survival*

Elias K. Michaelis

Adaptive versus Pathological Plasticity in the Aged Brain

Carl W. Cotman

Summary and Perspectives

Billy G. Hudson



HEAD, GODDARD DISTRIBUTED ACTIVE ARCHIVE CENTER

The Goddard Space Flight Center is seeking candidates for the position of Head of the Goddard Distributed Active Archive Center (DAAC), an operational data center for the international Earth science community. The incumbent must have demonstrated ability to manage data archiving facilities and to define and implement Earth science mission data requirements for archiving and distribution while working closely with the Earth science community both within and outside of NASA.

The incumbent must have a bachelors degree (advanced degree preferred) in physical science, mathematics or engineering and indepth experience in the processing and analysis of spacecraft-acquired Earth science data.

Salary range \$54,607 to \$83,502 dependent on education and experience. Candidates should submit an Application for Federal Employment (SF-171) to NASA/Goddard Space Flight Center, Employment and Employee Services Branch, Code 115J, Greenbelt, MD 20771 by August 14, 1992.

General inquires should be directed to Dianne Hagerty at (301) 286-8319. Technical inquires should be directed to Dr. Robert Price at (301) 286-2239. U.S. Citizenship is required. Equal Opportunity Employer.

DIRECTOR

General Clinical Research Centers Program
National Center for Research Resources
National Institutes of Health

The National Center for Research Resources (NCRR) is seeking applicants for the position of Director, General Clinical Research Centers (GCRC) Program. This position is located in Bethesda, Maryland, and is a permanent full-time position with a salary range of \$90,000 to \$112,100 per annum commensurate with qualifications. Physicians may be eligible for Physician Comparability Allowance ranging from \$5,000 to \$20,000 per year.

The Director, GCRC Program, is responsible for planning, developing, managing and evaluating a multimillion dollar program of grants and contracts which supports high quality clinical research throughout the Nation. The GCRC Program currently supports 74 General Clinical Research Centers with a 600 research bed capacity and an annual budget of approximately \$118 million. Applicants for this Senior Executive Service position must have a Doctor of Medicine degree or equivalent. Send applications to:

Ms. Pathenia Wiggins
NCRR
Building 31, Room 3B50
9000 Rockville Pike
Bethesda, MD 20892



For application forms and a copy of the requirements, contact Ms. Wiggins at NCRR on (301) 496-1524. **Deadline for applications is July 22, 1992.**

Public Health Service Commissioned Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

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MOLECULAR BIOLOGIST

– DNA Repair & Cell Cycle Control –

The recent opening of the new Glaxo Inc. Girolami Research Institute, located in Research Triangle Park, NC, represents Glaxo's continued commitment in the pharmaceutical industry to the discovery of drugs for unmet patient needs. Scientists engaged in Glaxo's expanding research and development programs at the Center have a premier facility in which to work.

We seek a **Molecular Biologist** with experience in the regulation of DNA repair and genomic integrity in mammalian cells. This individual will develop and lead a research program focusing on DNA repair and its role in regulation of the cell cycle as potential targets for novel cancer chemotherapy.

The successful candidate will be an energetic individual with leadership ability and creativity, in addition to scientific excellence. Active collaboration with other research teams both inside and outside the company is required. Qualifications must include a Ph.D. or M.D., plus a minimum of four years of relevant post-doctoral experience, and a proven record of achievement.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world-famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume, including salary history, to: **Human Resources Department, Job # 9125-MB-SC, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

SCIENTISTS/

PROJECT LEADERS

Baxter Diagnostics Inc., a worldwide leader in supplying diagnostic products, currently has several opportunities due to expansion of the R&D group.

Successful candidates will have a Ph.D. in biochemistry or relevant equivalent experience. Previous industrial R&D or postdoctoral studies involving protein purification, characterization and stabilization is a plus. Experience in liquid stabilization of proteins is desirable. Preference will be given to individuals with demonstrated ability to effectively provide leadership for successful product development projects.

We offer an excellent scientific environment, in a new facility, supported by a competitive salary and benefits package. Please send your resume in confidence to: **Baxter Diagnostics Inc., Research and Development, MS 384, Ad #701, P.O. Box 520672, Miami, FL 33152-0672.** Equal Opportunity Employer. We conduct pre-employment drug screening.

Baxter Diagnostics Inc.

Baxter

POSITIONS OPEN

FACULTY POSITION BIOLOGY OF INFECTIOUS DISEASES

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

MARINE PLANKTON

The College of William and Mary, School of Marine Science, Virginia Institute of Marine Science, invites applications for two tenure track **FACULTY POSITIONS**. Successful candidates will be expected to teach graduate level courses in biological disciplines, advise graduate students, and to develop externally-funded research programs. Preference will be given to applicants interested in research involving planktonic processes at the organismic, community or ecosystem level and a commitment to excellence in graduate education. Senior level applicants should demonstrate a record of outstanding research. We are particularly interested in applicants with skills in state-of-the-art techniques such as image analysis, immunofluorescence or molecular techniques, modeling or other computer applications which apply to planktonic processes.

Applicants should send their curriculum vitae and arrange for three or more letters of reference to be sent to: **Dr. Leonard W. Haas, Search Committee Chair, The College of William and Mary, Virginia Institute of Marine Science, Gloucester Point, VA 23062 (telephone: 804/642-7248).** Review of applications will begin on 15 August 1992 with the intention of filling one or both of the positions by the beginning of the Fall semester 1992. However, the positions will remain open until filled by suitable applicants.

The College of William and Mary is an Equal Opportunity/Affirmative Action Employer. Women and minorities are particularly encouraged to apply.

THE SALK INSTITUTE

POSTDOCTORAL POSITION IN MOLECULAR IMMUNOLOGY/MOLECULAR BIOLOGY. Immediately available in a group investigating (1) developmental regulation and function of lymphocyte cell surface molecules which includes ES cell/gene knock-out technology and (2) the identification of changes in gene expression that accompany the progression of cells through intermediate stages on the pathway to cancer. Expertise in molecular biology desirable.

Please send curriculum vitae and letters of recommendation to:

**Dr. William C. Raschke
The Salk Institute
P.O. Box 85800
San Diego, CA 92186-5800**

The Salk Institute is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

To study the pharmacology of benzodiazepine dependence and withdrawal on an NIDA-funded project for three years. Studies involve evaluation of withdrawal suppression drugs and analysis of tissue levels of drugs by HPLC. Requires Ph.D. with experience in drug abuse research field, behavioral analysis of drug actions and/or tissue level monitoring of drugs and with excellent communication skills verbal and written. Available immediately. Send curriculum vitae and three letters of recommendation to: **Dr. Norman R. Boisse, Department of Pharmaceutical Sciences, 211 Mugar Building, Northeastern University, Boston, MA 02115.**

POSITIONS OPEN

POSTDOCTORAL POSITION available to study the biological activity of proteoglycan core proteins. Recombinant peptides produced by expression vector systems will be evaluated for activity using affinity association methodology and cell culture systems. A strong background in biochemistry/molecular biology and an interest in cell biology/extracellular matrix desired. Send curriculum vitae and the names/addresses of three references to: **Dr. John Hassell, The Eye and Ear Institute of Pittsburgh, University of Pittsburgh School of Medicine, 203 Lothrop Street, Pittsburgh, PA 15213.**

POSTDOCTORAL POSITION available to study cell surface biology of *Neisseria gonorrhoeae* and its applications towards vaccine development. Project is a collaborative effort between the University of Maryland and MedImmune, Inc. Candidate should have strong background in molecular techniques. Send curriculum vitae and three letters of recommendation to: **Dr. Daniel Stein, Department of Microbiology, College Park, MD 20742. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION—Available immediately for a recent Ph.D. to join an ongoing study of the molecular basis of RNA binding by zinc finger proteins with an aim to developing novel therapeutic agents. Experience in molecular biology is essential. A background in protein structure-function would be advantageous. Send curriculum vitae and names and addresses of three references to: **Dr. Martyn Darby, Jefferson Cancer Institute, Thomas Jefferson University, 233 South 10th Street, Philadelphia, PA 19107. Smoke-free environment. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available for studying the role of errors in the transcription and in the receptor structure/function leading to the development of cancer. Ph.D. required with strong background in biochemistry; molecular biology experience helpful. Send curriculum vitae and references to: **Dr. Deodutta Roy, Department of Environmental Health Sciences, University of Alabama, Birmingham, AL 35294. An Equal Opportunity Employer.**

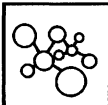
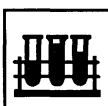
POSTDOCTORAL POSITION IN MOLECULAR VIROLOGY/IMMUNOLOGY. Available September 1 to study equine immune recognition of influenza virus. Experience with molecular biology is required. Experience with monoclonal antibodies, vaccinia virus expression system, or site-directed mutagenesis is desirable. Please send curriculum vitae, summary of previous research, and name/addresses of three references to: **Dr. Thomas M. Chambers, Department of Veterinary Science, 108 Gluck Equine Research Center, University of Kentucky, Lexington, KY 40546-0099. The University of Kentucky is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. One or two positions will be open in the fall of 1992 to study the biochemistry of cell adhesion as it pertains to tumor metastasis, atherosclerosis and osteoporosis. Emphasis will be on the fundamental protein biochemistry of integrin adhesion receptors, including (1) regulation of ligand binding by metal ions and receptor phosphorylation; and (2) receptor internalization and recycling. Individuals with backgrounds in chemistry or molecular biology who are interested in interfacing with a group strong in cell biology and protein chemistry are encouraged to apply. Send curriculum vitae to: **Dr. Jeffrey W. Smith, Committee for the Study of Vascular Biology (CVB-1), The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, CA 92037.**

POSTDOCTORAL POSITION IN: MOLECULAR IMMUNOLOGY is available at The Johns Hopkins School of Medicine. Projects address the roles that novel major histocompatibility complex encoded proteins play in the development, recognition and function of T cell subsets. Interested individuals should send a résumé and two to three letters of reference to: **Mark J. Soloski, Ph.D., Division of Molecular and Clinical Rheumatology, The Ross Research Building, Room 1049-S, The Johns Hopkins School of Medicine, 720 Rutland Avenue, Baltimore, MD 21205.**

Where do achievements in energy get recognized?

