

## Products & Materials

### Pyrogen Removal and Detection Products

Several new products can aid in the detection or removal of bacterial endotoxins [lipopolysaccharide (LPS) and lipid A] from fluids. Pyrochek is a detection assay incorporating a horseradish peroxidase-labeled LPS probe in a microwell strip format. Pyrofree microporous affinity membranes and microcarriers can be autoclaved and will remove up to 97% of the challenged pyrogen load per pass. Pyroclean is a detergent formulated for the safe removal of pyrogens from surfaces including stainless steel, plastic, rubber, and glass. It can be used for cleaning cell-culture systems, filtration systems, and pharmaceutical-processing equipment. ALerCHECK. Circle 474.

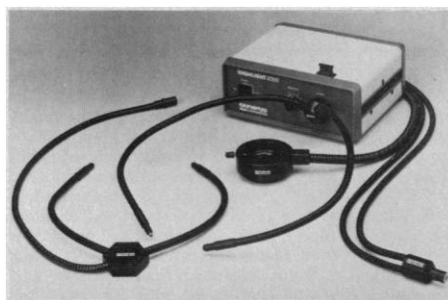
### Software for Amino Acid Analysis

Software for the Gilson ASTED System has been extended to include three methods of amino acid analysis. The methods are for amino and imino acids, for imino acids, and for amino acids, imino acids, and their metabolites. ASTED can derivatize all primary and secondary amino acids and their derivatives. Proteins, solid particulates, and intentionally precipitated interfering compounds are retained over a purification membrane. ASTED then automatically injects the samples into an analytical high-performance liquid chromatography column. ASTED software now contains ten specific methods. Gilson Medical Electronics. Circle 477.

### Illumination System

The Highlight 3000 Fiber Optic Illumination System is designed for flawless, consistent illumination in research and routine microscopy. It combines the latest in cold-light fiber-optic technology with ease of use and a broad array of accessories. A patented, continuously variable diaphragm allows

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.



control of the light intensity without the need to change voltage, thereby maintaining constant temperature and output angle of the lamp. Front and side illuminator panels completely shield against stray light. Among the light guides available are bifurcated and single gooseneck in various diameters, bifurcated flexible in various diameters, continuous full-ring ringlight for even illumination, and four-point ringlight for bright, high-contrast light. Olympus. Circle 485.

### Graphics Software

The Exponent Graphics system is designed to meet the graphics programming needs of scientists and engineers who solve problems using FORTRAN. The system contains subroutines for applications ranging from automatic three-dimensional contour rendering to control of graphics primitives. It can be used in conjunction with IMSL's mathematical and statistical subroutines, the user's own FORTRAN code, and other graphics packages. IMSL. Circle 481.

### Ductless Fume Hood

Mystaire Model FE-100E ductless fume hood eliminates hazardous fumes, gases, and noxious odors by adsorption onto activated charcoal. It provides increased operator protection through an electronic control panel. A built-in sensor provides continuous monitoring of filter condition. Audible and visual alarms alert the operator if hydrocarbon breakthrough occurs. Heat Systems. Circle 490.

### In-Vivo Electrochemistry System

The In-Vivo Electrochemistry System (IVEC-5) enables a scientist to measure extracellular neurochemical changes in the brain at speeds approaching physiological events. The system opens a new window into the dynamics of neural mechanisms by recording concentrations of dopamine, se-

rotonin, and norepinephrine up to ten times per second. Electrical currents, measured by microelectrodes placed at the prepared site, are amplified and the signals are directed to a computer. Unique menu-driven software then analyzes the signals, and concentrations are plotted in real time. Medical Systems Corp. Circle 482.

### HPLC Column Oven

Model EU-255 high-performance liquid chromatography (HPLC) column oven provides precise temperature control from 5° to 85°C. Up to 99 temperature profiles can be programmed through a menu-driven digital control pad. A large liquid-crystal display shows the selected temperature and current status. The oven reaches the desired temperature at a rate of 3° per minute. A microprocessor-controlled Peltier element ensures temperature stability. The oven can hold up to five columns, with room to spare for sample valves, coils, and mixers. It can be used either vertically or horizontally. Euramark. Circle 489.

### Literature

*SteamScrubbers and FlaskScrubbers Shed New Light on Cleaning Laboratory Glassware* is a 12-page catalog that contains specifications, dimensional data, and ordering information on glassware washers. Labconco. Circle 500.

*Now PhastSystem Can Do More* is a brochure that shows products for automated protein analysis. New products featured are PhastTransfer for semi-dry electrophoretic protein blotting, PhastImage for scanning and evaluating PhastSystem results, and a new gradient gel for analyzing large proteins and smaller DNA fragments. Pharmacia LKB Biotechnology. Circle 501.

*Waters Quanta 4000 Capillary Electrophoresis System* is a brochure describing the capabilities of the system, which include extended automation, high sensitivity, fraction collection, and temperature control for reproducible results. Waters Chromatography Division, Millipore. Circle 502.

*Accessories and Supplies for Infrared Spectroscopy* is an updated catalog with many new products. Wilmad Glass Co. Circle 505.

*Whatman LabSales Special Issue* is a 96-page catalog celebrating the 250th anniversary of the company. It features complete sections on safety products, separations, lab instruments, and selections ranging from pH meters and electrodes to plastic and glassware. Whatman LabSales. Circle 506.

# Personnel Placement

**SCIENCE** publishes each Friday, except the last Friday of the year, and is mailed on issue date. Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap, or sexual preference. **SCIENCE** reserves the right, in its discretion, to decline to publish advertisements submitted to it.

## LINE CLASSIFIED ADVERTISEMENTS

**DEADLINE:** Thursday, 10 a.m., 2 weeks prior to issue date. Advertising is accepted only in writing.

**POLICIES:** All classified ads will be edited and typeset according to **SCIENCE** style guidelines. NO ABBREVIATIONS. Any deadline for applications stated in ad must be at least 2 weeks after date of publication.

**CLASSIFICATION:** **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace.** Advertisers should specify classification desired; however, **SCIENCE** reserves the right to decline classification requests which it believes may be misleading to readers.

**SUBMISSION:** Prepare double-spaced typewritten ad copy on a separate sheet. On cover sheet, state name and telephone number of contact person, desired date(s) of publication, and billing information, including any special invoicing requests. Mail or FAX to:

**SCIENCE Classified Advertising**  
1333 H Street, NW, Room 940  
Washington, DC 20005  
Telephone: 202-326-6555  
FAX: 202-682-0816

**RATE:** \$41 per line, \$410 minimum, per week. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces per line. No charge for use of blind box number. No agency commission for ads less than 40 lines. To ESTIMATE ad cost, structure ad copy on a 52-character line; include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines x \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

**PREPAYMENT DISCOUNT:** A 3% cash discount is granted to all prepaid line ads. Prepayment in U.S. dollars by checks drawn on U.S. banks is required for all foreign ads.

**CREDIT CARDS:** **SCIENCE** accepts MasterCard and VISA. Both personal and corporate cards may be used. The prepayment discount does not apply to credit card ads.

**BOXES AND LOGOS:** Any 1-column line classified ad can be boxed and/or published with logo. No extra production charge for use of box or logo. For boxed ads, one line equals 48 characters and spaces; two additional lines will be added to cost of ad to allow for top and bottom rules. Logos are billed according to number of lines needed to accommodate logo.

**CANCELLATIONS:** Deadline for cancellations is 10 a.m. Tuesday, 10 days prior to issue date.

## DISPLAY PERSONNEL ADVERTISEMENTS

For rates, deadlines, and information about fractional display ads (1/6 page and larger) and all Marketplace listings of available products and services, contact:

**Scherago Associates, Inc.**  
1515 Broadway  
New York, NY 10036  
Telephone: 212-730-1050  
FAX: 212-382-3725

## RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications. **SCIENCE** encourages applicants for positions to investigate employment laws, non-discrimination policies, visa requirements, and cultural differences in the country advertising for employees.

To reply to a blind box ad, address correspondence to

**Box (give number)**  
**SCIENCE Classified Advertising**  
1333 H Street, NW, Room 940  
Washington, DC 20005

## POSITIONS OPEN

**ASSISTANT PROFESSOR OF BIOCHEMISTRY AND/OR MEDICINAL CHEMISTRY.** The primary responsibility is to teach required biochemistry and medicinal chemistry courses. The Ph.D. degree is required, ideally earned in biochemistry or medicinal chemistry. An individual who can span both disciplines will be favored. An undergraduate degree in pharmacy is preferred, but not required. Application and selection process starts immediately. Inquiries and applications should be sent to: **Thomas A. Gossel, Ph.D., Professor and Chairman, Department of Pharmacology and Biomedical Sciences, Ohio Northern University, College of Pharmacy, Ada, OH 45810. Equal Opportunity/Affirmative Action Employer.**

**BIOLOGY—ASSISTANT PROFESSOR** (geneticist/evolutionary biologist). Tenure track. Fall 1991. To teach undergraduate and graduate courses in genetics/evolution, vertebrate zoology, and general biology and to have active research interests appropriate for undergraduate and master's programs. Ph.D. in the biological sciences required. Send letter of application, statement of teaching and research goals, and résumé with names, addresses, and telephone numbers of three references to: **Dr. Leon J. Gorski, Chairperson, Biological Sciences, Central Connecticut State University (CCSU), New Britain, CT 06050-4010. Review of candidates will begin on 28 February 1991. CCSU is an Affirmative Action/Equal Opportunity Employer. Women, minorities, handicapped, and veterans are encouraged to apply.**

## EASTERN KENTUCKY UNIVERSITY

**GENETICIST—ASSISTANT PROFESSOR.** The Department of Biological Sciences at Eastern Kentucky University seeks applicants for a Ph.D.-level tenure-track position in genetics beginning August 1991. Teaching responsibilities will involve an undergraduate genetics course with laboratory and a nonmajor human heredity course as well as upper- and graduate-level courses in our M.S. program. The successful candidate will be expected to direct undergraduate and graduate research as well as research in area of specialty. Send letter of application, curriculum vitae, transcripts, and three letters of references by 1 March 1991 to: **Dr. Robert Creek, Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475. Eastern Kentucky is an Equal Opportunity/Affirmative Action Employer. Employment eligibility verification required, Immigration Reform and Control Act of 1986.**

**ASSISTANT PROFESSOR OF BIOLOGY.** Eastern Washington University invites applications for this tenure-track assistant professor position in vertebrate/wildlife biology. Doctorate required. Demonstrated research record on wildlife species. Teach vertebrate zoology, wildlife management, comparative anatomy, ornithology, and mammalogy. Supervise master of science students. Send curriculum vitae, statement of research interests to: **Search Committee, Department of Biology—Mail Stop #72, Eastern Washington University, Cheney, WA 99004-2499 by 15 February 1991.**

*Affirmative Action/Equal Opportunity Employer.*

## TEACHING OVERSEAS

The Department of Biology at the American University of Beirut (AUB), Beirut, Lebanon, invites applications for faculty positions at the level of **ASSISTANT PROFESSOR** or above, available 1 October 1991. Candidates with specialization in the following fields are sought: zoology and comparative vertebrate anatomy, and plant taxonomy and plant anatomy.

Applicants should hold the Ph.D. degree and are expected to teach undergraduate and graduate courses and to conduct a research program. Postdoctoral experience is preferred.

Appointments are normally made for a 3-year period. *AUB is an Equal Opportunity/Affirmative Action Employer.*

Interested persons may send their curriculum vitae and three letters of recommendation before 1 March 1991 to: **Dean of Arts and Sciences, c/o New York Office of the American University of Beirut, 850 Third Avenue, New York, NY 10022.**

*U.S. passports are presently invalid for travel to, in, or through Lebanon, and for residence in Lebanon, by order of the Department of State, and therefore applications from individuals who would travel to or reside in Lebanon on a U.S. passport cannot at this time be considered.*

## POSITIONS OPEN

The Division of Urology, University of California, Los Angeles (UCLA) School of Medicine, is recruiting a urologist to join the faculty as an **ASSISTANT PROFESSOR**. Applicants must be Board-certified or -eligible and skilled in teaching, research, and clinical urology. Activities will be divided between the UCLA Medical and the VA Medical Center, West Los Angeles. Experience in molecular biology research related to prostatic disease is desired. *UCLA and its affiliated institutions are Equal Opportunity and Affirmative Action Employers.* Applicants should submit curriculum vitae to: **Chief, Division of Urology, UCLA School of Medicine, Los Angeles, CA 90024-1738.**



## WRIGHT STATE UNIVERSITY DAYTON, OHIO 45435

The Department of Physiology and Biophysics at Wright State University is accepting applications for a tenure-track **ASSISTANT PROFESSOR** position in the general area of respiratory physiology (including respiratory control and systems physiology, airway cellular physiology, and hyperbaric physiology). The department is matrixed between the School of Medicine and the College of Science and Mathematics and has a major research orientation toward cellular and membrane physiology and biophysics. Applicants must have a Ph.D. and/or M.D. and two or more years of postdoctoral experience. The successful candidate will be expected to develop a strong, independent research program and to participate in team teaching of medical students and Ph.D. students in our Biomedical Sciences Graduate Program, with an emphasis in the field of respiratory physiology. Starting date is planned for 1 July 1991. Review of applications received will begin 1 May 1991. Send curriculum vitae, list of publications, statement of research interest and plans, as well as the names of three references to: **Dr. Peter K. Lauf, Professor and Chair, Department of Physiology and Biophysics, Wright State University, Dayton, OH 45435. Wright State is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

**PLANT VIROLOGIST.** Applications are invited for a 12-month, tenure-track (approximately 80% research, 20% instruction) **ASSISTANT OR ASSOCIATE PROFESSOR** position in the Department of Plant Pathology. A Ph.D. in plant pathology or related discipline, and significant research experience with a virus-host plant system are required. Applicants should have training and experience with molecular approaches for the study of plant viruses and virus diseases. Examples of appropriate specializations include molecular basis of pathogenesis, mechanisms of host resistance and cross protection, organization and expression of viral genomes, and development of transgenic resistance in plants. The successful applicant will be expected to develop a strong research program and teach a graduate-level virology course. Involvement in virus disease identification and control is expected. Applicants should send curriculum vitae, original transcripts, a complete list of publications, reprints of publications during last 5 years, list of honors and awards, and any other information which reflects professional achievements, and four letters of reference to: **Wiley N. Garrett, Head, Department of Plant Pathology, University of Georgia, Athens, GA 30602. Applications will be accepted until 15 March 1991. Position is available 1 July 1991. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.**

## YALE UNIVERSITY DEPARTMENT OF MOLECULAR BIOPHYSICS AND BIOCHEMISTRY ASSISTANT PROFESSOR

Applications are invited for an assistant professorship in the broad area of biophysics and/or molecular biology. Candidates should submit curriculum vitae, a summary of present and future research interests, and should request that three letters of reference be sent to: **Professor Joseph E. Coleman, Chairman of the Search Committee, Department of Molecular Biophysics and Biochemistry, Yale School of Medicine, 333 Cedar Street, Box 3333, New Haven, CT 06510. Qualified applicants would be expected to develop an independent research program and to participate in teaching at both the undergraduate and graduate levels.**

*Yale University is an Equal Opportunity Employer and invites applications from all qualified individuals.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR, MICROBIOLOGY

Applications are invited for a tenure-track position in microbial molecular biology/physiology. Research interest and postdoctoral experience interfacing with faculty in molecular biology, microbial physiology, and microbial ecology. Teaching responsibilities in introductory microbiology courses including virology and advanced course/seminar in area of specialization. Applicants must provide curriculum vitae, reprints, concise statement of research goals, and have three letters of recommendation sent to: Chair, Microbiologist Search Committee, Department of Biological Sciences, University of Wisconsin—Milwaukee, P.O. Box 413, Milwaukee, WI 53201. Closing date: 8 February 1991.

*The University of Wisconsin—Milwaukee is an Affirmative Action/Equal Opportunity Employer.*

### MEDICAL PARASITOLOGIST

The Division of Parasitology in the Department of Preventive Medicine at the University of Mississippi Medical Center invites applications for a tenure-track faculty position at the rank of ASSISTANT PROFESSOR beginning fall 1991. A Ph.D. is required, preferably with postdoctoral training. Activities include teaching parasitology with ample time for research. Send curriculum vitae, description of research, and three letters of recommendation to: Dr. William B. Lushbaugh, Department of Preventive Medicine, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216. *Equal Opportunity/Affirmative Action Employer, M/F/H/V.*

Academic Child Neurologist, University of California, Los Angeles (UCLA). The Division of Pediatric Neurology at UCLA has a university-supported, tenure-track position available at the ASSISTANT PROFESSOR level. Candidates should be Board-certified or -eligible in neurology with special qualification in child neurology. This is an exceptional opportunity for a scientist to develop a basic research program in early human neurodevelopment and/or epilepsy. The successful candidate may collaborate with many UCLA neurobiologists and the UCLA Pediatric Epilepsy Research Group, which includes a surgery program for catastrophic childhood epilepsy. Please contact: W. Donald Shields, M.D., Chief, Division of Pediatrics Neurology, UCLA School of Medicine, Los Angeles, CA 90024-1752. *UCLA is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

### MONTCLAIR STATE COLLEGE

**TOXICOLOGIST: ASSISTANT PROFESSOR (V-10).** The Department of Biology is seeking a colleague to coordinate its B.S. program in toxicology. Responsibilities include: teaching courses in toxicology, molecular biology, general education biology courses, toxicology student advisement, development of an active research program, and committee participation at the college. Teaching responsibilities will be divided equally between the toxicology and biology/molecular biology programs. The position involves a strong commitment to teaching and research in toxicology involving undergraduate and master's students. Ph.D. in toxicology or in the biological sciences is required with strong backgrounds in toxicology, molecular biology, and organismic biology, including toxicology research experience with eukaryotes.