At the **National Renewable Energy Laboratory (NREL)** in Golden. Recently appointed national laboratory status by President Bush, NREL, formerly SERI, is entering a new era of energy research. This elevated role has created an unparalleled environment of support for our work and our people. It's a perfect opportunity to join an innovative team committed to the development of cleaner, safer and renewable energy resources.



Senior/Staff Genetics Scientists

In these positions, you will lead and perform genetics research, including cloning, mutagenesis, and metabolic pathway engineering activities to improve organisms for the production of fuels and chemicals from renewable resources. You will also maintain a state-of-the-art genetics laboratory and establish an interactive role with the research community. We prefer 2-7 years relevant experience, plus documented success in developing novel fermentative organisms, technical competence with yeast and their modification, and documented experience in the culturing and taxonomy of fermentative organisms.

Demonstrated hands-on knowledge of modern techniques in classical and recombinant genetics technology, including a specialty in the genetic modification of fermentative microorganisms is also required, as is ability to train and assist research associates in the application of state-of-the-art technology in this field. Both positions require a PhD in molecular biology, biochemistry or microbiology or equivalent relevant experience.

Ref. #E4220-1072

Associate Genetic Scientist

You will provide technical assistance and support a team of genetic scientists using mutagenesis, recombinant DNA, and other techniques to enhance the production of fuels, chemicals, and materials from biomass.

Requires at least a Bachelor's degree in molecular biology, biochemistry, or microbiology with emphasis in genetics or equivalent relevant experience. Also requires demonstrated experience using classical genetics and recombinant DNA technology including DNA isolation and purification, analytical and preparative electrophoresis, ligation, transformation restriction mapping and plate screening. More than two years experience in genetic modifications of microorganisms is preferred, as is knowledge and use of blotting and immunological screening techniques, including experience in both radioactive and non-radioactive methodologies, cloning bacterial cellulase and/or work on expression vectors. **Ref. #E4220-1026**

Postdoctoral Position

We currently have a postdoctoral positions open in the laboratory of Dr. Lewis M. Brown, involving the study of the effects of simulated fossil fuel combustion gases on the growth of microalgae in culture (biomass production studies). Experience is desirable in advanced culture techniques applied to the physiological ecology of microalgae/phytoplankton, nutrient or inorganic carbon uptake dynamics. Experience in physiology/biochemistry of microalgae may be an asset as the project develops.

Ref. #E4220-271

We offer an excellent compensation and benefits package. For immediate consideration, please send your resume and salary requirement, indicating appropriate Reference Number, to: **Human Resources Office, National Renewable Energy Laboratory, 1617 Cole Blvd., Golden, CO 80401.**

For information regarding current job opportunities at NREL, contact JOB LINE (303) 628-4650

Women and minorities are encouraged to apply. We are an equal opportunity employer.



NREL

NATIONAL RENEWABLE ENERGY LABORATORY

REGIONAL ENVIRONMENTAL ADVISOR

BACKGROUND: The Agency for International Development (A.I.D.) is seeking a Regional Environmental Advisor (REA) to provide host country governments, grantees, and A.I.D. in East and Southern Africa (ESA) with information and technical expertise related to the environmental sector in Sub-Saharan Africa. In addition, the REA will provide technical backstopping support to USAID Missions, USAID regional staff and AID/Washington environmental officers in assuring compliance with the provisions of 22 CFR Part 216, "A.I.D. Environmental Procedures." The Regional Environmental Advisor will be based in the Regional Economic Development Services Office for East and Southern Africa (REDSO/ESA) in Nairobi, Kenya, and he/she will provide technical environmental services to USAID Missions and staff in the 20 countries of East and Southern Africa and the Indian Ocean States. The REA will work under the general supervision of the Chief Engineer, REDSO/ESA, who will provide general guidance, approve work plans and evaluate REA performance.

RESPONSIBILITIES: As the senior regional technical specialist for environmental issues and concerns, the REA will:

- A. Provide technical backstopping support for project activities related to environmental assessments. The REA will also initiate activities with USAID Missions in the ESA Region to identify, develop, and evaluate projects/programs that will assist host government and private sector entities in the area of environmental protection.
- B. Assist in the preparation of development strategies and plans, as well as in program and project design and implementation to ensure they are environmentally sound and conform to Host Country laws with respect to environmental matters. The REA will work closely with host country departments and officials to improve their capabilities to manage the environment of the country.
- C. Assist USAID Missions during the preparation of A.I.D. project identification, development and implementation documentation to help assure that environmental concerns are recognized, monitored, evaluated and mitigated.
- D. Provide technical input for representatives on intra-agency committees, work groups and other bodies dealing with environmental policy and related programmatic strategy and act as A.I.D. liaison with the World Bank (WB) with respect to development implementation of National Environmental Action Plans (NEAP) and Environmental Information Systems (EIS), as well as to coordinate USAID Mission activities related to these programs.
- E. Assist Host Country coordinating agencies to establish environmental assessment procedures and policies at national, municipal and local levels.
- F. Assist Missions and Host Countries in accessing the wide range of centrally-funded projects in A.I.D. now available by providing assistance in determining the project requirements, developing scopes of work and engaging necessary short-term specialists to evaluate specific environmental problems. The problems might range from general studies to incidents of industrial and/or municipal pollution or environmental degradation, including making recommendations for remedial action and/or governmental control.
- G. Assist Missions in designing new activities, projects and/or programs, or in re-designing their existing portfolios to provide assistance to Host Government Ministries in their efforts to plan, establish and staff environmental coordinating and regulatory agencies and in the institutionalization of newly created environmental agencies established to develop and/or implement National Environmental Action Plans.

REQUIREMENTS: A Bachelor of Science in one of the natural or physical sciences or engineering is required, and graduate degree(s) in environmental sciences is highly desirable. Prior work experience should include at least ten years of progressively responsible professional experience in the physical or natural sciences. Technical and administrative experience in A.I.D. project design and implementation and related work in developing countries is highly desirable, as is French language capability. Environmental work experience related to the ESA Region is especially desirable. U.S. Citizenship is preferred but not mandatory.

APPLICATIONS: USAID contemplates awarding a Personal Services contract in early September, 1992. The reporting date to Nairobi will be negotiated, but it is desired to be ASAP after a contract is awarded. The contract will be for a two year term with an option for extension. The selected individual must obtain security and medical clearances which include a physician's certification that the individual and any accompanying dependents are medically fit to serve in the African environment. A.I.D. encourages the participation to the maximum extent possible of women and minority individuals in this activity, in accordance with Part 19 of the Federal Acquisition Regulations. Qualified individuals are requested to submit applications including SF-171 (available from U.S. Post Offices and USAID Missions), resume, and salary history to Contracting Officer for REA, USAID/REDSO/ESA/CON. The mail address is Unit 64102, APO, AE 09831-4102, and the fax number is 254-2-330945 or 337304. Selection will be based on an evaluation by a Technical Evaluation committee of the applicants' qualifications. Applications must be received in Nairobi by 3:00 pm on August 14, 1992.



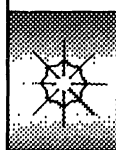
HEAD OF THE GLOBAL CHANGE DATA CENTER

The Goddard Space Flight Center is seeking candidates for the position of Head of the Global Change Data Center. The incumbent will be responsible for the Earth Observing System (EOS) - Systems Development Office, the Goddard Distributed Active Archive Center (DAAC) Facility, and the Earth Science Data Operations Facility. The incumbent must have demonstrated ability to manage complex data operations and archiving facilities related to Earth or space science research, including translating the needs of scientific data users into operational data systems.

The incumbent must have a bachelors degree (advanced degree preferred) in physical science, mathematics or engineering. He/she must be a recognized authority in science data systems development/operations, computer/data systems technology/techniques development, or Earth or space science data analysis, and have indepth experience in the processing, analysis and use of spacecraft-acquired Earth or space science data. Knowledge of some disciplines of Earth science is desired.