**BOTANY/PLANT SYSTEMATICS. ASSISTANT PROFESSOR (V-9).** The Department of Biology has a vacancy in botany/plant systematics, with field experience in the anthophytes. Responsibilities include: teaching undergraduate and graduate lecture/field courses in plant taxonomy and systematics, general education biology courses, development of an active research program involving undergraduate and master's level students, coordination of department's computer laboratory, assisting faculty in computer applications in teaching and research, and committee participation at the college. Ph.D. in botany is required, with research interests in the taxonomy and systematics of the anthophytes. Candidates must have undergraduate and/or graduate coursework in taxonomy/systematics.

Indicate V number for position applying for and send curriculum vitae, undergraduate and graduate transcripts, three letters of recommendation to: Montclair State College, Box C316 (V-9) or (V-10), Upper Montclair, NJ 07043. Positions subject to available funding. Screening will begin on 4 February 1991 and will continue until positions are filled. *An Affirmative Action/Equal Opportunity Employer.*

**PROCEPT, Inc.**, a dynamic and fast-paced biotechnology company with strong ties to the Harvard medical community, is dedicated to the principle of immunotherapeutic drug discovery via our proprietary receptor technology. Having recently signed our second of two long-term research and development agreements with one of the largest pharmaceutical companies in the world, we are rapidly expanding all of our scientific research programs aimed at major disease markets such as allergy, autoimmune disease and organ transplant rejection.

We are currently seeking a diverse selection of talented scientists to bring forth their best ideas and creative spirit for the benefit of human therapeutic needs. Help us set the pace in one of these outstanding areas, and together with our established team of professionals you can be part of a new era in immunotherapeutic drug development.

### PROGRAM LEADER/Allergic Diseases

We are seeking a Ph.D. level scientist with a minimum of 5 years postdoctoral experience to serve as a Project Leader of our Allergy/IgE Program. You should have a proven track record for successful management of creative research programs, and a strong background on one or more of the following research areas related to allergy: biology of IgE, inflammation, or signal transduction.

### CELLULAR IMMUNOLOGIST

An outstanding opportunity exists for a dynamic, Ph.D. level scientist interested in highly creative approaches to studying T-lymphocyte biology in our protein receptor program. A strong background in cellular immunology and record of achievement in lymphocyte biology is required.

### IMMUNOCHEMISTRY/ HYBRIDOMA DEVELOPMENT

We are seeking a Ph.D. level scientist to participate in our therapeutic programs targeting autoimmunity and allergy. Experience in hybridoma production and characterization of cell lines is necessary; previous research experience involving in-vivo animal models or clinical trials is desirable, but not required.

### MOLECULAR BIOLOGIST

We have a unique opportunity for the right individual to join an exciting research program focusing on immune cell activation and suppression. You must have a BS/MS degree with at least two years experience, and possess excellent technical skills in molecular biology techniques such as DNA/RNA isolation, cloning and sequencing, Northern/Southern analysis, in vitro mutagenesis, plasmid preps, PCR, etc. Previous experience with tissue culture is desirable, but not necessary.

### BIOPHYSICAL PROTEIN CHEMIST

We are searching for a Ph.D. level scientist with a demonstrated record of achievement in studying the fundamental mechanisms governing protein folding. You will play a key leadership role in our protein receptor development programs by applying your knowledge and experience to the renaturation and functional characterization of a variety of recombinant receptor proteins expressed in microbial cells. You should have direct experience with appropriate biophysical techniques for studying protein conformational structure such as UV, CD and fluorescence spectroscopy, microcalorimetry and molecular modeling.

### BIOANALYTICAL CHEMIST

This position requires a BS and minimum of 3 years experience in a protein biochemistry laboratory. You will join our protein receptor program as the lead scientist in protein characterization methodologies such as amino acid analysis, sequence determination, HPLC, etc., and you should possess good organizational skills for processing analytical data in an independent, responsible manner.

**PROCEPT** is committed to providing the finest environment for technology-driven, entrepreneurial scientists and rewarding their outstanding achievement with competitive salaries, a comprehensive benefits program and equity participation via incentive stock options. We invite you to forward your resume, in confidence to Human Resources, Procept, Inc., 840 Memorial Drive, Cambridge, MA 02139.

*An Equal Opportunity Employer*

**PROCEPT**

## POSITIONS OPEN

### ASSISTANT PROFESSORSHIPS

Kent State University Regional Campuses. Four tenure-track positions available fall 1991. Ph.D. and strong interest in teaching undergraduates is essential. Ashtabula Campus requires aquatic ecology and microbiology specialization. East Liverpool and Tuscarawas Campuses require mammalian physiology or cell biology. Salem requires botany, entomology, or ecology. Submit letter of application (please specify campus and position), curriculum vitae, transcripts, and names and addresses of three references by 1 February 1991 to: **Dr. Alan C. Coe, Dean for Academic Affairs Regional Campuses, Lincoln Building, Kent State University, Kent, OH 44242. Equal Opportunity/Affirmative Action Employer.**

### CELL BIOLOGIST

**ASSISTANT PROFESSOR**, tenure-track position, Department of Biology at the University of Dayton. Responsibilities involve participation in the teaching activities of the department, including a cell biology course and a graduate course in advanced cell biology, establishment of an active independent research program which will attract external funding, and directing M.S. and Ph.D. students. A Ph.D. and at least 2 years of postdoctoral experience are required. Applicants should send curriculum vitae, three letters of recommendation, and a statement of research interests and plans by 4 February 1991 to: **Dr. Roy M. Ventullo, Department of Biology, University of Dayton, 300 College Park, Dayton, OH 45469-2320. The University of Dayton is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

The Department of Bacteriology at the University of Wisconsin-Madison invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. The department is most interested in persons with training and experience in prokaryotic and lower eukaryotic metabolism, physiology, and biochemistry. Exceptional individuals working in other fields will also be considered. A Ph.D. in microbiology or a related field and postdoctoral experience are required. The successful candidate will be expected to establish a dynamic and extramurally funded research program and to participate in undergraduate and graduate teaching. Due to the excellent scientific environment and facilities of the Department of Bacteriology, this position represents an outstanding academic research opportunity. Salary and fringe benefits are nationally competitive.

Send curriculum vitae, a statement of research and professional goals, and three letters of reference to: **Search Committee Chair, Department of Bacteriology, University of Wisconsin, 1550 Linden Drive, Madison, WI 53706. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.** The application deadline is 1 February 1991 or until the position is filled.

The Department of Neurology at the University of Michigan is seeking applications for the following positions:

- A tenure-track, University of Michigan and Veteran's Administration Hospital-based faculty position at the **ASSISTANT PROFESSOR** level. Applicants should be Board-certified or -eligible in neurology with basic science and/or clinical interests in dementia.
- Three tenure-track, university-based faculty positions at the **ASSISTANT PROFESSOR** level, one or more of which will be focused in basic science activities relevant to the dementias. Applicants should be Board-certified or -eligible in neurology with basic science interests and experience.
- Two clinical-track, university-based faculty positions at the **INSTRUCTOR OR ASSISTANT PROFESSOR** level. Applicants should be Board-certified or -eligible in neurology with interests in clinical neurology and teaching. Specific interest or experience in neurological intensive care is being sought for one of these positions.

Candidates should submit curriculum vitae, a brief statement summarizing research/clinical interests and objectives, and three letters of recommendation by 28 February 1991 to: **Robert L. Macdonald, M.D., Ph.D., Department of Neurology, 1108 Neuroscience/1687, University of Michigan, Ann Arbor, MI 48109-1687. The University of Michigan is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.**

## POSITIONS OPEN



### UNIVERSITY OF MANITOBA FACULTY OF MEDICINE ASSISTANT PROFESSOR

Applications are invited for a position as assistant professor (contingent appointment) in the Department of Physiology and the Spinal Cord Research Centre at the University of Manitoba Faculty of Medicine and the Winnipeg Health Sciences Centre. Candidates should have a Ph.D. or equivalent and postdoctoral training, and be eligible for a Medical Research Council Scholarship Award. Preferred areas of interest include tissue slice or neuron culture electrophysiology and pharmacology, molecular biology, development, plasticity, regeneration, or transplantation of neural tissue. *The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, aboriginal people, and persons with disabilities. The University provides a smoke-free work environment.* Priority consideration will be given to Canadian citizens and permanent residents. Send curriculum vitae, and outline of future research plans, and arrange for three letters of reference to be sent to: **Dr. Larry M. Jordan, Director, Neuroscience Research Program, Department of Physiology, University of Manitoba, Winnipeg, Manitoba, Canada, R3E 0W3. Telephone: 204-788-6761; Fax: 204-786-0932. Deadline for receipt of applications is 1 March 1991.**

### ASSISTANT PROFESSOR CHEMICAL SENSES

The Department of Cellular and Structural Biology at the University of Colorado School of Medicine invites applications for a full-time, tenure-track position at the level of **ASSISTANT PROFESSOR**. Preference will be given to applicants with research interests in the cell or molecular biology of chemical sensory systems, and especially research in smell or taste which complements ongoing research at the Rocky Mountain Taste and Smell Center. In addition to pursuing an active research program, the successful applicant is expected to participate in the departmental teaching program. Applicants should have a Ph.D. or M.D. and appropriate postdoctoral training. Review of applications will begin 1 March 1991. Please send curriculum vitae, a two-page description of current and future research, and the names and addresses of three references to: **Dr. Thomas Finger, Search Committee Chairman, Department of Cellular and Structural Biology, B-111, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver, CO 80262. Affirmative Action/Equal Opportunity Employer.**

The University of San Diego (USD), Marine and Environmental Studies Program, invites applicants for a tenure-track position in **GEOLOGY OR GEOCHEMISTRY** at the **ASSISTANT PROFESSOR** level beginning in September 1991. Teaching responsibilities include geological oceanography, an upper division course to be developed by the candidate, and participation in the introductory curriculum. Marine and environmental studies is a broadly interdisciplinary program in the College of Arts and Sciences and maintains close ties with the Hubbs/Sea World Research Institute in San Diego. The program offers degrees at the baccalaureate and master's levels. USD is a Catholic university whose primary aim is teaching excellence. Active scholarship by the faculty is considered essential to this aim. The candidate is expected to maintain an active research program that has the potential for the involvement of both undergraduate and graduate students. Teaching experience is desirable. *Women and members of minority groups are encouraged to apply.* Send curriculum vitae, a brief description of teaching philosophy and research interests, and three letters of reference by 13 February 1991 to: **Director, Marine and Environmental Studies Program, University of San Diego, Alcalá Park, San Diego, CA 92110.**

### ELECTRON MICROSCOPY TECH (IST III) \$33,312 TO \$40,140 PER YEAR

The Department of Biology, San Diego State University (SDSU), seeks a skilled electron microscopist to manage a multiuser EM facility. To qualify, degree(s) in a biological science and experience in TEM is required. To obtain application materials, contact: **Personnel Services, SDSU, San Diego, CA 92182 or telephone: 619-594-4646 by 28 January 1991.**

*Equal Opportunity/Affirmative Action/Title IX Employer.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR DEPARTMENT OF MICROBIOLOGY

The Department of Microbiology at the University of Washington is seeking candidates for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Candidates should be prepared to develop an independent research program dealing with current problems in prokaryotic microbiology. Research areas of special interest include bacterial pathogenesis and mechanisms of host-parasite interactions, bacterial physiology, and microbial genetics. The appointee will be expected to teach in undergraduate and graduate courses and supervise graduate students. Applicants should send curriculum vitae, a short statement of research interests and goals, and the names of three references to: **Dr. James J. Champoux, Chairman, Prokaryotic Search Committee, Department of Microbiology SC-42, School of Medicine, University of Washington, Seattle, WA 98195. Deadline: 1 March 1991.**

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

### INSECT BIOLOGIST

Applications are invited for a regular faculty appointment at the **ASSISTANT PROFESSOR** level. Occidental College expects excellence in both teaching and research. The successful applicant will receive excellent research/teaching/office facilities in a new building and can expect appropriate start-up funds. Applicants will be expected to teach introductory-level physiology, a non-majors course and a course in area of specialty, as well as maintain an active research program that involves students. Send curriculum vitae, statement of teaching and research interests, and three letters of reference to: **Jon E. Keeley, Department of Biology, Occidental College, Los Angeles, CA 90041 by 31 January 1991. Occidental College is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.**

**ASSISTANT PROFESSOR.** One individual is being sought for assistant professor (tenure-track) position in the Department of Urologic Surgery of the University of Minnesota. Individual must have demonstrated involvement in quality research and have competence in communication and in the teaching of students. Board-eligible or board-certified in urology and have a minimum of 2 years of postdoctoral or fellowship training in reproductive biology are required. The individual will be expected to develop an independent research program in testicular or epididymal physiology. Individual will teach residents and provide service in urologic surgery with a specific interest in the area of male infertility. Individual should send curriculum vitae by 31 January 1991 to:

**Dr. P. Reddy  
Urologic Surgery  
University of Minnesota  
Box 394 UMHC  
Minneapolis, MN 55455**

*The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

### ASSISTANT PROFESSOR MOLECULAR POPULATION GENETICIST UNIVERSITY OF CALIFORNIA—RIVERSIDE

Applications are invited for a tenure-track faculty position in the Department of Biology starting 1 July 1991, in population genetics at the assistant professor level. We are looking for an individual whose research involves empirical studies of evolutionary processes at the genome level.

The individual will be expected to establish a strong research program, teach graduate and undergraduate courses, and participate in the evolutionary biology and the genetics graduate program.

Applicants should submit curriculum vitae, a statement of research interests, and arrange to have letters sent by three to five referees to: **Chair, Molecular Population Geneticist Search Committee, Department of Biology, University of California, Riverside, CA 92521.**

Applications should be received by 1 March 1991, to be assured consideration.

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

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## SR. PHARMACOLOGIST

The Immunoscience Research Area of Abbott's Pharmaceutical Product Division now seeks a senior-level Immunopharmacologist to join a team involved in the discovery of novel immunosuppressants. The successful candidate will help devise a research strategy for the *in vivo* evaluation of new compounds. This will include development of animal models involving both cellular and humoral immune responses. Duties may also include investigation of the mechanisms of action and toxic properties of potential immunosuppressants. We require a PhD in Pharmacology with a strong immunology background or a PhD in Immunology, plus at least 2 years of postdoctoral experience. Significant experience with *in vivo* experimentation is essential. **Reply to Job #7613.**

## TOXICOLOGIST

Abbott's Division of Drug Safety Evaluation now seeks an experienced Toxicologist to study design, management and reporting of both in-house and contracted studies. The selected candidate will be involved as a liaison between Toxicology and other groups within the Corporation. A PhD in Pharmacology, Toxicology or a related discipline and a minimum of 1-2 years experience in general or reproductive toxicology are required. Experience in *in vitro* or behavioral toxicology desired. Good interpersonal skills as well as excellent abilities in communication via both oral and written presentations are a must. Knowledge of the drug development process and appropriate GLP's are essential; board certification is desirable. **Reply to Job #7560.**

As a \$6 billion leader in the health care industry, we offer competitive compensation and benefits which include profit sharing and a stock retirement plan. Our corporate headquarters are located in an attractive suburban area near the Lake Michigan shoreline just 30 miles north of Chicago. Please send resume with salary history to: **Patricia Handy, Corporate Placement, Abbott Laboratories, One Abbott Park Road, Abbott Park, IL 60064.** (To facilitate the handling of your resume, please indicate job number of interest on your cover letter or resume.) Abbott is an Affirmative Action Employer.

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## RESEARCH POSITIONS DRUG METABOLISM/BIOANALYSIS

The Upjohn Company, a recognized leader in biomedical research and the discovery and development of new pharmaceuticals, is seeking several highly motivated and innovative individuals for positions in our Drug Metabolism Research Group. Industry or academic knowledge and background in drug metabolism or bioanalysis using radioactive or stable isotope tracer, enzymatic, immunological, chromatographic, mass spectrometric and other physical-chemical and biomedical methods are necessary. Excellent problem solving and interpersonal skills, oral and written skills, and the ability to conduct collaborative or independent research are also highly desirable.

**RESEARCH SCIENTISTS (Position no. 5729-HA).** A Ph.D. degree in biochemistry, organic chemistry, pharmaceutical science or related fields is required. The selected incumbents will function as experts in drug disposition and/or bioanalysis and as members of interdisciplinary, new product project teams. These scientists derive qualitative and quantitative information of the absorption, distribution, metabolism and elimination of drugs and conduct applied and basic research in disciplines such as drug metabolism, biopharmaceutics, pharmacokinetics, pharmacology and toxicology. Project management includes the elucidation of drug biotransformation mechanisms *in vivo* and *in vitro* and to develop/validate bioanalytical methods for drugs and metabolites in biological samples.

**RESEARCH ASSOCIATES (Position no. 5730-HA).** A B.S. or M.S. degree in one of the above disciplines is needed to assist a scientist in the conduct of *in vitro* and *in vivo* studies and to develop analytical methods for the separation, identification and quantification of drugs and metabolites. Pharmacokinetic and metabolism information of drugs and new compounds are derived, with participation in drug discovery and conceptual research projects. Senior associates may assume independent assignments.

Upjohn offers a very competitive compensation and benefits package in addition to a stimulating, multi-disciplinary research environment at our modern laboratories, located in downtown Kalamazoo, Michigan. Our region provides immediate access to abundant cultural and recreational pursuits and offers reasonable housing and living costs. Qualified applicants are invited to submit their CV's, cover letters and relevant materials to: **THE UPJOHN COMPANY, CORPORATE RECRUITING, 7000 PORTAGE ROAD, KALAMAZOO, MI 49001-0199.** Refer to a position number in your cover letter. An Equal Opportunity Employer M/F.

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## POSITIONS OPEN

**MOLECULAR BIOLOGIST, ASSISTANT PROFESSOR.** The Biology Department at Winona State University invites applications for a tenure-track position in molecular biology. Responsibilities include teaching molecular biology (molecular genetics), introductory biology for majors, microbiology, and other courses in addition to developing a vigorous research program which involves undergraduate students. Salary is dependent on qualifications and experience. The authorized salary for this position ranges from \$26,492 to \$41,000. *Minorities and women are especially encouraged to apply.* Applicants should send a letter of application stating teaching and research interests, curriculum vitae, and a list of the names, addresses, and telephone numbers of four references familiar with the applicant's research and teaching capabilities to: **Affirmative Action Office, Winona State University, Winona, MN 55987.** Screening of applications will begin 15 February 1991 and will continue until the position is filled. *Affirmative Action/Equal Opportunity Employer.*

### CELL BIOLOGIST/BIOCHEMIST ASSISTANT PROFESSOR BIOLOGY DEPARTMENT WILLIAMS COLLEGE

Tenure-track position beginning July 1991 for a broadly trained cell or molecular biologist with strong background in biochemistry to teach courses in cell biology and biochemistry. Normally, faculty members teach one course and two laboratories each semester. A research program which can attract extramural funding and involve undergraduates is expected. Special interests might include, but are not limited to, immunology, virology, microbiology.

Ph.D. required, some postdoctoral experience desirable. Please send curriculum vitae, statement of teaching and research interests, and three letters of reference by 1 February 1991 to: **Search Committee, Department of Biology, Williams College, Williamstown, MA 01267.**

*An Equal Opportunity/Affirmative Action Employer, Williams College especially welcomes applications from women and minority candidates.*

**IMMUNOLOGIST.** The Biology Department of the University of San Francisco, a Jesuit liberal arts university with an emphasis on teaching, invites applications for an anticipated tenure-track position at the **ASSISTANT PROFESSOR** level to begin in fall of 1991. Teaching responsibilities will include immunology and other undergraduate courses in at least two of the following areas: virology, microbiology, tissue culture, parasitology, and introductory biology. The candidate is expected to guide master's degree students and to develop an independent research program. Applicants should submit a letter of application, curriculum vitae, brief description of research plans, evidence of teaching ability, and three letters of recommendation by 15 February 1991 to: **Immunologist Search Committee, Office of the Dean, College of Arts and Sciences, Harney Science Center, Room 240, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.** *Women and minority candidates are especially encouraged to apply. The University of San Francisco is an Equal Opportunity/Affirmative Action Employer.*

**ENVIRONMENTAL SCIENTIST.** The Biology Department of the University of San Francisco, a Jesuit liberal arts university with an emphasis on teaching, invites applications for an anticipated tenure-track position at the **ASSISTANT PROFESSOR** level to begin in fall of 1991. Teaching responsibilities will include undergraduate courses in at least two of the following areas: aquatic ecology, toxicology, geology, and atmospheric sciences. The undergraduate program in environmental sciences is complemented by a master's degree program in environmental management. The candidate is expected to guide master's degree students and to develop an independent research program. Applicants should submit a letter of application, curriculum vitae, brief description of research plans, evidence of teaching ability, and three letters of recommendation by 15 February 1991 to: **Environmental Scientist Search Committee, Office of the Dean, College of Arts and Sciences, Harney Science Center, Room 240, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.** *Women and minority candidates are especially encouraged to apply. The University of San Francisco is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**TWO ASSISTANT PROFESSORS,** biological sciences; tenure track, earned doctorate required. Position #20205, **INVERTEBRATE ZOOLOGIST:** Individuals with expertise/research interest in entomology, aquatic biology, or parasitology urged to apply. Position #20828, **CELL BIOLOGIST:** Individuals with expertise/research interests in cell/molecular biology, genetics, and microbiology urged to apply. Applicants for both positions are expected to demonstrate quality teaching in general biology and content areas. Established research record is required, interest to pedagogy is expected. Teaching and research is at both graduate and undergraduate levels. Submit (using position number and title) by 18 January 1991 letter of application, résumé, three references, transcripts, *evidence of U.S. citizenship*, and statement of teaching philosophy to: **Margaret Heimbrook, Chair, Search and Screen Committee, Department of Biological Sciences, University of Northern Colorado, Greeley, CO 80639.** *Minorities and women encouraged to apply. The university is an Equal Employment Opportunity/Affirmative Action Employer.*

**PROTEIN CHEMIST.** The University of Maryland Center for Advanced Research in Biotechnology (CARB) has an opening for a **RESEARCH ASSISTANT PROFESSOR.** This is a non-tenure-track position. The successful candidate must have extensive experience in protein engineering of heme enzymes, including cloning, site-directed mutagenesis, and characterization of heme enzymes. Applications, including three letters of reference, should be sent to: **Dr. T. L. Poulos, CARB, 9600 Gudelsky Drive, Rockville, MD 20850 by 1 February 1991.** *The University of Maryland is an Equal Opportunity Employer.*

The Section of Plastic and Reconstructive Surgery, Yale University, invites applications for **TWO FACULTY APPOINTMENTS** at the levels of **ASSISTANT PROFESSOR AND ASSOCIATE PROFESSOR** of surgery. The section has an active research program and provides excellent facilities, start-up funds, and a stimulating research environment with broad opportunity for collaborative investigation. Candidates should have the M.D. or M.D./Ph.D. degrees, be Board-certified or in the certification process in plastic surgery. Candidates should have a focused clinical interest and a scholastic commitment. Preference will be given to individuals with experience and/or interest in developing cooperative clinical/basic science ventures and to those individuals who have had a sustained program of investigation.

Application should include a letter specifying qualifications, career goals, current research interests/activities, curriculum vitae, copies of recent publications and the names of three references. Applications should be submitted to: **Charles B. Cuona, M.D., Ph.D., Section of Plastic Surgery, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510-8062.** Deadline for submission is 1 April 1991.

*Yale University is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from women and members of minority groups.*

### HUMAN NUTRITIONIST

The Department of Food Science and Human Nutrition seeks an **ASSISTANT OR ASSOCIATE PROFESSOR** for a tenure-track position in nutrition. The selected individual is expected to participate in the undergraduate and graduate teaching programs of the department and to develop an independent research program that will complement the interdisciplinary program of the Center for Designing Foods to Improve Nutrition, which is presently under construction. The center will house a human metabolism laboratory and its faculty will have access to unique analytical facilities. Candidates should have expertise in experimental clinical or basic human nutritional science and have the ability to interact effectively with other scientists in areas related to human nutrition. A doctoral degree in nutrition or related life science area is required. Teaching and postdoctoral research experiences are preferred. *Iowa State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and members of other protected groups are encouraged to apply.* Submit letter of application, curriculum vitae, and names of at least three references to: **Dr. Murray L. Kaplan, Chair of the Search Committee and Coordinator, Center for Designing Foods to Improve Nutrition, Department of Food Science and Human Nutrition, 107 MacKay Hall, Iowa State University, Ames, IA 50011.** Deadline for application is 1 March 1991 or until position is filled.

## POSITIONS OPEN

### ASSISTANT OR ASSOCIATE PROFESSORS OF BIOLOGY

The Department of Biology, Hofstra University, anticipates hiring three new assistant associate professors for fall of 1991. We are actively recruiting persons with demonstrable skills in both teaching and research to fill these tenure-track positions. We are interested in persons representing a variety of fields in biology. In particular, we invite applications from persons with a research interest and background in one of the following fields: evolutionary biology, molecular systematics, cell and molecular biology, marine biology, or neurobiology. It is expected that one of the successful candidates will have teaching expertise in basic plant biology. Candidates must have a Ph.D.; postdoctoral experience is preferred. The successful candidates will be expected to actively engage in research and to work closely with students in a liberal arts environment. Curriculum vitae and three letters of reference should be submitted by 30 January 1991 to: **Dr. Carleton J. Phillips, Chairman, Department of Biology, Hofstra University, Hempstead, NY 11550.** *Hofstra University is an Equal Opportunity/Affirmative Action Employer.*

### VIROLOGIST UNIVERSITY OF MARYLAND AT BALTIMORE

A tenure-track molecular virologist position is available in the Department of Microbiology and Immunology at the University of Maryland School of Medicine in Baltimore. The position can be filled at the **ASSISTANT OR ASSOCIATE PROFESSOR** level, commensurate with the experience of the successful candidate. Applications are encouraged from individuals with molecular expertise in any area of animal virology. The successful applicant will be expected to establish a vigorous independent research program, participate both in graduate and medical school teaching, and interact with other faculty members with virological interests. The position carries attractive start-up funds as well as a competitive salary and benefit package. Interested parties should send recent curriculum vitae plus relevant reprints, the names of three references, and a short statement of their proposed research program to: **George K. Lewis, Ph.D., Virology Search Committee, Department of Microbiology and Immunology, University of Maryland, 655 West Baltimore Street, Baltimore, MD 21201.**

*The University of Maryland at Baltimore is an Equal Opportunity Employer, M/F/H/V.*

### UNIVERSITY OF NORTH TEXAS

The Department of Geography and Institute of Applied Sciences seeks applicants for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level beginning August 1991. Ph.D. in environmental science, geography, or related discipline required at the time of appointment with specialization in atmosphere and ecosystem interaction, climatic and ecological risk assessment, ecosystem analysis. Applicants must have proven teaching and research experience, ability to secure external funding, and willingness to participate in interdisciplinary research projects. Rank and salary commensurate with qualifications. Send letter of interest, curriculum vitae, transcripts, and names of three referees to: **Dr. F. Andrew Schoolmaster, Chair, Department of Geography, University of North Texas, Box 5277, Denton, TX 76203 by 22 March 1991.** *The University of North Texas is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT/ASSOCIATE PROFESSORS OF PHARMACOLOGY.** The University of North Dakota (UND) School of Medicine invites applications for an anticipated tenure-track (12-month) position at the rank of assistant or associate professor of pharmacology. The position requires a Ph.D. in pharmacology or related area, or M.D. with a commitment to teaching excellence and to the development of a strong, extramurally funded research program. All areas of pharmacology/toxicology research will be considered. Applicants should submit a letter to include appropriate rank, research goals, and curriculum vitae. Three letters of recommendation should be arranged by the candidate. Review of completed applications will begin 1 March 1991 and will continue until the position is filled. Submit applications to: **Dr. David W. Hein, Professor and Chairman, Department of Pharmacology, University of North Dakota School of Medicine, 501 North Columbia Road, Grand Forks, ND 58203.** *UND is an Equal Opportunity/Affirmative Action Employer.*

Department of Health and Human Services  
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## DIRECTOR

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

Opening Date: October 15, 1990 Closing Date: February 15, 1991

*(All Applications must be postmarked by the closing date.)*

The National Institutes of Health (NIH) invites nominations and applications for the position of Director, National Institute of Environmental Health Sciences (NIEHS). The Director is responsible for management and direction of one of the preeminent centers for toxicology research in the world, focused on carrying out its research mission: to seek the cause of and ways to prevent environmentally-associated health problems. Programs encompass intramural laboratory research and extramural (contracts and grants) activities on the environmental health sciences. The Director is responsible for the coordination and direction of all programs and activities in the Institute and serves as principal advisor to the Director, NIH, on environmental health-related matters.

The Director, NIEHS also serves in a dual role as the Director, National Toxicology Program (NTP). The NTP is a coordinated effort among DHHS agencies to characterize the toxicity of chemicals.

This is a Civil Service position in the Senior Executive Service (SES), with a base salary from the ES-1 to the ES-5 pay level (currently \$71,200 to \$83,600 per year) depending on qualifications. Proposed pay range to be effective January 1991, pending issuance of an Executive Order, is \$87,000 to \$108,300 (plus up to \$20,000 per annum allowance for physicians only). SES members are eligible for various bonuses and awards, and physicians are eligible for a comparability allowance of up to \$20,000 per year. (Alternatively, applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The SES individual selected, if not presently in the Senior Executive Service, must serve a one-year probationary period.

For more information, contact Mr. Alvin L. Wade, Jr. at (919) 541-4318. The following forms are *required*: Application for Federal Employment (SF-171) accompanied by a current curriculum vitae and bibliography. These forms may be submitted to:

**Mr. Alvin L. Wade, Jr.**  
**National Institute of Environmental  
Health Sciences**  
**Personnel Office (1-01)**  
**P.O. Box 12233**

**Research Triangle Park, North Carolina 27709**



Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental handicap, age, or membership or non-membership in an employee organization.

**NOTE:** The Search Committee decided to extend the application period. This should not imply any judgement of previous applicants. Those applicants will be automatically considered and need not apply.

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## Radioimmunotherapy Senior Research Associate

The Cell Biology Division of Wellcome Research Laboratories is seeking a scientist to design and carry out experiments for evaluation of radioimmunoconjugates and to carry out original, creative research in aspects of radioimmunotherapy.

Candidates must have a Ph.D. in a biological or biochemical science plus one year of experience related to radioimmunotherapy, antibodies, or nuclear medicine, or a Ph.D. thesis related to radioimmunotherapy, antibodies, or nuclear medicine plus one year of related experience. Other factors to be considered include experience with the study and development of radioimmunoconjugates for cancer therapy, related publications, and communication skills.

As a valued professional at Burroughs Wellcome Co. you will receive a salary commensurate with your experience and be supported by the highest level of benefits in our industry. If you are interested in working with us, submit your resume, indicating position number in your cover letter, by **March 4, 1991 to: Burroughs Wellcome Co., Scientific Recruiting and Staffing, Pos. #62491-4, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

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**For more information and registration forms contact:** Jacquelyn Roberts, AAAS  
Employment Exchange, Suite 1152, 1333 H Street, NW, Washington, DC 20005, (202) 326-6737.

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## POSITIONS OPEN

**GENETIC ENGINEERING, ASSISTANT ASSOCIATE PROFESSOR.** Bridge genetic engineering techniques (RFLPs, genetic transformation, etc.) with current plant improvement methods. Conduct basic and applied research in collaboration with plant breeders/geneticists. Teach a biotechnology course. Advise graduate students. Ph.D. or postdoctoral in molecular genetics; knowledge of agronomic crops. Send résumé, transcripts, and three reference letters by 1 March 1991 to: **Dr. M. S. Kang, Sturgis Hall, Louisiana State University, Baton Rouge, LA 70803-2110. Equal Opportunity Employer.**

The Department of Chemistry, Yale University, invites applications for a tenured position at the rank of **ASSOCIATE PROFESSOR OR PROFESSOR** in inorganic chemistry. An outstanding teacher-scholar is sought whose research interests will complement those of the current staff.