Salary (\$64,233-\$83,502) dependent on education and experience. Candidates should submit an Application for Federal Employment (SF-171) to NASA/Goddard Space Flight Center, Employment and Employee Services Branch, Code 115M, Greenbelt, MD 20771 by August 14, 1992.

General inquires should be directed to Dianne Hagerty at (301) 286-8319. Technical inquires should be directed to Robert Price at (301) 286-2239. U.S. Citizenship is required. Equal Opportunity Employer.



ENZON, Inc.

The excitement is contagious when a company with outstanding products and a vision of the future begins to come into its own. ENZON is such a company. Our core technology enhances the delivery of protein-based drugs; it offers the promise of new life to patients and a unique opportunity for the innovative and imaginative professionals who participate in the development.

Scientist

Supervisor, Analytical Chemistry

Develop and implement bioanalytical procedures to support research, clinical and related projects; coordinate analytical chemistry group activities; write reports and provide recommendations and monographs based on generated data. Ideally, you must have a PhD in Analytical Chemistry, Biochemistry, Biology, Immunochemistry or the equivalent, and familiarity with enzymes and immunoassays. Experience analyzing biological/clinical samples is desirable, and a knowledge of pharmacokinetics, drug metabolism, cGMP or computers is a plus. **Dept. S/SAC.**

We offer a fast-paced environment where creativity is valued, and independent thinking, as well as collaboration, is encouraged. We offer unparalleled support for your scientific standing, and a generous compensation and benefits package. Please send your resume, referencing the department, to: **Corporate Human Resources, Enzon, Inc., 40 Cragwood Road, South Plainfield, NJ 07080.** An Equal Opportunity Employer.

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UNIVERSITETET I OSLO

University of Oslo Department of Pharmacy Chair in Medicinal Chemistry

Candidates for the chair in medicinal chemistry should have a proven record of achievement in as many as possible of the following areas:

- 1) Synthesis and evaluation (structure-activity assessment) of new drugs with new pharmacological modes of action (lead compounds),
- 2) Synthesis and evaluation (structure-activity assessment) of new drugs employing known active compounds as lead structures,
- 3) Structure-activity analysis involving synthetic organic chemistry, *in vitro* and/or *in vivo* pharmacological methods, molecular modelling and/or QSAR.

The nominated professor is expected to participate in interdisciplinary research programs — e.g. biochemistry, pharmacognosy and pharmacology — which are of relevance to the research in medical chemistry.

The duties of the professor include teaching of medicinal chemistry/organic chemistry at all levels, research in his own area including supervision of undergraduate — and graduate students, and certain administrative responsibilities.

The appointee should ideally, in due course, attain the ability to teach and supervise in Norwegian.

Within one month after the date of application, applicants must forward 5 copies of publications and 6 copies of a list of publications to: University of Oslo, Faculty of mathematics and natural sciences, P.O. Box 1032, Blindern, 0315 Oslo, Norway.

Applications including a list of the publications should be forwarded to: University of Oslo, Faculty of mathematics and natural sciences, P.O. Box 1032, Blindern, 0315 Oslo, Norway.

Further information: Department of Pharmacy, Phone: +47-2-856586.

Last date of application: Sept. 15, 1992.

HEAD

AIDS ANTIVIRAL SCREENING LABORATORY

As part of the NCI's drug discovery effort, Program Resources, Inc. (PRI) operates a screening laboratory for materials inhibitory to the human immunodeficiency virus (HIV) at the Frederick Cancer Research and Development Center (NCI-FCRDC) in Frederick, MD.

The successful candidate will supervise a laboratory/clerical staff of 20 involved in performing routine assays involving HIV and in the development and performance of assays relevant to the range and mechanism of action of discovered antiviral materials. Work will involve handling HIV or HIV-infected materials under BL-3 safety conditions.

Applicants should have PhD in microbiology or equivalent experience, as well as several years postdoctoral experience in virology with expertise in molecular/cell biology, biochemistry, or organic chemistry. Experience in diverse areas is preferred, including use of computers for data management, administrative or managerial background, and knowledge of, or working experience with HIV under bio-containment conditions.

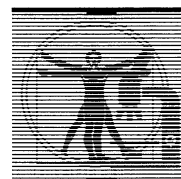
The working environment provided by the NCI-FCRDC is a campus-like setting in Frederick, MD near Baltimore and Washington, DC. PRI offers a salary commensurate with credentials and an attractive fringe benefits program. Forward resume in confidence to Barbara J. Norton-Gill, Employment Representative.

PROGRAM RESOURCES, INC.

a DynCorp subsidiary

NCI-FCRDC
P.O. Box B
Frederick, MD
21702-1201

EOE, M/F



POSITIONS OPEN

POSTDOCTORAL POSITION IN SOIL BIOGEOCHEMISTRY. Position available immediately to study landscape-level variations in transformations and hydrologic losses of different forms of nitrogen from soils. The project is part of a larger effort to understand and model fluxes and transformations of N in a mixed agricultural/forested landscape. Experience with lysimeters, soil hydrology, laboratory assays for N mineralization and soil solution chemistry is desirable. Please send cover letter, curriculum vitae and three letters of recommendation to: **Dr. Lars O. Hedin, W.K. Kellogg Biological Station, Michigan State University, Hickory Corners, MI 49060.**

TOXICOLOGY AND RISK ASSESSMENT

POSTDOCTORAL POSITION to develop and refine risk assessment techniques and evaluate hazardous waste sites. Opportunity exists for involvement in laboratory research in mechanisms of toxicity. Applicants with background in toxicology or related discipline preferred. Send curriculum vitae and names of three references by August 25, 1992 to: **Dr. S.M. Roberts, Center for Environmental and Human Toxicology, University of Florida, One Progress Boulevard, Box 17, Alachua, FL 32615.** An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN PLANT CELL SIGNAL TRANSDUCTION. Available Fall 1992 in the following: (1) mechanism of action of calmodulin and its target proteins and (2) signal exchange in the *B. japonicum* soybean nitrogen-fixing symbiosis. Biochemical and molecular approaches will be used to study signal molecules, their receptors, and calcium-target proteins. Work will include the rational design of altered structures and the evaluation of their activities in vitro, as well as in vivo in host and transgenic plants. Send curriculum vitae and at least three letters of reference to: (Position 1) **Dr. Dan Roberts, Department of Biochemistry;** (Position 2) **Dr. Gary Stacey, Department of Microbiology; Center for Legume Research, The University of Tennessee, Knoxville, TN 37996.**

POSTDOCTORAL POSITIONS are immediately available for molecular studies in **Cell Fate Determination in the Nervous System and in the Heart of *Drosophila*.** A multidisciplinary approach is used for studying neuronal and cardiac development in vivo. A strong background in molecular-genetics is preferred.

Applications including curriculum vitae and the names of three references should be sent to: **Dr. Rolf Bodmer, Department of Biology, University of Michigan, Ann Arbor, MI 48109-1048.** FAX: 313-747-0884. The University of Michigan is an Equal Opportunity/Affirmative Action Employer.

MULTIDRUG RESISTANCE TRANSPORTERS

POSTDOCTORAL POSITIONS are available immediately for studies of the drug specificities, regulation, molecular structures and mechanisms of the multidrug resistance pumps from human tumor cells and malaria parasites. Research will involve both biochemical and molecular biological approaches using a baculovirus expression system. Send curriculum vitae and names of three references to: **Dr. Gene A. Scarborough, Department of Pharmacology, CB #7365, F.L.O.B., University of North Carolina, Chapel Hill, NC 27599.** Equal Opportunity Employer.