Applicants should submit curriculum vitae and a list of publications to: **Professor Frederick E. Ziegler, Chairman, Department of Chemistry, Yale University, 225 Prospect Street, P.O. Box 6666, New Haven, CT 06511-8118, before 15 February 1991. Yale University is an Equal Opportunity/Affirmative Action Employer.**

**INVASIVE WEED SPECIALIST.** Needed to develop an ecologically prudent approach to weed management on Nature Conservancy preserves nationwide. Consult with habitat managers, develop and distribute information on weed management, and develop policies concerning chemical and biocontrol agents. Located near Davis, California. Advanced degree and experience in relevant field required. Contact: **Will Murray, The Nature Conservancy, Department S, 1815 North Lynn Street, Arlington, VA 22209. Equal Opportunity Employer.**

## MOLECULAR EVOLUTIONIST UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

Faculty position immediately available. Specialization in modern molecular approaches to the long-term evolution of macromolecules is desired. Rank (**ASSISTANT OR ASSOCIATE PROFESSOR**), salary, start-up, and tenure will be commensurate with experience. Position is open until filled. Send letter outlining research interests, current curriculum vitae, and three recommendation letters to: **Dr. Wen-Hsiung Li, Genetics Centers, University of Texas HSC, P.O. Box 20334, Houston, TX 77225. The University of Texas system is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

**ASSOCIATE PROFESSOR: SCIENCE, TECHNOLOGY AND ENVIRONMENTAL POLICY.** Focus on the analysis of science, technology, and environmental policy issues. Demonstrated record of achievement in policy analysis; ability to provide program leadership for Humphrey Institute's new M.S. degree program in Science and Technology Policy. Ph.D. or equivalent foreign doctoral degree in economics, planning, policy science, political science, or related fields; Ph.D. in biological or physical science with substantial policy experience is also acceptable. Appointment at tenured associate professor level or probationary associate professor level. Send applications and nominations to: **Dr. Burt Sundquist, Search Committee Chair, Closing date: 1 March 1991.**

**ASSISTANT PROFESSOR: POPULATION ANALYSIS AND POLICY.** Focus on the concepts and mathematical and statistical techniques of population analysis. Demonstrated ability to teach courses in demographic methods and models, and strong interest in policy questions and scholarly research. Ph.D. or equivalent foreign doctoral degree required by date of appointment. Specialization in economic or social demography, population economics, population geography, population history, planning, or field with strong population analysis and policy focus. Appointment at probationary assistant professor level. Send applications and nominations to: **Dr. James Vaupel, Search Committee Chair, Closing date: 1 February 1991.**

Send curriculum vitae, transcript of graduate course work, three letters of recommendation, samples of written research, and a brief account of research and teaching interests and experience to appropriate **Search Committee Chair, Humphrey Institute, University of Minnesota, 301-19th Avenue South, Minneapolis, MN 55445. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.**

## POSITIONS OPEN

### IMMUNOLOGIST UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE

A tenure-track faculty position is available for an immunologist in the Department of Microbiology and Immunology. The position can be filled at the level of **ASSISTANT OR ASSOCIATE PROFESSOR**. Candidates with expertise in the molecular biology of TCR, MHC, and/or antigen processing and presentation are sought. Applicants should submit their curriculum vitae, names and addresses of three references, a brief statement of planned research, and relevant reprints to: **Garnett Kelsoe, D.Sc., Immunology Search Committee, Department of Microbiology and Immunology, School of Medicine, University of Maryland, 655 West Baltimore Street, Baltimore, MD 21201.**

*The University of Maryland at Baltimore is an Equal Opportunity Employer, M/F/H/V.*

### MICROBIAL ECOLOGIST

Applications are invited for a tenure-track position available 1 September 1991 at the rank of **ASSISTANT OR ASSOCIATE PROFESSOR**, dependent on experience. Candidates should have postdoctoral training in microbial ecology, demonstrated excellence in research, and a willingness to participate in both undergraduate and graduate training programs. Preference will be given to applicants working in aquatic ecosystems or bioremediation. Teaching responsibilities will include introductory microbiology and advanced courses in the applicant's area of specialization.

Review of application will begin 10 February 1991 and continue until the position is filled. Candidates should submit a letter of application, curriculum vitae, and names of three references to: **Dr. Daniel D. Jones, Department of Biology, University of Alabama at Birmingham, UAB Station, Birmingham, AL 35294.**

*The University of Alabama at Birmingham is an equal Opportunity/Affirmative Action Employer.*

### ASSOCIATE OR FULL PROFESSOR IN BIOCHEMISTRY

The Department of Biochemistry at Case Western Reserve University (CWRU) invites applications and nominations for a tenure-track position. Applicants should have a vigorous and well-established research program in any area of biochemistry. Applicants should send curriculum vitae, a statement of research interests, and should arrange for the submission of three letters of reference to: **Dr. Mulchand S. Patel, Chair of Search Committee, Department of Biochemistry, Case Western Reserve University School of Medicine, Cleveland, OH 44106.**

*CWRU is an Equal Opportunity/Affirmative Action Employer and encourages the application of qualified women and minorities.*

**PROFESSORSHIP IN INFECTIOUS DISEASE.** The Department of Veterinary Science, College of Agriculture, University of Kentucky, invites applications or nominations for the newly established Keeneland Professorship in Infectious Disease. This tenured faculty position is intended to fill a need for an expanded program of research in the field of infectious diseases of the horse. The successful applicant will join an expanding faculty of veterinary science in the new Gluck Equine Research Center laboratories. Applicants must possess an earned Ph.D. degree, be qualified in veterinary medicine and present credentials illustrative of excellence in research in the areas of pathogenesis and immunology of bacterial infections of animals. The appointee is expected to establish an independent program of research and to participate in graduate education. Among appropriate subjects for research are pathogenesis and immunology of streptococcal diseases, rhodococcal infection, salmonellosis and other diseases associated with infection by Gram-negative bacteria. The salary to be offered will be commensurate with the credentials of the successful applicant. Interested individuals should submit a letter describing their research interests and achievements and complete curriculum vitae and name at least four persons familiar with their qualifications prior to 1 February 1991 to: **Search Committee for the Keeneland Professorship, Gluck Equine Research Center, University of Kentucky, Lexington, Kentucky 40546-0099. The College of Agriculture is an Equal Opportunity Organization.**

## POSITIONS OPEN

### CELLULAR/MOLECULAR CARDIOVASCULAR SCIENTISTS

Two tenure-track positions are available at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. Individuals with expertise in cellular/molecular approaches to investigation of vascular biology or CNS regulation of circulation are encouraged to apply. Rank, salary, and space will be commensurate with qualifications. Send curriculum vitae and names and addresses of three references to: **Dr. David Busija, Search Committee, Department of Physiology and Pharmacology, Bowman Gray School of Medicine, Wake Forest University, 300 South Hawthorne Road, Winston-Salem, NC 27103. Affirmative Action/Equal Opportunity Employer. Respond before 1 March 1991.**

**PLANT CELL BIOLOGIST** with evolutionary and organismal interests. Tenure-track, 9-month **PROFESSOR/ASSOCIATE PROFESSOR/ASSISTANT PROFESSOR** position to begin 1 August 1991. Candidate must have a strong organismal orientation and bring molecular approaches and technologies to the study of evolution of Hawaiian plants. Responsibilities include research, teaching, and service; courses could include introductory botany or biology, an upper level course in molecular aspects of plant evolution, and a specialized graduate course. Ordinarily 1.00 FTE Natural Sciences faculty are expected to teach three courses per academic year. The candidate is expected to compete for extramural research funding and to develop an active graduate program. Send curriculum vitae, reprints, statement of research and teaching interests, and names of three referees to: **Plant Cell Biologist Search Committee, Botany Department, University of Hawaii at Manoa, 3190 Maile Way, Honolulu, HI 96822. Closing date for receipt of applications: 15 February 1991. Inquiries accepted by FAX: 808-956-3923. An Equal Opportunity/Affirmative Action Employer.**

**MOLECULAR BIOLOGIST/INFORMATION SPECIALIST.** The National Library of Medicine (NLM), National Institutes of Health, Public Health Service, has full-time permanent openings for technical information specialists to analyze published gene sequence data from international biomedical journals as part of its indexing operation. Positions to be filled are at the GS-9 (starting at \$24,705) or GS-11 (starting at \$29,891) level. For application package, contact: **Ms. Apollito, NLM, Building 38, Room 2N17, 8600 Rockville Pike, Bethesda, MD 20894. Telephone: 301-496-4943. NLM is an Equal Opportunity Employer. U.S. citizenship required.** Applicants must meet the following selective factors: experience in gene sequence analysis or molecular biology and knowledge of at least two foreign languages (knowledge of computers may be substituted for one of the foreign languages). Vacancy #9037L095. Applications must be postmarked by 1 July 1991.

**SCIENCE DIVISION HEAD.** Applications and nominations are sought at Northeast Missouri State University (NMSU). Duties begin on 1 July 1991. NMSU is a state-wide liberal arts and sciences institution that has received national acclaim for its Value-Added Model of Assessment.

The science division includes four disciplines (biology, chemistry, physics, and agriculture) and offers the B.A., B.S., and the M.S. (biology) degrees. There are 62 faculty members and 750 science students. The primary focus of the division is on excellence in undergraduate teaching. High ability students involved in undergraduate research, modern facilities and state-of-the-art equipment all contribute to a quality program.

The applicant should possess a Ph.D., strong interpersonal skills, and present evidence of leadership in teaching, administration, and scholarship. Salary is competitive.

Send a letter of application which includes your philosophy of education, curriculum vitae, transcripts (undergraduate and graduate), and three letters of reference to:

**Dr. Jack Magruder  
Vice President for Academic Affairs  
Chair, Science Division Search Committee  
Northeast Missouri State University  
Kirksville, MO 63501**

Telephone: 816-785-4105; FAX: 816-785-4181

Applications will be reviewed beginning 15 February 1991. NMSU is an Equal Opportunity Employer.

# Oxygen Radical-Inflammation Research Scientist

PARKE-DAVIS Pharmaceutical Research Division, Warner-Lambert Company, seeks a Scientist in the growing area of Oxygen Radical-Inflammation Research. The candidate will be involved in examining the pharmacological effects and biochemical mechanisms of action of novel anti-inflammatory compounds.

The successful applicants should have a strong background in Oxygen Radical Research. Experience using both "in-vivo" animal models and "in-vitro" models and biochemical assays to examine the involvement of free radicals in cellular/tissue damage is essential. Additional experience in inflammatory pharmacology is also desirable. A Ph.D. in pharmacology, biochemistry or a relevant area with two to four years of post doctoral experience would be ideal. Good verbal and written communication skills are necessary.

Interested individuals should send their CV and references to **Mr. Jack Moyer, PARKE-DAVIS Pharmaceutical Research Division, 2800 Plymouth Road, Ann Arbor, MI 48105. Refer to job #90342. "Smoke-Free Work Environment"**

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### DIRECTOR, DEAN A. MCGEE EYE INSTITUTE AND CHAIRPERSON, DEPARTMENT OF OPHTHALMOLOGY THE UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

The Dean A. McGee Eye Institute and the University of Oklahoma College of Medicine invite nominations and applications for the position of Director and Chief Executive Officer of the Dean A. McGee Eye Institute and Chairperson, Department of Ophthalmology, The University of Oklahoma College of Medicine. The Dean A. McGee Eye Institute is a private organization affiliated with the College of Medicine. Its facilities are on the campus of the Oklahoma Health Center. The incumbent is retiring from this position after 18 years and has developed a premier program in academic ophthalmology. The successful candidate will have the opportunity to continue building the Institute's and Department's programs upon this superb base.

Candidates should have an M.D. degree, certification by the American Board of Ophthalmology, and a record of distinguished academic accomplishment with strong leadership and administrative skills.

Interested parties should submit a letter of application, curriculum vitae and bibliography, a summary of accomplishments and goals, and the names of at least three references to: Ophthalmology Search Committee, University of Oklahoma Health Sciences Center, College of Medicine, Dean's Office, Post Office Box 26901, Oklahoma City, Oklahoma 73190. The evaluation of candidates will commence in February, 1991 and will continue until the position is filled.

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Send letter of application, CV and three letters of reference by February 15, 1991 to:

Dr. Timothy C. Hall  
Chair, RDC Search Committee  
Department of Biology  
Texas A&M University  
College Station, TX 77843 - 3258

Texas A&M is an Equal Opportunity Employer

**DIVISION HEAD, VETERINARY MEDICINE  
NEW MEXICO REGIONAL PRIMATE  
RESEARCH LABORATORY (NMRPRL)  
New Mexico State University (NMSU)**

NMSU is seeking a Division Head for Veterinary Medicine of their Regional Primate Research Laboratory. NMRPRL is located within the security of Holloman Air Force Base, close to Alamogordo in southern New Mexico surrounded by high desert and mountains. NMRPRL enjoys proximity to ski resorts and other outdoor recreation as well as low real estate costs.

NMRPRL has a complete laboratory complex of 120,000 sq. ft. located on a 37 acre site and supports 427 chimpanzees, 1300 macaques, and other small laboratory animals. The new division head will direct the laboratory animal program. NMRPRL Veterinary Medicine has a staff of 59 employees with a total NMRPRL staff of 119 scientists, laboratory and animal technicians, and support personnel. The successful applicant will have the exciting opportunity to work with architects in the design and construction of a ten million dollar animal facility that will occupy a new 50 acre site at NMRPRL.

Applicants should have a DVM and several years of progressively responsible experience in laboratory animal medicine and demonstrated leadership ability. Candidates with ACLAM certification, research experience, primate and infectious disease experience, are preferred. Salary includes full benefit package and will be commensurate with qualifications and experience and will be highly competitive in New Mexico's low cost-of-living environment. Eligibility for employment is contingent upon verification of individual's eligibility of employment in the US.

Submit CV and three names and addresses for references to Preston A. Marx, Director, New Mexico Regional Primate Research Laboratory, New Mexico State University, Holloman AFB, NM 88330-1027. Applications received by January 31, 1990 will be given first consideration.

# DIRECTOR QUALITY CONTROL



Collagen Corporation is expanding its efforts in the area of novel biomaterials and medical devices. In addition to our injectable collagen used for soft tissue augmentation and repair, we are taking our technology to new venues of medical relevance, including collagen ceramic composites for bone grafting, membranes for guided tissue regeneration and bio-compatible materials to treat urology disorders. Also on the horizon are new drug delivery vehicles.

To address these exciting areas, we are seeking a Director of Quality Control to join our senior operations management team. The selected candidate will be responsible for organizing and directing Collagen's QC functions for new product introductions, commercial lot testing, regulatory compliance and systems/specifications development. In addition to a Ph.D. or M.S. degree in biochemistry, chemistry, microbiology, or related field, we require at least 7 years' experience in the biotechnology/pharmaceutical industry.

Collagen offers a competitive salary and benefits package, which includes relocation assistance, stock purchase plans, and merit rewards based on your performance. For consideration, please send your resume to: Collagen Corporation, 1850 Embarcadero Road, Dept. SLH, Palo Alto, CA 94303. We are an equal opportunity employer.



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**Sandoz Research, a company known for excellence in agricultural research has two openings at its California location.**

## Section Leader

This position requires approximately 70% research responsibility and 30% management responsibility, communicating and coordinating projects with a staff of five full-time research scientists and three part-time lab assistants.

Research responsibilities include participation in basic research projects related to essential amino acid biosynthesis and plant hormone function as well as mechanisms of action research and *in vitro* bioassays associated with chemical series being synthesized by the herbicide chemistry group.

Requires PhD in plant biochemistry or related discipline with five years of research and project team management experience.

## Insect Biochemist

Responsibilities of this position include receptor binding studies, enzyme assays, analysis of complex mixtures, biosynthesis of natural products and pesticides mode of action studies.

Requires an MS biochemist or BS with several yrs. exp. (chemist with biochemical knowledge will be considered), strong analytical chemistry/biochemistry skills, and exp. with HPLC equipment and radioisotopes. Must be able to handle insects & have no history of major allergies.

For immediate consideration send resume to:  
**Sandoz Research  
Human Resources Dept.  
975 California Ave.  
Palo Alto, CA 94304-1104  
AA/EOE**



## Branch Director

### The Washington Institute for Mental Illness Research and Training

**Description of Position:** The Washington Institute for Mental Illness Research and Training is seeking a Director to lead its Eastern Washington Branch. The Branch Director will serve as the Associate Director of the Institute and direct its eastern Washington program. The Institute is charged by the Washington legislature to conduct research and educational programs through the state's research universities and mental health facilities.

The Branch Director will conduct his/her own research program and stimulate research at participating institutions. He/she will also coordinate Institute training activities at Eastern State Hospital and in community-based settings. The primary focus includes (1) Identify biomedical and psychosocial research needs; develop a research agenda; and implement a research program. (2) Identify the staff development/training needs at Eastern State Hospital and in community mental health organizations; inventory ongoing training activities and evaluate their effectiveness; identify provider institutions; and implement a training agenda in conjunction with those providers.

#### Qualifications:

- Doctorate or equivalent in an academic discipline relevant to mental health
- Demonstrated research and teaching competence sufficient to qualify for a tenured faculty position at Washington State University
- Demonstrated ability to obtain grant support
- Academic leadership ability
- Knowledge of state mental health systems
- Experience with public psychiatric hospital and community mental health systems is highly desirable

**Appointment and Salary:** This is a faculty appointment at Washington State University. Departmental affiliation will depend upon the candidate's academic preparation. Salary will be competitive with equivalent academic positions.

To apply send a vitae, cover letter summarizing your interest in and qualifications for the position together with your thoughts about the role of mental illness research and training in the process of change in mental health systems, and three original letters of reference to:

**C. Harold Mielke, M.D., Chair  
Search Committee for the Branch Director  
Washington State University at Spokane  
601 West First Avenue  
Spokane, WA 99204-0399  
509/456-4408**

Final screening will begin on March 1, 1991 and continue until the position is filled.

*Washington State University is an equal opportunity/affirmative action educator and employer.  
Protected group members are encouraged to apply.*

## POSITIONS OPEN

### CHAIRMAN DEPARTMENT OF BIOCHEMISTRY

The Chicago College of Osteopathic Medicine invites applications for the position of chairman of the Department of Biochemistry. Applicants should have distinguished records in biomedical research and medical education. Preference will be given to candidates who have experience commensurate with senior faculty rank and have a record of extramural grant funding and an active research program. The successful candidate should have the potential for strong and innovative leadership. Interested applicants should send curriculum vitae, synopsis of current and planned research, and the names and addresses of three references no later than 15 February 1991 to: **Dr. Teresa Dombrowski, Chairman, Search Committee for Biochemistry, Chicago College of Osteopathic Medicine, 555 31st Street, Downers Grove, IL 60515.**

*Equal Opportunity/Affirmative Action Employer.*

### HEAD OF THE PHYSICS DEPARTMENT UNIVERSITY OF CONNECTICUT

The University of Connecticut invites applications for the anticipated headship of the Physics Department. Applicants should have a Ph.D. in physics and a distinguished record of publications in their research specialty. We seek candidates who have significant and widespread recognition for their scientific work; who can exercise effective leadership in a community of faculty colleagues and students and be articulate and convincing spokespersons for the department's scientific and educational missions. The Physics Department consists of 40 faculty members and has about 80 graduate students, most of them enrolled in the Ph.D. program. Research areas in the department which have significant strength are atomic and molecular physics, condensed matter physics, particle and field theory, quantum optics and laser physics, and nuclear theory. The Physics Department also has responsibility for the training of undergraduate physics majors and for a variety of introductory courses required by other university programs. Applicants with previous administrative experience and those whose research specialties overlap programs in which the Physics Department has substantial strength will be given preference. Applications, curriculum vitae, and addresses of at least three references should be sent to: **Dr. Timothy J. Killeen, Dean's Office, University of Connecticut, College of Liberal Arts and Sciences, U-98, Storrs, CT 06269.** Plans are to fill this position by September 1991. *Affirmative Action/Equal Opportunity Employer.* (Search #1A178.)

### MARINE TOXICOLOGIST/BIOCHEMIST GM-415-14 (\$52,408 TO \$68,129)

The National Oceanic and Atmospheric Administration (NOAA) invites applications for a position in its Ocean Assessments Division as **PROJECT MANAGER** and in-house authority in the areas of marine toxicology and biochemistry related to marine pollution. Duties include: developing and directing projects to identify and quantify the biological and ecological effects of marine environmental contaminants; interpreting the significance of these effects; and presenting program results. Education and experience in these areas and U.S. citizenship are required. Call 301-427-2506 or write for a copy of **Announcement #OA/N91-26JWS** to: **National Ocean Service Personnel, 1335 East West Highway, #3230, Silver Spring, MD 20910.** Deadline 1 March 1991. *Equal Opportunity Employer.*

**MANAGER, WEED SCIENCE LABORATORY.** Ishihara Sangyo Kaisha (ISK) Mountain View Research Center, an agricultural and scientific research arm of ISK emphasizing basic research, is seeking a self-motivated, highly creative plant scientist to head a small group of researchers involving the discovery and development of new agrochemical products.

We are looking for a Ph.D. plant scientist with a strong background in plant physiology, plant biochemistry, chemical ecology, and herbicide modes of action. Strong leadership and interpersonal skills are essential. Oral and written communication skills are also important.

ISK offers an outstanding professional environment, an opportunity for professional growth, and an attractive salary. For immediate consideration, please forward your curriculum vitae to: **Dr. Y. S. Hwang, San Francisco, CA 94111.** Our research facility is located in Sunnyvale, California.

## POSITIONS OPEN

### DEAN SCHOOL OF NATURAL RESOURCES THE UNIVERSITY OF MICHIGAN

Applications and nominations are invited for the position of dean of the School of Natural Resources at the University of Michigan. The dean is the chief academic and administrative officer of the school and reports directly to the academic vice president. The School of Natural Resources is an interdisciplinary, research-oriented, professional school, focusing on research and the development of policies and management programs that promote the conservation, protection, and sustainable use of natural resources. In addition, the school educates practitioners and researchers who will seek these ends. The school's activities include instruction at the undergraduate, master's, and doctoral levels and an active research program. Faculty interests are diverse: resource ecology and management, resource policy and behavior, and landscape architecture. The school is committed to an integrative, interdisciplinary, problem-solving approach in collaboration with related disciplinary departments and professional schools.

The dean provides leadership in program planning, development, and evaluation. Qualifications should include an earned doctorate, a distinguished record appropriate for a tenured appointment in the school, and the ability to generate funds for programs at the local, state, national, and international levels. The committee will begin reviewing candidate files on 4 February 1991. Applications and nominations should be sent to: **Professor Burton Barnes, Chair, School of Natural Resources, Dean Search Advisory Committee, The University of Michigan, 520 East Liberty, Ann Arbor, MI 48104-2210.** A *nondiscriminatory, Affirmative Action Employer.*

### DIRECTOR OF ALZHEIMER'S CENTER

The Department of Psychiatry of the School of Medicine, University of California, San Francisco (UCSF), is seeking a psychiatrist as director for the Alzheimer's Center which is based at the Langley Porter Psychiatric Institute. The incumbent will provide leadership for the teaching, research and clinical components of the center program; and will be responsible for coordination of all geriatric training within the Department of Psychiatry, with other UCSF departments and with programs in the community. The position will be in a state-funded salary line up to the level of full-professor commensurate with the candidate's qualifications, and will be available any time after 1 July 1991. The ideal candidate would be a Board-certified or Board-eligible psychiatrist with an established record of clinical and/or laboratory research on Alzheimer's disease or related disorders, evidence of a commitment to excellence in teaching and clinical care, and demonstrated ability in administration. Eligibility for California licensure is required. Applications must be received by 15 February 1991. Please send résumé to: **Leonard S. Zegans, M.D., Search Committee Chair, UCSF Department of Psychiatry, 401 Parnassus Avenue, Box F, San Francisco, CA 94143-0984.** UCSF is an *Affirmative Action/Equal Opportunity Employer.* Women and minorities are encouraged to apply.

### DIRECTOR OF THE MORRIS ARBORETUM OF THE UNIVERSITY OF PENNSYLVANIA

The Director of the Morris Arboretum of the University of Pennsylvania is the chief educational and administrative officer reporting directly to the provost of the university. He or she should qualify for faculty appointment at the University of Pennsylvania. The director works closely with the Board of Managers which aids and assists in the management of the financial affairs and administration of the Arboretum's teaching, research, and outreach service programs.

This strong leadership position calls for someone with an established reputation as a researcher, educator and/or manager in the fields of horticulture or some related discipline. Interpersonal and fund-raising skills and a demonstrated record of academic and administrative achievement are important.

*The University of Pennsylvania is an Equal Opportunity Employer.*

To apply: Candidates meeting this criteria should send full résumés to:

**W. H. Wurster  
Chairman, Search Committee  
940 Haverford Road, Suite 103  
Bryn Mawr, PA 19010**

## POSITIONS OPEN

The Department of Commerce (DOC), NOAA, Office of Oceanic and Atmospheric Research is seeking applicants for the position of **MANAGEMENT AND PROGRAM ANALYSIS OFFICER, GM-343-15 (\$59,216 to \$76,982).** Duties: The position serves as Chief of the Resource Management Staff and is responsible for policy analysis, program evaluation, budget formulation, and related administrative support activities. The position is located in Silver Spring, Maryland. Applicants must submit a Standard Form 171 by 16 January 1991 to: **NOAA/Personnel Operations Division/NOS-OAR Operations Branch, SSMC-1, OA213, #3230, 1335 East West Highway, Silver Spring, MD 20910.** For additional information telephone: 301-427-2506 refer to: **Vacancy #: OA/O-91-02.MMP.** DOC is an *Equal Opportunity Employer.*

### UNIT DIRECTOR GENERAL IMMUNOLOGY

Rush Medical College, Department of Immunology/Microbiology, and the Office of Consolidated Laboratory Services at Rush-Presbyterian-St. Luke's Medical Center are seeking a proven professional to assume the key position of unit director of the General Immunology Laboratory at Rush. The laboratory serves Rush's 1265-bed medical center facility, which is one of the nation's outstanding leaders for integrating patient care, education, and research. This laboratory offers services in the areas of serum protein electrophoresis, autoantibody testing, and infectious disease serology. It also participates in educational programs for pathology residents, medical technologists, and medical, doctoral, and post-doctoral students. This laboratory is part of the Division of Immunology, which includes molecular biology, retrovirology, flow cytometry, genetics, and endocrinology.

The successful candidate should have a strong commitment to service, research, and education, and will be expected to develop an independent research or R&D program and to teach in the university. Professional experience in the diagnostic laboratory, familiarity with immunologic techniques, and documented investigational productivity are sought. Salary will depend upon training and experience. Applicants must possess an M.D. and/or a Ph.D. or an equivalent degree and should be Board-certified or -eligible. Applicants should submit curriculum vitae, statement of research interest, and the names of three references to: **Meryl H. Haber, M.D., Medical Director, Office of Consolidated Laboratory Services, Rush-Presbyterian-St. Luke's Medical Center, 1653 West Congress Parkway, Chicago, IL 60612.** An *Equal Opportunity/Affirmative Action Employer.*

### SCIENCE DIRECTOR WEST COAST NATIONAL UNDERSEA RESEARCH CENTER UNIVERSITY OF ALASKA FAIRBANKS

The University of Alaska Fairbanks is a new Center for NOAA's National Undersea Research Program. The science director will be responsible for the direction and coordination of the undersea science program for the U.S. West Coast and Antarctica. Duties include (i) develop effective communication with research, (ii) develop and implement programmatic research themes, (iii) prepare annual announcement of research opportunities and coordinate proposal review, (iv) assist with preparation of the Center's annual report and proposal to NOAA, and (v) some supervision of Center staff. The science director will report to the center director. This is a 12-month per year appointment. Preferred qualifications include a Ph.D. in oceanography, submersibles and ROVs. Communication and interpersonal skills will be evaluated. Applications will be accepted until 8 February 1991, or until a qualified applicant is found. Submit résumé and names and addresses of three references to:

**Director  
West Coast National Undersea Research Center  
School of Fisheries and Ocean Sciences  
University of Alaska Fairbanks  
Fairbanks, AK 99775-1080**

*The University of Alaska is an Affirmative Action/Equal Opportunity Employer and educational institution. Person hired must comply with provisions of the Federal Immigration Reporting Act of 1986 and have a valid social security number.*

Your application for employment may be subject to public disclosure should you be selected as a finalist.

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The University  
of  
British Columbia

## FACULTY OF FORESTRY

**Applications And Nominations Are Invited  
For The Following Department Head  
Positions In The Faculty of Forestry**

**DEPARTMENT OF FOREST SCIENCES**, including interests in the natural sciences associated with forestry.

**DEPARTMENT OF FOREST RESOURCES MANAGEMENT**, including interests in the management sciences - natural, social or quantitative - associated with forestry.

**DEPARTMENT OF HARVESTING AND WOOD SCIENCE**, including interests in wood science and technology, wood chemistry, harvesting, forest engineering, or a closely allied field.

Applications should contain a letter stating interests and qualifications; the names, addresses and telephone numbers of at least three references; and three to five key publications. The successful candidate will have an international record of excellence in research and a demonstrated interest in the scientific problems arising in the practice of forestry broadly defined. Further details on each of the above positions are available upon request. Salary will be determined by qualifications and experience. The closing date for applications is **March 1, 1991**. Please direct inquiries, nominations and applications to: **Professor Clark S. Binkley, Dean, Faculty of Forestry, The University of British Columbia, 270 - 2357 Main Mall, Vancouver, B.C., CANADA V6T 1W5.**

In accordance with Canadian immigration requirements, priority is given to Canadian citizens and permanent residents of Canada. The University of British Columbia is committed to the Federal Government's employment equity program, and encourages applications from all qualified individuals.

## Career Opportunities IN BIOTECHNOLOGY

SyStemix, Inc. is an exciting, innovative company utilizing revolutionary technology—the SCID-hu mouse chimaera—for the study of human disease and its treatment. Areas of expertise include cellular immunology, hematology, retrovirology, and molecular biology. One principal research focus is the human stem cell—its identification and characterization, its growth in response to novel factors, and its potential in bone marrow transplantation. We seek creative individuals to join us in developing this challenging area of science. Opportunities are as follow:

### Research Scientist (2)

Individuals will further develop and characterize novel assay systems, *in vitro* and *in vivo*. One successful applicant will concentrate on the establishment of *in vivo* bone marrow transplantation systems for the preclinical evaluation of human stem cell populations. The other will develop both *in vitro* and *in vivo* systems suitable for the study of committed human megakaryocyte progenitor cells, and the identification of associated growth factors.

Both positions require a PhD and/or MD with a strong background in immunology and hematology, and preferably 2-3 years experience in a suitable research environment. Demonstrated expertise with animal models, cell culture, or growth factors an advantage.

### Development Manager

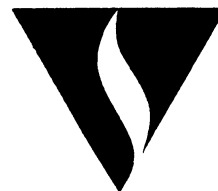
The successful candidate will lead a scientific development team in the next phase of a program to bring human hematopoietic stem cells to the clinical arena. He/she will have the responsibility to create, implement and scale-up two processing methodologies to purify human stem cells from bone marrow in an effective, safe, and reproducible manner appropriate for a clinical setting. This may involve significant external contact with technology-based companies and regulatory authorities, as well as clinicians.

The ideal candidate is a PhD/MD with at least 5 years relevant experience following postdoctoral studies. He/she will have a strong background in cell biology, with proven technical creativity and an excellent track record in development. Interactive management skills are essential. Knowledge of regulatory and clinical trial processes essential.

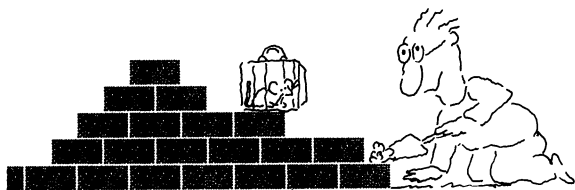
We are also looking for **Research Associates** at all levels and have a position for a talented **Laboratory Manager** capable of supporting an R&D staff of 60 employees. For further details on these positions, please contact SyStemix.

SyStemix offers competitive salaries, benefits, and equity participation, as well as a challenging research environment. Please send your resume to: SyStemix, Inc., Attn: Human Resources 3400 W. Bayshore Road, Palo Alto, CA 94303. EOE.

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## POSITIONS OPEN

### EXECUTIVE OFFICER COUNCIL ON UNDERGRADUATE RESEARCH

Applicants, nominations, or inquiries are invited for the position of executive officer of the Council on Undergraduate Research (CUR). CUR is a national society dedicated to the advancement of scientific research by students and faculty at primarily undergraduate colleges and universities. Membership is available and open to anyone with such an interest. CUR is currently organized into biology, chemistry, geology, mathematical sciences, physics/astronomy, and at-large sections governed by 122 councilors elected by the membership. CUR publishes a quarterly newsletter and directories of research at undergraduate institutions; holds semi-annual conferences for science faculty, administrators, and representatives of federal funding agencies and private foundations; sponsors undergraduate summer research fellowships; and provides consultants to undergraduate science departments. The executive officer will coordinate the activities of the volunteer councilors, administer all CUR programs, and maintain liaisons with other scientific organizations. Candidates should have both organizational talent and experience with scientific research at primarily undergraduate institutions. The initial appointment is for a 3-year term, renewable after review. The salary is competitive with academic salaries at professional levels. For further information, write to: **Professor Stuart B. Crampton, President, Council on Undergraduate Research, Department of Physics, Williams College, Williamstown, MA 01267.**

### EDITOR, THE BIOPHYSICAL JOURNAL

The Biophysical Society is looking for candidates to succeed Thomas E. Thompson as editor of *The Biophysical Journal* in July 1992. The editor of *The Biophysical Journal* is responsible for supervising the day to day operations of the journal and maintaining the quality and tone of the journal through appropriate use of associate editors, members of the editorial board, and referees. The initial term of the editor is 3 years. *The Biophysical Journal* has maintained its high quality while expanding at an annual rate of over 15%. The society believes that this growth and excellence can be maintained. The Biophysical Society provides financial support for on-site operations by the editorial office and is committed to find ways to accelerate and improve these operations. Candidates should have considerable experience in the writing and review of scientific manuscripts. They should be familiar with the many areas of research represented by both the Biophysical Society and *Journal*. The editor has to deal with authors and referees with skill and tact. Nominations or applications, with résumé, should be submitted before 15 February 1991. Communications should be addressed to: **Dr. Richard W. Lymn, Chair, Joint Publications Committee, The Biophysical Society, 9650 Rockville Pike, Room 0512, Bethesda, MD 20814.**

The Department of Pathology of the University of Texas Medical Branch (UTMB) at Galveston invites applications for a rewarding tenure-track **FACULTY POSITION IN RESEARCH**. UTMB employs 8200 people and consists of four schools, seven hospitals, and two research institutes. Applicants should have a Ph.D. or M.D. degree and a minimum of 2 years of postdoctoral research experience. The department is seeking individuals with a strong record of scientific achievement. Preference will be given to applicants who are using modern approaches to the study of bacterial pathogenesis, but other disciplines such as virology and cellular immunology will also be considered. Expertise in the areas of molecular biology and/or biochemistry are essential. Duties will include developing and maintaining a strong independent research program and interacting with other faculty investigating the pathobiology and immunobiology of infectious diseases. Applicants will be expected to actively seek extramural funding. Other duties will include the teaching of both medical and graduate students. The Department of Pathology includes both clinical and basic scientists whose interests represent a diverse mixture of research areas. Interested applicants should send a detailed curriculum vitae, an outline of current research interests, recent reprints, and three letters of reference to: **David H. Walker, M.D., Chairman, Department of Pathology, The University of Texas Medical Branch, Galveston, TX 77550.** UTMB is an Equal Opportunity/Affirmative Action Employer, M/F/V/H. UTMB hires only individuals authorized to work in the United States.