POSTDOCTORAL positions in plant biochemistry/molecular biology. One position involves the molecular dissection of the elements and signals controlling an elicitor-inducible sesquiterpene cyclase gene. The second position is a joint project with Dr. Glenn Collins involving the isolation of tissue specific promoters and their use for defining developmental patterns in tobacco. Relevant experience in molecular biology/biochemistry required. Applications should include curriculum vitae, names and telephone numbers of three references, and a statement of research interests/goals to: **Dr. Joe Chappell, Agronomy Department, University of Kentucky, Lexington, KY 40546-0091.** Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

The Department of Microbiology and Immunology at The Pennsylvania State University College of Medicine in Hershey invites applications from qualified individuals for postdoctoral positions. Departmental research programs include (a) immunology—molecular aspects of the MHC complex, antigen processing, and cellular immunology; (b) molecular and cellular biology—regulation of cell growth and gene expression, oncogenes, and mechanisms of neoplastic transformation; and (c) virology—molecular studies of virus replication, assembly, pathogenesis, latency and gene regulation using adeno, hepatitis B, herpes, papilloma, papova and retroviruses. Applicants should send curriculum vitae, a brief description of research experience and interests, and names and addresses of three references to: **Dr. Richard J. Courtney, Chairman, Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine, Post Office Box 850, Department 30, Hershey, PA 17033.** The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

TWO POSTDOCTORAL POSITIONS IN HIV RESEARCH available immediately to study: HIV placent tropism and replication *in vitro*; infection of cord blood subsets, including stem cells; gene therapy in stem cells and SCID-human mice; quasispecies diversity. Applicants should have Ph.D. in relevant field and experience in modern molecular biology techniques. Send curriculum vitae, names and telephone numbers of three references to: **David Schwartz, M.D., Ph.D., Department of Immunology and Infectious Diseases, Johns Hopkins University (JHU) School of Public Health, 615 North Wolfe Street, Baltimore, MD 21205.** FAX: (410) 955-2791, telephone: (410) 955-1622. JHU is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS VANDERBILT UNIVERSITY

Several positions available in August at Vanderbilt University School of Medicine. Research involves design of HIV vaccine and protein engineering. Training in immunology, lipid/liposome chemistry or peptide/protein chemistry is essential. Send curriculum vitae and names of three references to: **Dr. James P. Tam, Department of Microbiology and Immunology, A5301 Medical Center North, Vanderbilt University, Nashville, TN 37232-2363.** Vanderbilt University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL ASSOCIATE

A postdoctoral position is available immediately to study the effects of ethanol consumption on hepatic proteolytic systems. Specific projects include investigations of lysosomal proteolysis, cellular autophagy and ubiquitin-mediated proteolysis in the whole organ as well as in isolated hepatocytes. A background in biochemistry and/or cell biology is preferred. Please send curriculum vitae and the names and addresses of three references to: **Dr. Terrence M. Donohue, Jr., Liver Study Unit, VA Medical Center and University of Nebraska Medical Center (UNMC), 4101 Woolworth Avenue, Omaha, NE 68105.** UNMC is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL/ RESEARCH ASSOCIATE POSITIONS

To work on the brain tumor biochemical and metabolic characterization by autoradiography. (Immediate opening.)

The influence of Ca-channel blockers on the uptake of nitrosoureas will be studied in C6 glioma implanted into rat brain. The influence of chemotherapy on the C6 glioma density of the peripheral benzodiazepine receptors and the influence of the peripheral benzodiazepine antagonists on tumor proliferation will also be studied. Some experience in doing animal experiments is essential. Any experience in implanting catheters into femoral vein and artery would be advantageous. Salary is between \$26,000 and \$34,000 per year depending on prior experience. If interested, please send curriculum vitae along with the name and telephone number of three references to: **Professor Mirko Diksic, Montreal Neurological Institute, McGill University, 3801 University Street, Montreal, Quebec, H3A 2B4, Canada.**

POSITIONS OPEN

Position available for **POSTDOCTORAL OR ASSISTANT RESEARCH SCIENTIST** in basic molecular biology techniques, cell culture and an interest in *in situ* hybridization. Ability to work on own projects cooperatively within 10 person group is important. Interaction between clinical and basic sciences. Salary negotiable. Contact: **Dr. W. Souba, Box 100286, University of Florida, Gainesville, FL 32610; telephone: 904-395-0494.** Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE positions are available on an ongoing basis to conduct research within different research groups in the Institute of Molecular Biology at the University of Oregon. The purpose of this notice is to establish and maintain a pool of qualified applicants. Ph.D. in Molecular Biology or related field is required. Salary dependent on experience. Send résumé and letter of interest to: **Postdoctoral Positions, Institute of Molecular Biology, University of Oregon, Eugene, OR 97403.** Equal Opportunity/Affirmative Action Institution committed to cultural diversity.

POSTDOCTORAL RESEARCH POSITIONS. To study signal transduction by adhesion receptors and the biochemistry of lymphocyte activation. Background in cellular biochemistry, protein biochemistry or cellular/molecular immunology is desirable. Those interested should mail or FAX [(619) 534-5792] curriculum vitae and the names and telephone numbers of three references to: **Dr. Adrienne Brian, The Cancer Center, University of California, San Diego (UCSD), 9500 Gilman Drive, 0063, La Jolla, CA 92093-0063.** UCSD is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITIONS BRIGHAM AND WOMEN'S HOSPITAL AND HARVARD MEDICAL SCHOOL

The Department of Pathology at Brigham and Women's Hospital and Harvard Medical School, Boston, Massachusetts has available postdoctoral research positions for M.D. and/or Ph.D. candidates. The Department's principal research groups are working in the following areas: vascular cell biology (head: M. A. Gimbrone), molecular oncology and development (J. L. Sklar), immunology (A. K. Abbas), epithelial cell biology (J. L. Madara), experimental renal disease (H. G. Rennke), and pulmonary pathophysiology (J. J. Godleski). The Department has an interactive research program with over 25 established investigators. Interested applicants should send curriculum vitae to: **Ramzi S. Cotran, M.D., Chairman, Department of Pathology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.**

The Brigham and Women's Hospital is an Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSISTANT

Research position available relating to the isolation of gene encoding proteins that can interact with nuclear oncogene products. Duties include: the isolation and maintenance of primary human and rodent cells, subcellular fractionation, isolation of DNA binding proteins from nuclear extracts, gel shift assays, DNase footprinting both *in vivo* and *in vitro*, and production of antibodies both monoclonal and polyclonal to recombinant proteins.

Special requirements include Ph.D. in Biochemistry and at least three years of experience in making cDNA expression libraries from heterologous organisms for screening in yeast using transcriptional assays. A detailed knowledge of yeast genetics, homologous recombination in yeast and in ES cells, RNA isolation, construction of cDNA and genomic libraries in yeast vectors, DNA sequencing, site directed mutagenesis, PCR amplification of wild type and mutant genes, and transfection of genes into mammalian cells using both plasmid and retroviral vectors is also required.

Position located in Boston, Massachusetts. Salary: \$32,000.00 per annum; 40 hours per week. Send résumé only to:

Job Order #2902
P.O. Box #8968
Massachusetts Department of
Employment and Training
C.F. Hurley Building
Boston, MA 02114

Advancement in Science Begins at Bio-Rad Laboratories

We are Bio-Rad Laboratories — a world leader in clinical diagnostics and one of the fastest growing companies in California. Continued growth has created several opportunities in major U.S. cities. We are seeking talented scientists who wish to begin their careers in industry.

As a Diagnostics Sales Representative, you will serve in a highly visible position with excellent opportunities for growth and advancement. Career paths include sales and product management leading to general management.

We require a BS or equivalent in a Life Science (MBA, MS or PhD a plus). Successful candidates must be willing to relocate.

We offer a competitive compensation package. Please send your resume to: Bio-Rad Laboratories, Dept. D316, 4000 Alfred Nobel Dr., Hercules, CA 94547. EOE M/F/D/V.

BIO-RAD

Bio-Rad Laboratories

POST-DOCTORAL SCIENTISTS

SmithKline Beecham Animal Health, a world leader in innovative research and development, has openings for Post Doctoral Scientists to join its expanding animal biological research and development team.

Research opportunities exist in virology and immunology for up to two years. The following two positions are available immediately:

MOLECULAR IMMUNOLOGIST

Will focus on epitope identification and characterization of protective immune responses to viral and bacterial pathogens. Requirements include:

- Ph.D. in immunology or biochemistry with experience in analytical protein purification.
- Background in antibody characterization and in-vitro growth of B and T lymphocytes.
- Understanding of protein sequencing and peptide synthesis.

MOLECULAR VIROLOGIST/VIROLOGIST

Will conduct vaccine-related studies on animal retroviruses, canine viruses, and/or bovine respiratory disease viruses. Requirements include:

- Ph.D. in virology or microbiology with significant training in virology.
- Background in viral pathogenesis and immunology.
- Working knowledge of methods in molecular biology.

SmithKline Beecham Animal Health provides a stimulating and challenging work environment based on creativity, commitment and team work. We offer a very attractive compensation, benefit and relocation package.

For confidential consideration, please send your C.V. and name of three references to Mr. Eric Erickson, SmithKline Beecham Animal Health, 601 West Cornhusker Highway, Lincoln, NE 68501-0809.



SmithKline Beecham
Animal Health

An Equal Opportunity/
Affirmative Action Employer

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

CHIEF

Contraceptive Development Branch
Center for Population Research

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

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

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



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

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

Staff Scientists Peptidomimetics Medicinal Chemistry

Affymax Research Institute is an innovative venture dedicated to the development of new technology which will accelerate the process of drug discovery.

Our success in the creation and screening of large combinatorial chemical libraries has created several openings in our Department of Medicinal Chemistry for Ph.D. Scientists with demonstrated achievement in Peptidomimetic Chemistry. We seek experienced medicinal chemists, with strong synthetic organic chemical backgrounds, who are enthusiastic about pursuing Drug Discovery in a multidisciplinary environment.

Affymax offers many of the benefits of a world class academic environment and the potential to develop new therapeutics. Please refer to Job Code S/EG2 and send your resume to: Affymax Research Institute, 4001 Miranda Avenue, Palo Alto, CA 94304. Equal Opportunity Employer.

affymax



RESEARCH SCIENTISTS

Hybritech Incorporated, a \$100 million subsidiary of Fortune 100 Eli Lilly and Company and a recognized leader in the manufacturing and marketing of *in vitro* diagnostic tests utilizing monoclonal antibody technology, has two immediate and challenging opportunities for Research Scientists to support our Diagnostics Research and Development division.