## POSITIONS OPEN

### THE UNIVERSITY OF MELBOURNE AUSTRALIA DEPARTMENT OF OPHTHALMOLOGY RESEARCH FELLOW DEPUTY DIRECTOR FOR LIONS' EYE BANK

Following the appointment of Professor Hugh Taylor to the Ringland Anderson Chair of Ophthalmology, The Lions' Eye Bank is being established in the Department of Ophthalmology at The Royal Victorian Eye and Ear Hospital using funds committed by the Lions Clubs of Victoria and Southern New South Wales.

Applications are invited from a scientist with a Ph.D. or equivalent degree for the position of deputy director. The appointee will be responsible for the establishment and running of the eye bank with the help of a research assistant. An interest in and a commitment to research involving the eye is expected; time will be available for this. Possible fields of research include cell biology, immunology, or biochemistry. Eye bank duties will involve organ retrieval, evaluation, distribution, and quality control.

Salary: \$A33,163 to \$A43,096 (research fellow, Gr2), \$A43,984 to \$A51,015 (senior research fellow), depending on qualifications and experience.

For further information and a position description, please call **Professor Taylor, 613-665 9564**. Applications close on 31 January 1991 and should be sent, in duplicate, quoting three referees, to: **Director, Personnel Services, The University of Melbourne, Parkville, Victoria, 3052, Australia.** Please quote reference number B/576/058.

*The University of Melbourne is an Equal Opportunity Employer and has a smoke-free work-place policy.*

### SCIENTIFIC WRITER/RESEARCH ADMINISTRATOR

American Red Cross national research and development laboratory seeks individual to prepare annual report and other publications, to organize annual scientific conference for Red Cross scientists at the national laboratory and regional Red Cross Blood Centers, to manage program for award of research funds to Red Cross Regional Blood Centers and the regular peer review of research groups within the national laboratory, and to manage submission of research proposals. Ability to write scientific articles targeted for lay audiences and to manage multiple projects is a must. Graduate degree in biomedical science or related field and experience in research is required. Excellent salary and benefit package. Submit résumés to: **Dr. Howard E. Sandberg, Director, Research and Development Administration, American Red Cross, Holland Laboratory, 15601 Crabbs Branch Way, Rockville, MD 20855 or Fax: 301-738-0553. M/F/H/V.**

### BIOLOGICAL SCIENCES STAFF THE UNIVERSITY OF CHICAGO

Positions available to assist faculty with undergraduate courses, primarily with laboratories:

- **POSTDOCTORAL LECTURESHIPS.** Starting autumn for recent Ph.D.'s; half-time teaching in three quarters and postdoctoral research at other times. (i) Teach physiology and morphology; research in comparative physiology. (ii) Teach evolution; research area open. Submit curriculum vitae, statement of research interests and teaching competence, and names of three references and of prospective Chicago faculty research sponsor. First year salary: \$20,000, renewable for second year.

- **LABORATORY MANAGER** positions, now open but starting no later than autumn for (iii) advanced introductory sequence (cell biology, genetics, evolution), or majors' courses in (iv) molecular and cell or (v) organismal and evolutionary biology. Master's or Ph.D. required. Salary: minimum \$24,000. Submit curriculum vitae, statement of teaching and technical competence, and names of three references.

Apply, specifying position(s) of interest, by 15 February 1991 to: **Biological Sciences Collegiate Division, University of Chicago, 1116 East 59th Street, Chicago, IL 60637.** An Affirmative Action/Equal Opportunity Employer.

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

**FAX NUMBER: 202-682-0816**

## POSITIONS OPEN

### FACULTY POSITION IN CARDIOLOGY

The University of Texas Southwestern Medical School at Dallas is significantly expanding its faculty in the Division of Cardiology. Currently there is a position available in the Center for Molecular Cardiology. Candidates must give evidence of scholarly achievement or potential to join this intellectually and clinically vibrant department. The position available is for an **ASSISTANT PROFESSOR** who holds an M.D. or Ph.D. with 2 to 3 years of postdoctoral fellowship and also has extensive experience in molecular biology and virology with an interest in gene regulation and must have published significant articles in peer-reviewed international journals.

Interested parties should send curriculum vitae and three letters of recommendation to: **Dr. R. Sanders Williams, Chief of Cardiology, Department of Internal Medicine, Room CS7.102, University of Texas Southwestern Medical School, Dallas, TX 75235-9047.** The University of Texas Southwestern Medical Center is an Equal Opportunity Employer.

**ECOSYSTEM STUDIES.** The Ecology and Evolutionary Biology Department at Rice University seeks to fill a **HUXLEY RESEARCH INSTRUCTORSHIP**. This is a 2-year appointment for a recent Ph.D. Preference will be given to candidates interested in wetland trace gas flux or biogeochemistry, microbial ecology, ecological modeling, plant physiological ecology, or global change research. In addition to research, some teaching in an ecology or global change course is expected. The instructor will be part of the multidisciplinary Earth Systems Institute. Applications, including curriculum vitae, a summary of research and teaching interests, and three letters of reference, are to be sent to: **Dr. P. A. Harcombe, Ecology and Evolutionary Biology Department, P.O. Box 1892, Houston, TX 77251** by 15 February 1991. *Rice University is an Equal Opportunity/Affirmative Action Employer.*

### MOLECULAR HIV RETROVIROLOGIST

The Department of Microbiology, University of Washington, is seeking candidates for a **TENURE-TRACK FACULTY POSITION** to complement an ongoing interdepartmental multidisciplinary research program on human immunodeficiency virus (HIV), simian immunodeficiency virus (SIV), and other retroviruses.

Applicants will be expected to develop a successful and independent research program using molecular and genetic approaches to study HIV. Teaching responsibilities include involvement in undergraduate and graduate courses and supervision of graduate students. Applicants should send their curriculum vitae, a short statement of current research interests, and the names of three references by 1 March 1991 to:

**Virology Search Committee, c/o Dr. Eugene Nester  
Department of Microbiology, SC-42  
University of Washington, Seattle, WA 98195**

*The University of Washington is an Equal Opportunity/Affirmative Action Employer, and we are especially eager to identify qualified women and minorities.*

### FACULTY POSITIONS ALBERT EINSTEIN COLLEGE OF MEDICINE DEPARTMENT OF MOLECULAR PHARMACOLOGY

Candidates are invited to apply for positions at the level of **ASSISTANT PROFESSOR**. We are seeking individuals with a record of excellence in research who will apply skills in biochemistry, molecular biology, genetics, and cell biology to solve problems relevant to molecular pharmacology. An essential requirement is an innovative research program that complements programs within the department and the medical school. Research areas of interest to the department include: mechanisms of hormone, oncogene, growth factor and neurotransmitter actions; regulation of gene expression and differentiation; molecular basis of disease; structure, function and regulation of receptors and channels; second messengers and protein phosphorylation; post-translational modification and intracellular targeting. Candidates should submit curriculum vitae and a statement of research interests, goals, and plans. Letters from three references should be submitted on behalf of the candidates. All materials should be sent to: **Ms. Anna Cioffi, Administrator, Department of Molecular Pharmacology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461.** Equal Opportunity Employer.



## POSITIONS OPEN

### FACULTY POSITIONS DEVELOPMENTAL BIOLOGY

The Markey Program in Developmental Biology at Northwestern University Medical School invites applications for tenure-track faculty positions at the **ASSISTANT OR ASSOCIATE PROFESSOR** levels. Successful candidates will have demonstrated significant research capabilities in developmental biology. Appointments will be in participating basic science and clinical departments; rank and salary will be commensurate with the successful candidates' qualifications and experience. Applicants should submit curriculum vitae, statement of their research interests and names of three references to: **Philip M. Iannaccone, M.D., D. Phil., Director, Markey Program in Developmental Biology, 303 East Chicago Avenue, Chicago, IL 60611. Telephone: 312-503-5232.**

*Equal Opportunity/Affirmative Action Employer.*

### SYSTEMATIST/ECOLOGIST

**ASSISTANT PROFESSOR**, nontenure-track, 9-month, renewable annually, to begin 1 August 1991. The successful candidate will be expected to participate in the instruction of general biology or general botany and also to develop and teach other courses; for example, an upper level course and a graduate course related to the candidate's specialization. The successful candidate will have expertise in plant population ecology or symbiotic relationships involving plants (appropriate examples include lichens, mycorrhizae, pollination biology, and zooxanthellae) and will be expected to develop an active program of research on Hawaiian plants. Send curriculum vitae, reprints, statement of research and teaching interests, and names of three referees to: **Systematics/Ecology Search Committee, Department of Botany, University of Hawaii at Manoa, 3190 Maile Way, Honolulu, HI 96822.** Closing date for receipt of applications: 15 February 1991. Inquiries accepted by FAX: 808-956-3923. *An Equal Opportunity/Affirmative Action Employer.*

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# Research Associates African Horsesickness

## Plum Island Animal Disease Center

The Center is expanding its ongoing research into the molecular virology and pathogenesis of African horsesickness virus (AHSV). These studies will be conducted by a new, well-funded, multidisciplinary group located in well-equipped laboratories in the Center's high security biocontainment facilities.

Two Postdoctoral Research Associate positions are currently available. One position (#1N012) involves production of a cDNA library for AHSV, restriction enzyme analysis, nucleic acid sequencing and expression of clones corresponding to various viral genes in either prokaryotic or eukaryotic systems. Experience in recombinant DNA technology and knowledge of protein expression systems is desirable. The second position (#1N011) will involve selection and characterization of virulence variants of AHSV. Individuals experienced with orbiviruses or reoviruses and oligonucleotide mapping are encouraged to apply.

The Center is located off the northeast tip of Long Island, New York. USDA ferry services to Orient Point, NY and Old Saybrook, CT offer a choice of living on Long Island or in Connecticut. Close collaborations are being developed with research institutions in the area including: Yale and Tufts Universities, the University of Connecticut and the State University of New York at Stony Brook.

Appointments are for two or three years from March 1, 1991 (or by arrangement) and, based on qualifications, will be at the GS-11 (approximately \$31K/year) or GS-12 level (approximately \$37K/year). Successful candidates must have obtained a Ph.D. or equivalent degree in a relevant discipline within the last three years. Applicants should send a curriculum vitae along with the names and addresses of three references to:

Dr. W.W. Laegreid (#1N011)  
Dr. M.J. Grubman (#1N012)  
USDA/ARS, Plum Island Animal Disease Center  
P.O. Box 848  
Greenport, LI, NY 11944-0848

**Applications must be received before February 15, 1991**

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WOMEN AND MINORITIES ARE  
ENCOURAGED TO APPLY**



**United States Department of Agriculture  
Agricultural Research Service**

## POSITIONS OPEN

### FACULTY POSITION IN PROCARYOTIC MOLECULAR BIOLOGY

The Center of Marine Biotechnology of the Maryland Biotechnology Institute, University of Maryland System, invites applications from outstanding candidates to occupy full-time, tenure-track positions (ASSISTANT OR ASSOCIATE PROFESSOR levels) in procaryotic molecular biology. Prior work in marine systems is advantageous but not essential. The successful candidate will be expected to foster independent research programs in one of the following general areas; (i) molecular ecology, with an emphasis on microbial diversity in communities; (ii) molecular biology of archaeobacteria or thermophilic bacteria; and (iii) biochemical and genetic aspects of photosynthetic microorganisms. Many opportunities exist for collaborative research at the Center of Marine Biotechnology, and many of the faculty hold joint appointments at other campuses in the University of Maryland System.

Candidates must have a Ph.D. and a minimum of 2 years of postdoctoral experience. To apply, submit a letter of application, curriculum vitae, brief description of current and future research plans, and names and addresses of three referees to:

**Prokaryotic Molecular Biology Search Committee**  
Center of Marine Biotechnology  
600 East Lombard Street  
Baltimore, MD 21202

Closing date for applications is 15 February 1991.

*The University of Maryland System is an Equal Opportunity/Affirmative Action Employer.*

The Department of Biology at the Virginia Military Institute (VMI), Lexington, Virginia invites applications for a possible **TENURE-TRACK POSITION** commencing 1 August 1991. Requirements for position include ability to teach general biology, developmental biology, and upper level courses in area of expertise. Preference will be given to candidates who hold the Ph.D. degree and who can also demonstrate an interest in conducting small animal research.

VMI is an undergraduate military college located in the Shenandoah Valley of Virginia. Faculty wear uniforms but are not required to perform nonacademic duties or to have prior military experience.

Interested candidates should send résumé, transcript, and three letters of recommendation by 1 March 1991 to: **Fred C. Swope, Ph.D., Department of Biology, VMI, Lexington, VA 24450.** *VMI is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION/NEUROSCIENCES ALZHEIMER RESEARCH LABORATORY CASE WESTERN RESERVE UNIVERSITY

A tenure-track faculty position is available at the **ASSISTANT OR ASSOCIATE PROFESSOR** level in the Departments of Neurology and Neurosciences for an individual with training in the neurosciences. The specific area of research interest is less important than scientific excellence. Ideally, the applicant will have a research program relevant to neuroplasticity, growth factors, aging, or Alzheimer's disease. The applicant will be expected to build a strong independent research program. Send a curriculum vitae, a summary of research interests, and the names of three references to either **Dr. Peter Whitehouse** or **Dr. Gary Landreth, Alzheimer Research Laboratory, E504, Case Western Reserve University School of Medicine, 2119 Abington Road, Cleveland, OH 44106.** *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

### THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE PROTEIN/PEPTIDE CHEMIST TO WORK IN UNIVERSITY FACILITY

The Johns Hopkins University School of Medicine has a position open for a person with formal training and experience in protein/peptide chemistry to help facilitate the operation of a protein/peptide/DNA facility. Individuals with experience using applied biosystems instrumentation will be given preference. Interested individuals should send a curriculum vitae and two references to: **Dr. Peter L. Pederson, Department of Biological Chemistry, The Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205-2185.** *The Johns Hopkins University School of Medicine is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

**BIOCHEMIST.** For fall 1991. **TENURE-TRACK OPENING** for a joint appointment in biology and chemistry, to teach courses in biochemistry, develop strong research program with undergraduates, and establish and coordinate an interdisciplinary program in biochemistry. Rank commensurate with experience and qualifications. Send résumé, statement of research, copies of pertinent transcripts, and three letters of recommendation to: **Biochemist Search Committee, c/o Department of Biology, Gustavus Adolphus College, St. Peter, MN 56082.** Application deadline: 1 February 1991. *Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

**MARINE SCIENTIST.** Tenure-track, new Ph.D. program to begin 1 September 1991. Candidate should have a Ph.D. in an area complementary to the marine sciences program and be able to teach physical oceanography at the graduate level and maintain an active research program. Appointment level and salary will be commensurate with experience. Applications will be accepted until 28 February 1991, and should include current curriculum vitae and three references. Send to: **Dr. Murlene Clark, Department of Geology, LSB 341 University of South Alabama, Mobile, AL 36688.** *The University of South Alabama is an Affirmative Action/Equal Opportunity educational institution.*

**DEPARTMENTAL BIOLOGY.** Sabbatical replacement for the 1991-92 academic year to teach developmental biology, general biology, and other courses in area of specialty. Expertise in molecular and cellular biology of invertebrate development preferred. The position may be continued the following year to teach both genetics and general biology. Hanover College is a selective, independent, undergraduate liberal arts college associated with the Presbyterian church. The Department of Biology utilizes our rural setting to support a well-rounded program in organismal and molecular-cellular biology. *Affirmative Action/Equal Opportunity Employer.* Send letter, curriculum vitae, transcripts, and at least three letters of recommendation to: **Charles Flynn, Dean of the College, Hanover College, Hanover, IN 47243.**

### INSTITUTE OF BIOSCIENCES AND TECHNOLOGY TEXAS A&M UNIVERSITY

Texas A&M University is establishing the Institute of Biosciences and Technology (IBT) in the Texas Medical Center in Houston. The function of the IBT is to merge the strengths of the Colleges of Agriculture and Life Sciences, Veterinary Medicine, and Engineering with the scientific and clinical strengths with the Texas Medical Center. All **FACULTY** in the Houston IBT will have positions in academic departments in College Station. Academic rank is dependent upon experience and qualifications. Outstanding individuals having research interests dealing with a broad range of biomedical investigations are sought. The 11-story IBT building is scheduled for completion in September.