One position involves assay and process development of new products. The ideal candidate will have a PhD and industrial experience in the areas of protein biochemistry, immunochemistry, bioanalytical and/or analytical chemistry. Immunoassay development experience is a plus.

The other position is responsible for guiding development of immunoassays relating to skeletal diseases, including coordination of R&D activities with external companies and collaborators. The successful candidate will have a PhD with training and industrial or academic experience in the areas of bone biology, bone chemistry or related areas. Immunoassay development experience is desirable.

Hybritech offers a stimulating work environment and competitive salaries and benefits. Please send your resume to: HYBRITECH INCORPORATED, Human Resources SM/SCI-7-31-92/RS, P. O. Box 269006, San Diego, CA 92196-9006. We are committed to diversity in our workforce/EOE.



American Cyanamid is a research-intensive biotechnology and chemical company with strong involvements in the agricultural industry, and currently has openings for both Field Sales Trainees and Sales Representatives. These positions in the Animal Nutrition and Health Department of the agricultural Group offer long-term, management opportunities to qualified, highly motivated professionals.

FIELD SALES TRAINEE

We are offering a developmental sales position which will involve selling specific products via the telephone to accounts designated by management. Your objective will be to maximize the profit potential of each account by using judgement and action. You'll be given all the training required to become a top notch sales professional, with the corporate support and sales knowledge necessary to be successful.

Initial location is at our Corporate Headquarters in Wayne, NJ; placement into Field Sales is expected within 8-12 months (minimum).

FIELD SALES REPRESENTATIVE

You will be responsible for the sale of Animal Nutrition and Health products in an assigned territory. Requirements include familiarity with swine and cattle operations and 2-4 years related sales experience.

Qualifications for both positions include a BS in Business or Animal Science and the strong desire to excel in sales. For confidential consideration, send your resume, indicating salary history and requirements to: AG Personnel, Department FP, American Cyanamid Company, 1 Cyanamid Plaza, Wayne, NJ 07470; Principals only please. We are an equal opportunity employer.



SENIOR AQUACULTURE SCIENTIST, SOLOMON ISLANDS

The International Center for Living Aquatic Resources Management (ICLARM) is an international organization conducting interdisciplinary research on aquaculture and fisheries in tropical developing countries. It is a member of the Consultative Group on International Agricultural Research (CGIAR). ICLARM's research is carried out in close cooperation with national programs.

Applications are invited for the position of Senior Scientist and Officer-in-charge of ICLARM's Coastal Aquaculture Centre in the Solomon Islands.

The appointee will be responsible to the Director, Coral Reef Resource Systems Program, for implementation of research projects concerned with aquaculture and fisheries enhancement in coral reef environments. Activities will include breeding and development of cultivation systems for a variety of tropical marine species. The appointee will also oversee village level farming trials and liaise with and implement collaborative research programs with other research groups in the Indo-Pacific region. Future projects are expected to include research on fisheries enhancement systems for coral reef fish and invertebrates.

The incumbent will also have overall responsibility for the operations and management of the Coastal Aquaculture Centre and supervision of support staff and trainees.

A Ph.D. in an appropriate discipline and considerable experience in research, breeding programs and data analysis is required. Preference will be given to candidates with experience in tropical aquaculture research, project management and work in developing countries.

ICLARM is an equal opportunity employer. Salary and benefits are competitive with those offered by similar international organizations and include subsidized housing, vehicle, assisted education for children, home leave, health and life insurance and a retirement plan contribution.

Applications should reach the: Director (South Pacific), ICLARM, P.O. Box 438, Honiara, Solomon Islands, Fax No. (677) 22130, Tel. No. (677) 20255, before 15 September 1992.

Research Scientist Experimental Hematology

Pro-Neuron, Inc., a development-stage pharmaceutical company, has an immediate opportunity for a qualified senior cell biologist. Responsibilities and qualifications are as follows:

- Conduct analyses of new pharmaceutical agents *in vitro* and *in vivo*
- Hematopoietic cell culture assays and isolation of factors from culture
- Ph.D. degree and post-doctoral research experience required

This position will be based initially in the New York City area and will be affiliated with a cancer research center. At the completion of the program (approximately one year), you will be offered an equivalent, permanent research position in our Rockville, Maryland research laboratory.

Pro-Neuron offers a competitive salary and comprehensive benefits package.

For immediate consideration, please send your resume to Pro-Neuron, Inc., Human Resources Department (SCI), 1530 East Jefferson Street, Rockville, Maryland 20852.

Pro-Neuron, Inc.

We are an equal opportunity employer.

MOLECULAR PHARMACOLOGIST

Unigene Laboratories, Inc., a multidisciplinary biotechnology research corporation, is seeking a recently-graduated scientist for the following position:

POSTDOCTORAL SCIENTIST

The successful candidate will have a Ph.D. and/or an M.D. degree in Pharmacology, Biochemistry, or a related field. Experience in Molecular Biology or Peptide Biochemistry is desirable.

The project will investigate the identification and characterization of novel modulating peptides and their role in modulating cardiovascular performance.

Unigene offers a competitive salary with a comprehensive benefits package and the opportunity to work in an environment which fosters continuing professional development. Please send C.V. and three references to:

**PROTEIN BIOCHEMISTRY DEPARTMENT
UNIGENE LABORATORIES, INC.
110 LITTLE FALLS ROAD
FAIRFIELD, NJ 07004**

unigene

An equal opportunity employer

POSITIONS OPEN

Marine Biotechnology/Molecular Biology

University of Washington

College of Ocean and Fishery Sciences

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

School of Oceanography—Marine Biotechnology (re-opened)

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

School of Fisheries—Molecular Biologist

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

Leader

Peptidomimetic Chemistry

Affymax Research Institute is an innovative venture dedicated to the development of new technology which will accelerate the process of drug discovery.

Our success in the creation and screening of large combinatorial chemical libraries has created the need for a Leader of Peptidomimetic Chemistry. We seek an exceptional medicinal chemist, with 5-10 years of industrial experience, who will lead a group of scientists engaged in the transformation of peptides to potential drugs. Experience in managing research, an ability to lead others and to productively interact in a multidisciplinary environment required. Demonstrated expertise in peptidomimetic chemistry and possession of a broad knowledge of peptide related medicinal chemistry are essential qualities.

Affymax offers many of the benefits of a world class academic environment and the potential to develop new therapeutics. Please refer to **Job Code S/EG1** and send your resume to: **Affymax Research Institute, 4001 Miranda Avenue, Palo Alto, CA 94304**. Equal Opportunity Employer.

affymax



Discover Treatments for the Causes, Not the Symptoms

At ImmuLogic's research facility in Palo Alto the focus is on understanding the immunological mechanisms that cause various autoimmune diseases. Our goal is to investigate and define the molecular mechanisms involved in autoantigen/HLA/T cell interactions. The objective is to discover biopharmaceuticals that block autoimmunity in a disease-specific manner. Therapeutic products derived from this multi-disciplinary effort will constitute a novel form of therapy that will conceivably revolutionize the clinical approach to treating diseases like diabetes and rheumatoid arthritis.

PROTEIN CHEMISTS

Molecular Immunology Group. As a member of this group, you'll be involved in biophysical studies, exploring conformational changes in ligand-receptor interactions that would encompass primarily nmr, but also a variety of spectroscopic methods, including cd and fluorescence energy transfer. **Dept. C/MI.**

Molecular Biology Group. Using traditional and novel protein chemistry techniques, you'll join a group currently trying to identify, clone and purify autoantigens important in Type I Diabetes and rheumatoid arthritis. **Dept. C/MB.**

Candidates must have a Ph.D. in Biochemistry or a related field; at least 2 years of relevant postdoctoral training with expertise in routine methods of protein purification and characterization, and a demonstrated record of success.

We're in a position to offer you exceptional opportunities and support for your professional stature, as well as an excellent compensation and benefits package. Please send your resume, referencing the department, to: **Human Resources, ImmuLogic Pharmaceutical Corporation, 855 California Avenue, Palo Alto, CA 94304**. An Equal Opportunity Employer.

IMMULOGIC
Pharmaceutical Corporation



The clear relationship between business and science

Enzytech, Inc. is a biotechnology company committed to the development of novel drug delivery systems for therapeutic proteins and peptides.

PROTEIN RESEARCH SCIENTIST

We are currently seeking a professional who is intrigued and excited about discovery to examine the structural stability of recombinant proteins for the development of therapeutic controlled delivery systems. The successful candidate will be skilled in the relevant spectroscopic chromatographic and electrophoretic techniques to study structure-function-stability relationships of these protein drugs.

The ideal candidate will have a Ph.D in Biochemistry or a related field with 0-5 years of experience in protein chemistry or protein structure-function. Knowledge of protein formulation and/or lyophilization technology is a plus. Good communication skills and a strong publication record are highly desirable.

PROCESS DEVELOPMENT ENGINEER

The individual selected for this position will be responsible for designing and scaling up new pharmaceutical processes for preparing drug delivery systems. You will be responsible for developing, optimizing and trouble shooting processes, process control and validation, identifying and characterizing process intermediates, and transferring technology to pilot/production scale.

The ideal candidate for this hands-on position must possess a Ph.D in biochemical or chemical engineering and have experience in the development of pharmaceutical processes as well as scale up experience using statistical approaches to experimental design. A thorough understanding of cGMP's and aseptic processing is necessary. Experience with biologicals for pharmaceutical use and a working knowledge of lyophilization is desirable.

Enzytech, Inc. promotes a working environment that is energetic, innovative, and exciting. We offer an excellent salary and benefits package including medical, dental, life insurance, 401(k), and tuition reimbursement. For confidential consideration, please send your resume to: Human Resources Dept., Enzytech, Inc., 64 Sidney Street, Cambridge, MA 02139. An Equal Opportunity Employer.

The Enzytech logo features the company name in a bold, italicized, sans-serif font. To the left of the text is a small, stylized graphic of a triangle composed of horizontal lines.

STRUCTURE-BASED DRUG DESIGN

Postdoctoral positions are immediately available in protein crystallography and computational biochemistry in the Structural Biochemistry Program, NCI-Frederick Cancer Research & Development Center. This is a multi-disciplinary program dedicated to structure-based drug design by combining X-ray crystallography, biochemistry and synthetic and computational chemistry.

The program is investigating a number of structural targets related to the areas of AIDS and cancer as well as other human diseases. The selected candidates will have access to state-of-the-art X-ray crystallography and computing facilities, including a Rigaku 12 kW rotating anode X-ray equipped with an R-axis image plate detector, and Evans and Sutherland and Silicon Graphics workstations networked to the NCI Biomedical Supercomputing Center which has VAX, Convex, and Cray supercomputer systems.

PROTEIN CRYSTALLOGRAPHY

PhD with training in protein crystallography, including protein purification, crystallization, data collection and processing, structure determination, structure refinement and analysis.

COMPUTATIONAL BIOCHEMISTRY

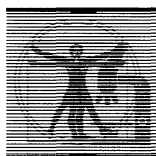
PhD with training in molecular modeling, computational chemistry, or a related field.

Interested candidates should send their CV, list of publications, a brief statement concerning research interests and three references to: Dr. John W. Erickson, Director, Structural Biochemistry Program.

PROGRAM RESOURCES, INC.

a DynCorp subsidiary
NCI-FCRDC
P.O. Box B
Frederick, MD
21702-1201

EOE, M/F



POSITIONS OPEN

RESEARCH ASSISTANT I for educational institution in Northeast Ohio. Duties are: to analyze yeast strain phenotypes by using the techniques of in situ hybridization, monitoring auxotrophic characteristics, crossing yeast strains and tetrad dissection. To microinject nucleic acids into *Xenopus* oocyte nuclei and evaluate the results of these experiments. To keep all related records, analyze the data, make suggestions for follow-up experiments. To document results by photomicroscopy. To train new lab members in these procedures. Must have B.S. in Biological and Physical Sciences or Biology or foreign equivalent as determined by accredited credentialing agency. No experience required in job duties but applicant must be proficient doing biomedical research experiments in yeast genetics using the techniques of in situ hybridization, tetrad dissection and genetic analysis of yeast biology as evidenced by professor or employer written testimonial. Applicant must also have a minimum of one course each in microbiology, biochemistry, pharmacology or neuropharmacology. 37 1/2 hours per week, 8:30 a.m. to 5:00 p.m., Monday to Friday, \$16,497.00 per year. *Must have proof of legal authority to work indefinitely in United States.* Send resume in duplicate (no calls) to: J. Davies, JO#1200890, Ohio Bureau of Employment Services, PO Box 1618, Columbus, OH 43216.

RESEARCH ASSISTANT III for educational institution in Northeast Ohio. Duties are: to carry out research on the effects of gamma-radiation on the production and repair of DNA protein crosslinks in cultured cells; to conduct experiments on the induction of stress proteins in cells exposed either to gamma-radiation or to photodynamic treatment using electrophoresis and autoradiography; to develop and improve techniques for the above projects, as needed; to assist and collaborate with other members of the laboratory. The position requires a considerable amount of independent work. Therefore, the person named must have a high degree of skill and training in the techniques for isolation and analysis of DNA and proteins and a strong background in radiation biology. No experience required in above duties. Applicants will qualify with B.S. and four years of DNA/Protein research using the techniques of I-125 iodination, electrophoresis, autoradiography, molecular biology techniques for plasmid preparation, Southern and Northern blots and hybridization, photodynamic and radiation induction of DNA damage. Or applicant may have an M.S. in Environmental Health Science or Molecular Biology and two years of research experience in: DNA/Protein studies including detection and isolation of proteins crosslinked to DNA using techniques of I-125 iodination, electrophoresis, and autoradiography, molecular biology techniques for plasmid preparation, Southern and Northern blots and hybridization, photodynamic and radiation induction of DNA damage and 2 published papers relating to DNA-protein crosslinks in scientific journals and one graduate level course each in biochemical or biomedical toxicology, microbiology, somatic cell genetics, statistics in biology and medical science, risk assessment. Experience may be gained before, during or after degree. 37 1/2 hours per week, 8:30 a.m. to 5:00 p.m., Monday to Friday, \$25,200.00 per year. *Must have proof of legal authority to work indefinitely in United States.* Send resume in duplicate (no calls) to: J. Davies, JO#1200890, Ohio Bureau of Employment Services, PO Box 1618, Columbus, OH 43216.

ENGINEERING RESEARCH ASSOCIATE: Edward L. Ginzton Laboratory. **RESPONSIBILITIES:** Develop experimental and analytical procedures for the study of vacuum-squeezed states, regulated single electron to single photon conversion, quantum non-demolition measurements in surface-emitting semiconductor lasers. Specific responsibilities include the development of novel experimental techniques for measurement of noise properties of quantum-well semiconductor lasers. **QUALIFICATIONS:** Familiarity with all aspects of semiconductor and quantum-well technology; knowledge of fabrication and preparation of semiconductor microstructure devices; particular knowledge of squeezing and quantum non-demolition measurement and the experimental techniques to develop such; knowledge of microwave circuit techniques; background in techniques of low-temperature, interferometric, and quantum non-demolition measurement. A Ph.D. in Electrical Engineering is required. Salary will be determined by level of experience. Send resume no later than August 14, 1992, to: Professor Yamamoto, Edward L. Ginzton Laboratory, Mail Code 4085, Stanford University, Stanford, CA 94305.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE REGULATORY LIPID BIOCHEMISTRY AND CELL BIOLOGY

A postdoctoral position is available to participate in an ongoing research program focused on the biochemical characterization and cloning of key enzymes that modulate phospholipid synthesis and degradation. Candidates with Ph.D. degree interested in joining a multidisciplinary group applying contemporary techniques of molecular genetics, cell biology, protein purification and antibody production to problems related to the regulation of lipid metabolism should submit their curriculum vitae, reprints and names of three references to: **Dr. Charles O. Rock, Biochemistry Department, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE. In Molecular biology to study the function of protein kinase substrates. Requires experience in 1d and 2d SDS PAGE, molecular cloning, genomic and cDNA library screening, *in vitro* transfections, PCR, Southern/Northern/Western blotting, gel shift assays, RNase protection studies and handling transgenic animals. Applicant should have Ph.D. in Biochemistry or Biology with at least one year of post-doctoral experience and expertise in protein purification using HPLC and FPLC technique in addition to experience in handling laboratory animals. *Applicants who are not U.S. citizens must include basis for work authorization in the United States.* All résumés must include the Social Security Number. Salary: \$23,250 per year; 40 hours per week; 8:30 a.m. to 5:00 p.m. Contact: **Job Service, 516 North Mangum Street, Durham, NC 27701** or your nearest Job Service Office. Refer to Job Order No. NC 3012707; DOT Code 090.227-010.