Applicants should send curriculum vitae, list of publications, a brief description of current and future research interests, and have three letters of reference sent to: **Dr. Robert D. Wells, Director, Institute of Biosciences and Technology, Texas A&M University, College Station, TX 77843-2128.**

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

**LECTURER IN BIOLOGICAL SCIENCES.** The Department of Biological Sciences, University of Nevada, Las Vegas (UNLV), seeks applicants for a non-tenure-track position as lecturer in biological sciences. Responsibilities will include teaching of introductory biology courses (lecture and laboratory components of a nonmajors' human biology course and a microbiology course). The successful candidate becomes a professional staff member of the department. Experience in, and commitment to, undergraduate biology instruction is expected. Master's degree in a life science required. Salary is negotiable; position available August 1991. Send curriculum vitae and three letters of reference to: **Dr. Wes Niles, Chair, Lecturer Search Committee, Department of Biological Sciences, University of Nevada, Las Vegas, NV 89154.** Applications must be received no later than 15 February 1991. *UNLV is an Equal Opportunity/Affirmative Action Employer and employs only U.S. citizens and aliens authorized to work in the United States.*

## POSITIONS OPEN

The Division of Natural Sciences, Incarnate Word College (IWC), invites applications for **THREE TENURE-TRACK POSITIONS** with appointments beginning in fall of 1991. Candidates should demonstrate interest and experience in teaching excellence at graduate and undergraduate levels. Ph.D. required.

- **GENETICS.** Molecular and classical genetics.
- **ANALYTICAL CHEMISTRY.** Environmental chemistry interest desirable.
- **PHYSICS/GEOLOGY.** Background sufficient to develop courses in calculus-based physics, engineering statics, and physical/historical geology.

Applications should include cover letter indicating the position sought, teaching and research interests, and curriculum vitae. The closing date is 1 February 1991. Applications and three letters of support should be sent to: **Dr. Andrew G. Cleveland, Incarnate Word College, Natural Science Division, 4301 Broadway, San Antonio, TX 78209.** *Equal Opportunity/Affirmative Action Employer. IWC encourages applications from minorities and women.*

University of California, San Diego. **TENURED/TENURE-TRACK POSITIONS IN BIOCHEMISTRY AND IN PHYSICAL CHEMISTRY.** The Chemistry Department of the University of California, San Diego, is recruiting for two positions, one each in the areas of biochemistry and physical chemistry. Candidates must have a Ph.D. and a demonstrated ability for creative research and for teaching at the undergraduate and graduate levels. Of special interest for the biochemistry appointment are the areas of structural biochemistry and biochemical regulation. Candidates at all levels are encouraged to apply. Open positions subject to availability of funds. All applications received through 11 February 1991 will be given thorough consideration. Salary commensurate with experience and based on the University of California pay scale. Candidates should send curriculum vitae, a list of publications, reprints of up to five representative papers, a summary of research plans, and names and addresses of three references to: **University of California, San Diego, Chairman, (Biochemistry) (Physical Chemistry) Search Committee, Department of Chemistry—0332, 9500 Gilman Drive, La Jolla, CA 92093-0332.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

### BIOLOGY INSTRUCTOR FOOTHILL COMMUNITY COLLEGE

Primary areas of classroom instruction will include: organismic and evolutionary biology, multicellular life, environmental biology, and ecology/natural history. Secondary duties may include: introduction to molecular-chemical aspects of biology, human biology, biology of human reproduction, and marine biology. This position will also be responsible for student recruitment and advising, acting as a liaison between college and professional and/or educational biological organizations, participating in curriculum development and in college activities/committees. Evening classes may be part of the teaching load. M.A. in biology or equivalent. Emphasis in organismic and population biology or related field preferred. \$30,684.80 to \$49,706.80 annually plus benefits. Application and complete job description may be obtained from: **Employment Services, Foothill-De Anza Community College District, 12345 El Monte Road, Los Altos Hills, CA 94022.** Telephone: (415) 949-6217. A résumé or curriculum vitae may not be substituted for a completed application. Open until filled with first review date of 28 January 1991. *Affirmative Action/Equal Opportunity Employer.*

### ASSISTANTSHIPS GRADUATE PROGRAM IN NEUROSCIENCE

The Neuroscience Program at College of Medicine at The Milton S. Hershey Medical Center of the Pennsylvania State University has assistantships available in August 1991. This interdepartmental program is designed to confer a Ph.D. degree with a major in neuroscience. Participating faculty have established research programs in molecular biology of the nervous system, neurophysiology, neuroendocrinology, behavioral science, neuropharmacology, neurovirology, and cerebral blood flow and metabolism. Interested candidates are invited to apply to: **Dr. Robert B. Page, Director, Neuroscience Program, P.O. Box 850, Hershey, PA 17033.**

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## Ph. D SCIENTIST MEMBRANE RESEARCH

The Liposome Company, a growing biopharmaceutical firm specializing in lipid-based drug delivery systems, is offering a challenging opportunity for a scientist with a background in liposomology, membrane biophysics or physical chemistry, to conduct a broad-based research program as part of its innovative liposomology group. Ph.D and 1-3 years post-doctoral experience required. The Liposome Company is an equal opportunity employer offering competitive salaries, generous stock options, comprehensive benefits and a creative work environment. Please forward resume to:

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**The Liposome  
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One Research Way, Princeton, NJ 08540

### SULTAN QABOOS UNIVERSITY — SULTANATE OF OMAN COLLEGE OF MEDICINE

Applications are invited for the following posts in the Department of Biochemistry.

Both MD Chemical Pathologists and Ph.D. Clinical Biochemists, with teaching experience within basic and clinical biochemistry need apply. Requirements for the appointment are:

#### **Professor**

At least ten years teaching experience post Ph.D., at least two years of which in an equivalent grade. Normally a minimum of 18 substantial publications in international referred journals or books in the area of specialization.

#### **Associate Professor**

At least six years of teaching experience post Ph.D., at least two years of which must be as Associate Professor or equivalent grade. Normally a minimum of six substantial publications or research.

#### **Assistant Professor**

At least four years teaching experience as Assistant Professor or equivalent grade post Ph.D. Minimum of three substantial publications or research in the same area of specialization in international referred journals or books.

Sultan Qaboos University is recognized by many major Western universities and is located in a pleasant peaceful country, facing the Indian Ocean.

An attractive package of benefits is available to suitable applicants. Applications should be addressed to:

**The Administrator  
College of Medicine  
Sultan Qaboos University  
P.O. Box 32485  
Al-Khod, Sultanate of Oman  
Fax: 513419 Phone: (Oman-968) No. 513333**

The following documents must be enclosed:

1. Photocopies of Academic and Professional experience certificates
2. Curriculum Vitae

## BIOTECHNOLOGY RESEARCH OPPORTUNITIES

As one of America's top two brewers, Miller Brewing is committed to supporting a progressive research and development program in biotechnology. Presently, we have three post-graduate term appointments available for individuals seeking valuable industrial experience in biotechnology. Each term appointment is for 12 months and offers the possibility of renewal. The candidates we seek will possess the ability and desire to work independently in a multidisciplinary research team environment.

#### • **BIOTECHNOLOGIST (Downstream Processing)**

##### **Term Appointment**

Candidate should have an M.S. or Ph.D. in molecular biology, biochemistry, chemical engineering or a related field with skills in protein isolation, purification, and/or downstream processing of fermentation components.

#### • **BIOTECHNOLOGIST (Molecular Cloning)**

##### **Term Appointment**

Candidates should have an M.S. or Ph.D. in molecular biology, microbiology or a related field with skills in molecular cloning and manipulation of genes. Experience in yeast expression/secretion systems would be helpful.

#### • **BIOTECHNOLOGIST (Analytical)**

##### **Term Appointment**

Candidates should have a B.S., M.S. or Ph.D. in biochemistry, chemistry or a related field with skills in protein isolation and analysis.

From Miller, expect a highly focused and goal-oriented challenge offering broad benefits and competitive pay. For consideration send your resume, indicating the position for which you are qualified, to: **Personnel Department, Dept #1061-90, MILLER BREWING COMPANY, 3939 W. Highland Blvd., Milwaukee, WI 53201-0482.**



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**Dr. Janet D. Robshaw**  
Weis Center for Research  
Geisinger Clinic  
Danville, PA 17822.

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**Geisinger**

## Research Scientists Research Associates

**BioGenex Laboratories**, a San Francisco Bay Area company involved in the cellular diagnostics field seeks qualified candidates with prior training and expertise in the following areas:

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- Analytical Immunocytology
- *In Situ* Hybridization

Applicants should possess strong management and research skills, and a successful track record in a fast paced environment. Prior industry experience helpful but not essential. BioGenex offers competitive compensation, excellent benefits, opportunity for advancement, and a prime location. Please send resume and salary history to:



**BIOGENEX LABORATORIES**  
4600 Norris Canyon Rd.  
San Ramon, CA 94583

## POSITIONS OPEN

### FACULTY POSITIONS DEPARTMENT OF BIOLOGICAL SCIENCES WELLESLEY COLLEGE

The Department of Biological Sciences at Wellesley College, a liberal arts institution located ten miles west of Boston with a student body of 2200 women, invites applications for positions to be filled by September 1991. The department is housed in a science center complex with modern facilities for effectively integrating teaching and research.

Tenure-track appointment at the **ASSISTANT PROFESSOR** level in **NEUROSCIENCE**. Preferred areas of specialization are the neural basis of behavior or fundamental neurophysiology. The successful candidates will be expected to teach courses in introductory biology, physiology, and neuroscience, and to participate in our Interdepartmental Program in Psychobiology. We are seeking applicants who demonstrate a genuine commitment to both undergraduate teaching and maintaining a productive research program that will involve undergraduate students.

**ONE-YEAR REPLACEMENT** openings for one full-time and one part-time **ANIMAL PHYSIOLOGIST** to teach in introductory human biology, comparative physiology and anatomy, and advanced vertebrate physiology, and a part-time **PLANT BIOLOGIST** to teach an intermediate level plant physiology course.

Applicants must have a Ph.D. In the case of the tenure-track position, 2 years of postdoctoral experience are preferred. Credentials will be reviewed when complete. Applicants should send their curriculum vitae, graduate transcript, a brief outline of research plans, three letters of recommendation to: **Search Committee, Department of Biological Sciences, Wellesley College, Wellesley, MA 02181, no later than 15 February 1991.**

*Wellesley College is an Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITION IN STRUCTURAL RETINAL BIOLOGY

The Department of Ophthalmology, University of Florida, invites applications for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level in the area of structural retinal biology. The department is particularly interested in candidates who utilize modern morphological methods to investigate structure and function of the vertebrate retina. Candidates must have at least a Ph.D. degree, postdoctoral experience, and demonstrate exceptional promise in research. Candidates are expected to develop a vigorous extramurally funded research program and to supervise a well-equipped electron microscopy core facility that serves an active group of vision researchers. Opportunities exist for joint appointments with appropriate basic science departments. Recruiting deadline is 15 February 1991 to start 1 April 1991. Candidates should send curriculum vitae, a list of publications, a statement of research activities and goals, and the names of three referees to: **George A. Stern, M.D., Professor, Department of Ophthalmology, Box J-284 JHMC, University of Florida, Gainesville, FL 32610-0284. The University of Florida is an Equal Opportunity/Affirmative Action Employer.**

### SUMMER MINORITY FACULTY POSITIONS PURDUE UNIVERSITY WEST LAFAYETTE, INDIANA

The Purdue Minority Faculty Fellows Program invites applications for summer research and/or teaching positions at the West Lafayette campus. Blacks, Hispanics, and Native Americans are encouraged to apply. Fellows who are selected will receive a regular 8-week summer salary, plus a \$2500 cost-of-living adjustment and \$500 for supplies.

Positions are available in the Schools of Agriculture, Consumer and Family sciences, Education, Engineering, Health Sciences, Liberal Arts, Management, Nursing, Pharmacy and Pharmaceutical Sciences, Science, Technology, and Veterinary Medicine.

Application deadline is 1 February 1991. For application and further information contact:

**Dr. Clara Bell, Director**  
Minority Faculty Fellows Program  
School of Nursing  
Purdue University  
West Lafayette, IN 47907  
Telephone: 317-494-0242

*Purdue is an Equal Access/Equal Opportunity University.*

## POSITIONS OPEN

### BIOLOGY. THREE FACULTY POSITIONS.

Applications are invited for three positions (two assistant professors; one instructor) beginning August 1991. (Ph.D. required for assistant professor positions.) (i) Geneticist to teach general genetics, (ii) geneticist biologist (physiology concentration) to teach in the freshman program, (iii) geneticist biologist to teach geneticist biology laboratory courses. Ability and willingness to teach freshman biology is required of all candidates. Xavier University is a small predominantly African-American, Catholic, liberal arts institution. Application deadline: 21 January 1991 or until filled. Send résumé and three letters of recommendation to: **Willie J. Caffey, Jr. Chairman, Search Committee, Biology Department, Xavier University, Box 858, New Orleans, LA 70125.**

**FULL-TIME FACULTY POSITION IN BIOLOGY** available fall 1991 in either microbial genetics and biotechnology or immunology and biotechnology. Successful candidate expected to develop courses in area of specialty and participate in a general biology program for nonmajors. Research encouraged; a strong research potential may develop with NASA life science satellite program. Opportunities exist with nearby USEWS, USDA, and NCI facilities. Ph.D. required. With an enrollment approaching 4000 students, Shepherd College, located on the banks of the Potomac River approximately 65 miles from Washington and Baltimore, is a baccalaureate institution in the West Virginia State College System. Application deadline is 1 February 1991. *Minorities and women are encouraged to apply.* Send résumé and arrange for at least three letters of reference to be sent to: **Dr. Phillip Simpson, Department of Biology, Shepherd College, Shepherdstown, WV 25443. Affirmative Action/Equal Opportunity Employer.**

The Department of Molecular Biology at Princeton University invites applications for a **TENURE-TRACK POSITION IN CELL BIOLOGY**. Level of positions is open. Applicants should send a curriculum vitae, a summary of research interests, and the names of at least three referees to:

**Cell Biology Search Committee**  
Department of Molecular Biology  
Princeton University  
Princeton, NJ 08544

Application deadline is 1 February 1991.

*Princeton University is an Equal Opportunity/Affirmative Action Employer.*

The Department of Biological Sciences, San Jose State University (SJSU), invites applications for **FOUR TENURE-TRACK POSITIONS** to begin August 1991. Applicants must have earned doctorate and teaching experience. Postdoctoral research experience desired. Significant professional contributions and development of active research program will be expected. All positions include teaching general education science, advising undergraduate and/or graduate students, and participation in the M.A. degree program. Candidates shall have an awareness and sensitivity to the educational goals of a multicultural population. Cross-cultural experience and/or training preferred. (i) **AQUATIC VERTEBRATE ECOLOGIST**: Candidate should have skills related to the management and/or physiological ecology of fishes and must be able to teach fisheries ecology and management, ichthyology, general zoology, and/or limnology (ii) **BOTANIST**: Candidate must have skills in whole plant structure and function and be able to teach plant physiology, physiological plant ecology, and/or developmental plant anatomy. (iii) **HUMAN ANATOMIST/PHYSIOLOGIST**: Candidate must be able to teach human gross anatomy, microscopic anatomy, and human physiology courses for biology majors. (iv) **MEDICAL MICROBIOLOGIST**: Candidate should have a broad spectrum knowledge in medical microbiology, preferably with competence in medical bacteriology, medical mycology, parasitology, and/or virology, and must be able to teach introductory biology and/or microbiology courses. *The university is committed to increasing the diversity of its faculty such that our disciplines, students and community can benefit from multiple ethnic and gender perspectives.* Completed applications, with transcripts, curriculum vitae, statement of professional goals, and three current letters of reference, must be sent by 15 February 1991 to: **Dr. Wayne Savage, Chairman, Department of Biological Sciences, San Jose State University, San Jose, CA 95192. SJSU is an Equal Opportunity/Affirmative Action/Title IX Employer.**

## POSITIONS OPEN

### UNIVERSITY OF MARYLAND ASTRONOMY PROGRAM FACULTY POSITION IN THEORETICAL ASTROPHYSICS

The Astronomy Program invites applications for a tenure-track or tenured professorial position to start in September 1991. This position would be available subject to funding availability. Outstanding candidates in any area of theoretical astrophysics that overlaps with the current research interests of the department are encouraged to apply. Research areas include extragalactic astronomy, stellar atmospheres, solar and stellar radio physics, space plasma physics, cometary studies, galactic structure, and galactic and extragalactic ISM and star formation. Current research facilities include a mini-supercomputer, 25 workstations, and the BIMA millimeter array, which is expanding to nine elements.