RESEARCH ASSOCIATE—Radiation Oncology. Conduct basic research in human lymphocyte responses to ionizing radiation and chemicals at the cellular, chromosomal and gene levels to study the effects of low doses of ionizing radiation on subsequent exposure to radiation or chemicals. Includes measuring: (1) the quantity and quality of chromosome damage in mitotically arrested metaphase cells, and in nonmitotic cells using the premature chromosome condensation technique; (2) cell killing and gene mutation induction using a T-cell cloning assay; (3) sister chromatid exchanges using a fluorescence plus Giemsa technique and cohort analysis; (4) alterations in cell cycle stage and progression cytometry; (5) lymphocyte growth factors using enzyme linked immunosorbent assays; and (6) cell viability using fluorescent microscope analysis. Requirements: M.S. in Biological Science or related field or B.S. in Biological Science (or related field) plus five years of research experience. Experience must include: one year of experience in isolation, activation and long term culture of human lymphocytes or primary human cells and survival or mutation assays; six months of laboratory experience in all steps of chromosomal aberrations analysis; laboratory experience with sister chromatid exchange analysis using fluorescence plus Giemsa technique; laboratory experience with light microscope and fluorescent microscopy; irradiation of culture cells with low LET ionizing radiation; sample preparation for cell cycle analysis by flow cytometry; experience with ELISA. \$22,686 per year. 8:00 a.m. to 5:00 p.m. *Must submit evidence of legal authority to work in the United States.* Send résumé to: **Bernice Kimbrough, 819 North Sixth Street, Milwaukee, WI 53226. J.O. #0556116.**

Ph.D.—PHARMACOLOGY

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

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

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

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

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

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

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

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

DNA PROBE DIAGNOSTICS

Digene Diagnostics is a rapidly growing company dedicated to the development and marketing of DNA probe-based diagnostics. We are seeking creative, energetic and motivated individuals who thrive in a fast-paced team environment to participate in our growth. We currently have the following opportunities:

Senior Scientist—Infectious Disease Diagnostics

Successful candidates will design and develop probe-based diagnostic products for the clinical microbiology marketplace. Responsibilities include cloning and characterization of probes for infectious disease pathogens, development of specimen preparation methods, optimization of assay performance characteristics and the transfer of new products into manufacturing. The position requires hands-on benchwork and creative, critical scientific abilities. Applicants must have a Ph.D. in biochemistry, molecular biology or microbiology with 2-4 years relevant industrial experience.

Molecular Biologist

Responsibilities include development of DNA/RNA amplification technology and development of novel DNA probe detection systems. Applicants must have a Ph.D. or M.S. degree in molecular biology with a minimum of two years experience in DNA probe assay development.

Microbiologist

Responsibilities include design of specimen processing methods, identification of new DNA probes and creation of new infectious disease assays. Applicants must have a Ph.D. or M.S. degree in Microbiology with 2 years experience in molecular virology or clinical microbiology.

Protein Chemist

Responsibilities include development of conjugation methods, signal detection systems and novel solid phase chemistries. Applicants must have a Ph.D. or equivalent in protein biochemistry with at least 2 years experience in the study of enzyme nucleic acid interactions, enzyme kinetics and the optimization of nucleic acid detection systems.

Product Development Engineer

The successful candidates will bring an engineering background to participate in the development of instrumentation and software for infectious disease diagnostics. Thorough knowledge of fluid handling systems, statistics and software design are attractive attributes, as is some basic knowledge of biochemistry. Applicants should have 2-4 years experience in the design of biomedical instrumentation.

Please forward your resume to: **Digene Diagnostics, Inc., ATTN: Maurine Mazzeo, 2301-B Broadbirk Drive, Silver Spring, MD 20904**



An Equal Opportunity Employer

Innovation Through Biotechnology: Genencor Delivers!

Genencor International, Inc. has a proven record — translating state-of-the-art research into successful products. So productive is our pipeline that we're continually expanding our manufacturing capacities to keep pace with customer demand. In turn, we're increasing R&D activities in an exciting variety of technologies, including protein chemistry, enzymology, metabolic pathway engineering, process engineering and microbial product expression. Exceptional opportunities now exist in our South San Francisco labs for:

SCIENTIST.

Enzymologist with experience in redox enzymes. Experience with oxygenases and/or oxidoreductases preferred. Requires a Ph.D. in enzymology or related field. Post doctoral experience preferred. (Job 1)

SCIENTIST.

Strain Development Group. Individual will use molecular and non-molecular techniques to increase the production of enzymes in production strains. Requires a Ph.D. in microbiology, molecular biology or genetics; skilled in biochemistry, microbiology, and fermentation (small scale). Post doctoral experience preferred. (Job 2)

SCIENTIST.

Molecular Biologist to work in the Fungal Genetics Group. Experience in gene cloning, PCR techniques, and DNA sequencing required. Experience of prokaryote or lower eukaryote genetics desirable. Requires a Ph.D. plus two to three years of relevant post doctoral experience (Job 3)

SCIENTIST.

Individual will be responsible for developing and implementing automated systems for screening of natural microbial isolates, enzymes modified by site directed mutagenesis, novel chemical compounds through the use of robotic systems as well as others. Requires a Ph.D. in microbiology or biochemistry. Experience in automation, analytical chemistry and microbiology needed. (Job 4)

PROCESS SCIENTIST/ENGINEER.

A process biochemist responsible for transfer/optimization of processes in the areas of granulation, recovery and liquid formulation. Requires a MS or Ph.D. in biochemical engineering or protein chemistry or related field (plus 3+ years of experience with MS level). Travel 30% internationally. (Job 5)

PROCESS ENGINEER/SCIENTIST.

An individual responsible for recovery process development, optimization and technology transfer. Requires a MS or PhD in Chemical Engineering plus 2-3 years of industrial experience. (Job 6)

RESEARCH ASSISTANT/ASSOCIATE.

An individual responsible for the Genencor Culture Collections and to work with our Strain Development Group to increase product yields and production strains. Requires a BS or MS in microbiology or related field plus 1-2 years of laboratory experience preferred. Skilled in microbiological techniques and familiarity with basic molecular biology techniques essential. (Job 7)

RESEARCH ASSISTANT/ASSOCIATE.

Individual will be responsible for all phases of enzyme production, purification and characterization. Requires a BS/MS in molecular biology with 0-5 years of experience in a multifunctional lab setting. (Job 8)

RESEARCH ASSISTANT.

Microbiologist/Biochemist in the Strain Development Group to perform various screening activities in both bacterial and fungal systems. Requires a BS/MS in microbiology, biochemistry or a related field. Two to five years of industrial laboratory experience. (Job 9)

POST DOCTORAL POSITIONS IN BIOCHEMISTRY.

1. An individual to clone, express and purify novel oxygenases and develop oxidative biotransformation process. Requires a Ph.D. in biochemistry, chemistry, or equivalent. (Job 10)
2. An individual to work in multifunctional group to isolate and characterize components of the prokaryotic protein secretory apparatus. Requires a Ph.D. in biochemistry. Experience in protein purification, isolation and microsequencing (Job 11)

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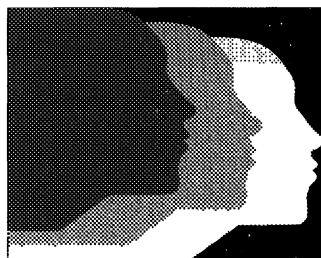
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RESEARCH SCIENTIST BIOCHEMISTRY/CELL BIOLOGY

Gliatech, Inc., a growing pharmaceutical company dedicated to understanding and utilizing the unique properties of neuroglial cells in treating nervous system disorders, has an opening for a Research Scientist within our Alzheimer's Disease research program. The position requires a Ph.D. in Biochemistry or Cell Biology and at least two years of post-doctoral research. The successful candidate will have a history of productivity, with prior experience in membrane transport systems and a sound background in protein biochemistry and cell biology. Prior research in the neurological sciences would be desirable, but not required.

Gliatech is located in suburban Cleveland in close proximity to Case Western Reserve University and the Cleveland Clinic. Its collaborative interactions with scientists and clinicians at these and other academic institutions provides an exceptional intellectual environment. Gliatech offers a competitive salary and benefits package, and our location allows access to affordable housing as well as an array of cultural and sports activities. Qualified candidates are encouraged to submit their curriculum vitae to: Gliatech, Inc., Corporate Recruiting, 23420 Commerce Park Rd., Cleveland, OH 44122.



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Postdoctoral Fellows

Two positions involve studying the mechanisms of activation of matrix metalloproteinase zymogens, and two positions involve studying the mechanism of action of matrix metalloproteinases. These positions require experience in enzymology, biochemistry or solid phase peptide synthesis. Experience in related areas is desired. Please send your resume with three letters of reference.

Syntex offers competitive salaries and comprehensive benefits including a relocation program. For consideration, please send your resume to: Syntex, Corporate Employment, Job #MCS6731, 3401 Hillview Avenue, Suite A2130, Palo Alto, CA 94303. Syntex is an equal opportunity employer committed to the values of a diversified workforce.



SYNTEX

Postdoctoral Fellowship Bacterial Antibiotic Resistance

At the Medical Research Division of American Cyanamid, we're making important strides in developing a new generation of therapeutics based on molecular biology and cell-specific mechanisms. We currently have an immediate position available for a Postdoctoral fellow to study molecular mechanisms of antibiotic resistance and related topics.

The project involves both genetic and molecular approaches to study basic questions related to bacterial antibiotic resistance. Opportunities exist to interact on a personal level with a group of molecular biologists, biochemists, and prokaryotic geneticists, working to answer fundamental questions. Applicants must have a Ph.D. in microbiology or molecular biology. Candidates should also have knowledge of prokaryotic genetics and molecular biology.

We are located in Rockland County, 25 miles north of New York City. The salary is fully competitive and includes comprehensive benefits. For consideration, please send your c.v. with the names and telephone numbers of three references to: Dept. BR, Department of Molecular Biology, Lederle Laboratories, Division of American Cyanamid Company, Building 205, Room 214, Pearl River, NY 10965. An Equal Opportunity Employer.

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Our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available.

For immediate consideration, mail/fax your resume to Joe Tringali at Biogen, Inc., Ref. SM0692, 14 Cambridge Center, Cambridge, MA 02142, Fax: (617) 252-9617. Biogen is an Equal Opportunity Employer.

BIOGEN

POSITIONS OPEN

ASSISTANT RESEARCH BIOCHEMIST position available for Ph.D. in Pharmaceutical Chemistry to participate in ongoing research on the molecular mechanism of drug biodegradation. The incumbent will be expected to design and synthesize the genes required for metabolism of selected drugs and purify the expressed protein. Modifications will be made in the nucleotides of the gene in an effort to understand how the enzymes function in humans. Organic synthesis and characterization of the metabolites of the drugs will also be necessary. A requirement is the ability to characterize the pharmacology and biochemistry of drugs and their actions and interactions with relevant proteins and to synthesize and design drugs including nucleotides, which are potential inhibitors of selected proteins. Salary range: \$41,600 to \$43,300. Send résumé and three letters of reference by September 4, 1992 to: **Dr. Waskell, Department of Anesthesia (129) VA Medical Center, 4150 Clement Street, San Francisco, CA 94121. Equal Opportunity Employer.**

BIOCHEMIST. Position is available immediately in a start-up biotechnology company to study the isolation, purification, and characterization of vitamin K-dependent proteins. A Ph.D. in biochemistry or related field is required. Excellent publications and experience in protein purification is a must. Send curriculum vitae, publications and three references to: **P.O. Box 21492, Bethlehem, PA 18002.**

CHEMISTRY POSITIONS available at EPA's Risk Reduction Engineering Laboratory in Cincinnati. One involves developing new methods for the chemical analysis of contaminated soils; the other involves bioremediation of soils contaminated with hazardous wastes. Recent college degree in chemistry or soil science preferred. Information: **Research Participation Program/EPA, Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117, telephone: (615) 576-3456.**

STAFF SCIENTIST—IMMUNOBIOLOGY

Challenging opportunity for highly motivated scientist experienced in Immunology and cell biology. You will participate in an aggressive cell biology research program dealing with organ transplantation and the development of cultured tissues for research and clinical use, and manage a clinical Immunology group response for the immunological assessment of ongoing clinical trials. The ideal candidate will possess a good working knowledge of transplantation Immunology, mammalian cell biology and have experience in performing immunological assays such as ELISA and MLR. Ph.D. required. Two to four years of postdoctoral experience preferred. Interested applicants should send résumé to: **Organogenesis Inc., 83 Rogers Street, Cambridge, MA 02142.**

U.S. DEPARTMENT OF ENERGY (DOE) MOLECULAR BIOLOGIST

DOE's Office of Health and Environmental Research in the Office of Energy Research is seeking a Molecular Biologist (GS-401-14/15) with a high degree of knowledge and understanding of molecular genetics research and the policy implications of such research. Responsibilities include technical administration for a broad and complex program of research in molecular biology designed to provide basic and applied information in support of health effects research, and research in the basic life sciences and human genome missions within the Health Effects and Life Sciences Research Division. Contacts are with industry, universities, national/international laboratories, Congressional staffs, and the public. *U.S. citizenship required.* Salary range for GS-14 is from \$54,607 to \$70,987 and for GS-15 is from \$64,233 to \$83,502. Send an SF-171, application for Federal employment, or direct inquiries to: **Stephanie Chaconas, Germantown Technical Program Service Section, AD-533.5, U.S. Department of Energy, Washington, DC 20585; telephone: (301) 903-4983. Applications accepted through September 4, 1992.**

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POSITIONS OPEN

MOLECULAR-CELLULAR NEUROBIOLOGIST. The Neurosciences group of the Loeb Research Institute at the Ottawa Civic Hospital, a teaching institution affiliated with the University of Ottawa, invites applications for two appointments at the **ASSISTANT PROFESSOR** level. We are seeking candidates with a Ph.D. or M.D. and three or more years of postdoctorate training, and demonstrated excellence, originality and productivity in molecular biology applied to neurobiology. Our research program is multidisciplinary and focuses on CNS development, ion channel and receptor function, neural circuitry regulating body fluid and cardiovascular homeostasis, and mechanisms governing neuronal/glial responses to ischemia. At least one appointment will be in the area of signal transduction, but outstanding applicants using molecular approaches in other areas of neuroscience will be considered. *In accordance with Canadian immigration requirements, this advertisement is directed first, but not solely, to Canadian citizens and permanent residents.* Please forward curriculum vitae with names of three references and statement of goals/interests by September 1, 1992, to: **Dr. Leo Renaud, Associate Director, Loeb Research Institute, Ottawa Civic Hospital, 1053 Carling Avenue, Ottawa, Ontario, Canada K1Y 4E9.**

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PLANT PHYSIOLOGY

RESEARCH TECHNICIAN II. ICI Seeds, one of the nation's leading seed suppliers, is seeking an individual to join a team of scientists to work in the area of environmental stress tolerance. Need an individual that has a strong background in plant physiology or agronomy, with experience in measuring whole plant responses to environmental stress. Requires a B.S. or M.S. preferably in Botany, Biology, Plant Physiology or Agronomy. Full-time position with company benefits. Send letter of application and résumé to: **ICI Seeds, Dr. John Greaves, Box 500, Slater, IA 50244. Equal Opportunity Employer.**

RESEARCH SCIENTIST DIVISION CANCER RESEARCH

The Division of Cancer Research at Ribic Immunochem Research, Inc. invites applications for a position at the Research Scientist level. Candidates should have expertise in cellular immunology and cancer research to study aspects related to tumor antigen identification and isolation. Applicants must have a Ph.D. plus two years of postdoctoral experience. The successful candidate will be expected to participate in ongoing research projects and to develop an independent program in the area of cancer immunotherapy. Send letter of interest, curriculum vitae, bibliography and three references to: **Human Resources Manager, 553 Old Corvallis Road, Hamilton, MT 59840. Equal Opportunity Employer.**

Germplasm Documentation/Computing Technology. SCIENTIST/SENIOR SCIENTIST required by the International Board for Plant Genetic Resources (IBPGR) at its headquarters in Rome, Italy.

Working in the area of plant germplasm documentation, this position ensures availability, security and management of IBPGR's LAN-based computing resources. Computer facilities include PC-based LAN under Novell 3.11 supporting 45 staff in headquarters. Computer services are provided on a limited basis to seven offices in developing countries. The incumbent works closely with the Documentation Methodology and Application Specialist, with a large degree of functional interchangeability.

Degree in biological or agricultural science and a higher degree. Extensive experience in using computers, preferably including formal training or experience in the development, methodology and use of applications for PC-based LANs and relational database design. Comprehensive knowledge and experience of at least one type of PC-based LAN. Ability to work independently and as a team member in a multicultural environment. Fluency in English, and proven ability to write scientific articles.

Three-year contract, renewable. Salary is competitive, including pension, insurance, children's education, cost of living and housing allowances and annual home leave travel. Candidates should immediately submit letters of interest and curriculum vitae, by fax or Email only, to: **The Director, IBPGR, Via delle Sette Chiese 142, 00145 Rome, Italy. Fax: 39-6-5750309. Telephone: 36-6-5744719. Email: 157:CGI101 or IBPGR.**

POSITIONS OPEN

THE CENTER FOR INDOOR AIR RESEARCH POSTDOCTORAL FELLOWSHIP PROGRAM

The Center for Indoor Air Research (CIAR) is accepting applications for the CIAR Postdoctoral Fellowship Program. The purpose of this program is to further develop the scientific productivity of outstanding young men and women pursuing careers in indoor air research and to stimulate interest in entering the field of indoor air research among individuals with strong backgrounds in related or allied sciences.

For details and application brochure, write or call:

**Center for Indoor Air Research
Postdoctoral Fellowship Program
1099 Winterson Road, Suite 280
Linthicum, MD 21090
Telephone: (410) 684-3777**

Deadline for receipt of applications: October 31, 1992.

MEETINGS

PROGRAM IN MATHEMATICS AND MOLECULAR BIOLOGY III COMPUTATIONAL APPROACHES TO NUCLEIC ACID STRUCTURE AND FUNCTION

Santa Fe, New Mexico, November 7 to 11, 1992. For more information see full ad, *Science* issue of April 10, 1992, page 278. Abstract deadline: September 15. For information contact: **PMMB, 103 Donner Laboratory, University of California, Berkeley, CA 94720. FAX: (510) 642-4071. sylviaj@violet.berkeley.edu.**

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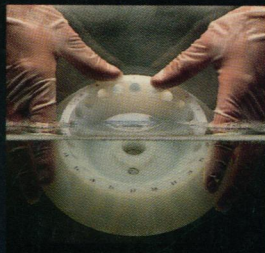
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