The Astronomy Program expects to hire two more faculty over the next 3 years, including one additional person in theoretical astrophysics. This would again be subject to funding availability. Candidates should send complete curriculum vitae including publications and a brief summary of research interests and plans, and arrange for three letters of recommendation to be sent by 15 February 1991 to: Faculty Search Committee, Astronomy Program, University of Maryland, College Park, MD 20742-2421.

### FACULTY POSITION MICROBIAL PATHOGENESIS

The Department of Microbiology at the Medical College of Ohio invites applications for a tenure-track faculty position at the ASSISTANT/ASSOCIATE PROFESSOR level for a new program in microbial pathogenesis. Candidates are being sought who have demonstrated excellence in research and whose investigations embrace modern approaches to understanding bacterial, viral, fungal, or parasitic disease mechanisms. Successful candidates are expected to develop independent externally funded research programs and to contribute to the teaching of medical and graduate students. Our laboratory and support facilities are outstanding. In addition, generous start-up funds will be provided. Salaries are competitive and commensurate with experience. Submit curriculum vitae, a statement of research goals, and three letters of recommendation by 31 March 1991 to: Earl H. Freimer, M.D., Chairman, Department of Microbiology, Medical College of Ohio, P.O. Box 10,008, Toledo, OH 43699. *The Medical College of Ohio is an Equal Opportunity/Affirmative Action Employer.*

**SCIENTIFIC THINKING.** Physical or biological scientist with background and interest in history and/or philosophy of science to teach, in English, primarily scientific thinking, a general requirement for science and arts students. The course emphasizes the common aspects shared by all sciences with the exposition of the scientific method. Also to participate in an interdisciplinary sophomore seminar on "Great Books" for science and arts students. Additional teaching load in science will be assigned in areas of competence. Course load: three courses per semester. Ph.D. required. Two-year appointment (renewable) beginning September 1991. Faculty rank and salary according to qualifications and experience. For expatriates, housing and round-trip air travel, plus schooling for two children, included. Write with curriculum vitae to: Dean George H. Gibson, The American University in Cairo, 866 United Nations Plaza, Suite 517, New York, NY 10017, preferably before 15 February 1991.

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## Postdoctoral Appointment Control Biotechnology Laboratory

Postdoctoral position in analytical protein chemistry is available immediately in the Control Biotechnology Unit at the Upjohn Co. The project involves the development of micro-analytical separation methodologies to characterize structural heterogeneity of recombinantly-derived therapeutic proteins. Emphasis will be placed upon the utilization of the high resolving power of electrophoretic separations to isolate protein impurities and the development of methods that permit recovery and subsequent analysis by multiple analytical techniques. Characterization methods will include N-terminal sequencing and peptide mapping interfaced with mass spectroscopy detection. The position requires a Ph.D. in Chemistry or Biochemistry, with previous experience in the separation of protein by HPLC and electrophoresis and interest in the development of techniques to perform micro-sequencing and micro-peptide mapping.

Interested individuals are invited to send their curriculum vitae and the letters of reference to: Dr. Gustav A. Walker, Corporate Recruiting/Position 5732-CA, The Upjohn Company, 7000 Portage Road, Kalamazoo, MI 49001-0199. Refer to position no. 5732-CA in your correspondence. An Equal Opportunity Employer M/F.

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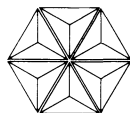
# Upjohn

## ASSISTANT/ASSOCIATE SCIENTISTS Metabolism and Pharmacokinetics

The Bristol-Myers Squibb Pharmaceutical Research Institute has career opportunities in its Metabolism and Pharmacokinetics Department located in Syracuse, New York. These positions will play a major role in the nonclinical and clinical development and worldwide registration of new drug entities as well as product line extensions, and evaluation of novel drug systems in humans.

Responsibilities include development of analytical methods for drugs and their metabolites in biological fluids, quantitation of drugs in biological fluids using standard chromatographic techniques, and participation in the implementation of pharmacokinetic and metabolism studies in animals. The qualified individual should have a BS/MS in Pharmaceutical or Biological Sciences and 0-3 years of experience in analyzing drug substances in biological fluids. Expertise in performing surgical procedures in small animals is desirable. Computer literacy and good writing skills are essential.

We offer a competitive compensation package and a comprehensive benefit program which includes relocation assistance to a superb upstate NY living area. Interested candidates should submit a resume indicating salary history and requirements to: **Dept. Metabolism & Pharmacokinetics, BRISTOL-MYERS SQUIBB COMPANY, P.O. Box 4755, Syracuse, NY 13221-4755.** An equal opportunity employer M/F/H/V.



## Bristol-Myers Squibb Company

## You'll Play A Leading Role In Our Process Development Area

Berlex Biosciences, formerly Codon and Triton Biosciences, is developing recombinant protein products for the areas of oncology, cardiovascular disease and related disorders. The following scientific positions are now available at our South San Francisco and Brisbane facilities for professionals who will play a primary role in supporting Process Development as well as other project areas.

### Research Scientist Bioanalytical Chemistry

You will lead a group engaged in developing and conducting assays for regulatory compliance of products derived from prokaryotic and eukaryotic cell cultures. This will also include direct involvement with biological product QC and routine environmental testing. In addition to a Ph.D. in Biological Science with an emphasis on immunochemistry, you must have 1 year of post-doctoral experience supported by some industrial experience in an analytical biochemistry environment. Familiarity with ELISA, SDS-PAGE HPCE Western Blot, DNA Hybridization and other bioassay techniques desired; working knowledge of GMP and GLP methodologies would be a definite asset.

### Senior Biochemical Engineer Process Development

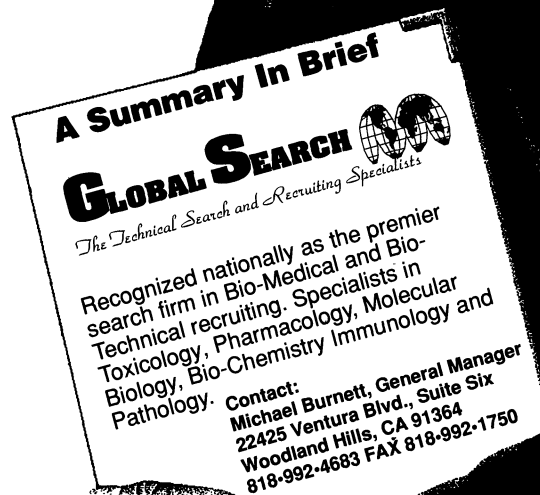
As a key member of Process Development, you will lead process system design and implementation and manage optimization and scale-up programs. In this role, you will interface with project groups in cell culture, fermentation and downstream process development, clinical production, and facilities engineering. To be successful, you will need a Ph.D. in Biochemical/Chemical Engineering, 3-5 years directly related experience, and a working understanding of recombinant protein production systems. Experience in GMP operations and protein recovery/purification preferred.

### Process Development Scientist Protein Product Characterization & Formulation

Apply your in-depth expertise in protein chemistry to guide the development of stable formulations for protein-based drug products. Specifically, you will lead product characterization efforts, perform stability studies, and verify compatibility of formulations with drug delivery systems. The preferred candidate will have a Ph.D. in (Bio)Chemistry and 3 or more years experience in protein purification, formulation, and lyophilization processes. Experience in GMP operations and prior interactions with FDA would be a plus.

With facilities in both the East and West Bay, Berlex is an established biotech leader. As such, we are pleased to provide highly attractive salaries and a full complement of benefits. For immediate consideration, please submit your resume, indicating position of interest, to: Berlex Biosciences, Human Resources, Dept. JAB, 213 E. Grand Avenue, South San Francisco, CA 94080. An equal opportunity employer.

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**A Summary In Brief**

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### MacARTHUR FOUNDATION POSTDOCTORAL TRAINEESHIPS IN AGING

The MacArthur Foundation Research Program on Successful Aging invites applications from graduates of advanced degree programs to conduct research on a collaborative interdisciplinary study of aging in seven sites.

Trainees will work with a team of investigators working on longitudinal studies of elderly and will have a unique opportunity to be a part of interdisciplinary gerontologic research. While most trainees will be based in laboratories of investigators leading population-based studies, there is also an interest in applicants with a biological or physiological orientation who will serve as liaison between these studies and other more clinically-oriented and basic biological studies that are part of the research program.

The focus of the studies is on the maintenance of physical and cognitive functioning in a psychosocial and physiologic context and on developing new interdisciplinary approaches to larger issues in health and aging.

Positions are available for M.D.'s or Ph.D.'s with an interest in aging, physiology, neuropsychology, endocrinology, epidemiology, basic biologic sciences, biostatistics, psychology, psychiatry, sociology or related fields. Positions are available at the University of Southern California, University of California at Irvine, Mt. Sinai Medical Center in New York, Yale University, the University of Michigan, The Karolinska University in Sweden, and Pennsylvania State University.

Emphasis will be placed on candidates' abilities to work in an interdisciplinary setting. Positions are available for terms of 1 or 2 years.

Salaries range up to \$40,000, commensurate with qualifications and university policy.

Submit curriculum vitae, publications, names of three references, preferences for a specific site and a 2-page statement, including areas of expertise and future research plans to:

Deadline for Applications to be received is January 30, 1991

Lisa F. Berkman, Ph.D.  
Department of Epidemiology  
Yale School of Medicine  
60 College Street  
New Haven, Connecticut 06510

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## DESIGN TOXICITY STUDIES FOR ONE OF THE WORLD'S LEADING ANIMAL HEALTH COMPANIES.

In its newly merged organization, SmithKline Beecham Animal Health has established itself as one of the world's most accomplished research and development organizations. We are currently seeking a Manager of Toxicology who will develop protocols and design Target Animal Toxicity studies in accordance with GLP rules.

You will remain informed of marketed and proposed compounds and their toxicological effects; monitor and document toxicologic studies; and assist in feasibility studies, major product project proposals and new product analysis. You will also assist in the development of budgets and strategic and technical plans for the department.

The requirements for this position include a DMV degree with at least 3-5 years' experience as a practicing veterinarian, preferably with large animals, and a Master's or Ph.D. in Toxicology or Pharmacology. You will also need strong communication skills, the ability to work with all levels of staff and management, PC proficiency, and the ability to maintain the quality and on-time delivery of multiple assignments.

As part of SmithKline Beecham, one of the world's largest health care companies, we offer extremely competitive salaries and an excellent benefits package. To apply, send your resume to: Personnel Department, SmithKline Beecham Animal Health, 1600 Paoli Pike, West Chester, PA 19380. We are an Equal Opportunity Employer, M/F/H/V. Our site is a clean air zone.



**SmithKline Beecham**  
*Animal Health*

### BOSTON UNIVERSITY MEDICAL CENTER EVANS RESEARCH DEPARTMENT/ DEPARTMENT OF MEDICINE NEW POST-DOCTORAL TRAINING PROGRAM FOR MDs AND PhDs

The Evans, one of the nation's oldest endowed basic and clinical research departments, invites applications for post-doctoral fellowships. Fellowship stipends (at NIH or higher levels) are guaranteed for several years to support the transition from trainee to initial faculty status. Starting dates on or after July 1, 1991 can be arranged individually.

An enriched program of visiting senior scientists, seminars, methods courses, etc. is being established to enhance the already excellent environment for joint training of MD and PhD scientists and for interactive research. MD programs can include appropriate clinical subspecialty training.

The Evans staff currently includes about 100 basic and clinical investigators studying a broad spectrum of areas ranging from molecular and cellular biology to organ physiology and human diseases. For detailed information about specific research programs and application procedures contact: John R. Murphy, Ph.D., Director Evans Research and Training Program, Boston University Medical Center, 88 East Newton Street, Boston, MA 02118.

Please enclose curriculum vitae and indicate your area of research interest.

## National Institutes of Health NEUROBEHAVIORAL TOXICOLOGIST

The Division of Toxicology Research and Testing (DIRT) of the National Institute of Environmental Health Sciences (NIEHS), National Toxicology Program, Research Triangle Park, NC has a permanent position (GM 13/14) for a Neurobehavioral Toxicologist. The position has a salary range of \$42,601 to \$65,444.

### The successful candidate will be expected to:

1. Conduct original research in the area of neurobehavioral toxicology (develop new test protocols and investigate the site and mechanism of action of neurotoxicants using techniques of cellular and molecular biology). Research interest in the developing nervous system is preferred.
2. Serve as Project Officer for extramural contract(s) in neurobehavioral toxicity testing.
3. Provide expert consultation to the Program in matters involving neurobehavioral toxicology.

### Candidates are required to have the following:

1. Ph.D. degree or its equivalent in toxicology, pharmacology, anatomy, physiology or other allied subject where training was focused on neurobehavioral toxicology.
2. Five or more years of postdoctoral research experience in neurobehavioral toxicology (preferably development neurotoxicology).
3. Strong interest in developing a research program which utilizes techniques of cellular and molecular biology to impact the areas of developmental and neurobehavioral toxicology.
4. Broad knowledge of neurobehavioral toxicology which will aid in the interpretation of testing data.
5. Ability to communicate effectively both orally and in writing.
6. Relevant publications in related scientific journals.

Applicants must be found to be eligible on a Civil Service Register. If interested, please send a curriculum vitae by **February 15, 1991** to:

**Ms. Norma Daye**  
**Code: HNV25**  
**NIEHS Personnel Office**  
**P.O. Box 12233**  
**Research Triangle Park, NC 27709**

Any questions may be directed to Ms. Norma Daye at (919) 541-7513.

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## POSITIONS OPEN

### BIOLOGY FACULTY POSITIONS

Applications are invited for three tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** positions to begin 16 August 1991. Ph.D. required and postdoctoral experience desirable. Establishment of a strong, independent research program, direction of graduate students, and participation in the undergraduate and graduate teaching program in the department is expected. Details of each position are as follows:

- **CELL BIOLOGY.** Both plant and animal cell biologists are encouraged to apply. Specific courses include: cell biology and coordination of one semester of the introductory biology laboratory for majors. Send materials to: **Dr. A. J. Fivizzani.**
- **FISH BIOLOGY.** The new faculty member will contribute to an active undergraduate Fisheries and Wildlife Biology Program. Appropriate professional experience may substitute for postdoctoral experience. Specific courses include: fisheries management and fish biology/ichthyology. Send materials to: **Dr. R. W. Seabloom.**
- **VERTEBRATE BEHAVIOR.** Vertebrate behavioral ecologists are especially encouraged to apply. Specific courses include: animal behavior and vertebrate zoology. Send materials to: **Dr. I. J. Schlosser.**

For each position, send curriculum vitae, copy of transcripts, three representative reprints, and statement of teaching and research interests, and arrange to have three letters of recommendation sent to the appropriate committee chair at: **Department of Biology, University of North Dakota, Grand Forks, ND 58202-8238.** Review of applications will begin on 15 February 1991 and continue until the position is filled. *The University of North Dakota is an Affirmative Action/Equal Opportunity Employer.*

**BIOLOGIST. TENURE-TRACK POSITION** for September 1991 to teach a majors' course in zoology, an upper level/graduate course in his/her area of specialization, and to participate in the general education program for nonmajors. The successful candidate will also be expected to assume, within a year or two of employment, a part-time assignment as co-director of the Health Sciences Office, which involves the promotion and maintenance of placement affiliations with hospitals and health professions schools. A Ph.D. is preferred and college-level teaching experience is required. Applicants should send curriculum vitae, a statement of teaching and research interests, transcripts, and the names, addresses, and telephone numbers of three references to: **Dr. Penelope J. Padgett, Chair, Search Committee, Department of Biology, Shippensburg University, Shippensburg, PA 17257.** Receipt deadline for all application materials is 1 February 1991.

*Shippensburg University is an Equal Opportunity/Affirmative Action Employer. Women and all minorities are encouraged to apply.*

### RADIATION BIOLOGIST/ CANCER BIOLOGIST/ MOLECULAR BIOLOGIST

The Department of Radiation Medicine at Massachusetts General Hospital (MGH) has an opening for a cellular/molecular biologist to do research on biological, chemical, and biochemical mechanisms of radiosensitization in mammalian cells and DNA, particularly using molecular biology techniques. These studies are being pursued with a view to determining how improvements in cancer therapy might be achieved in a major treatment and research center. The research will be performed in a well-established, fully equipped laboratory in the Cox Cancer Center at MGH. Opportunities exist for multidisciplinary interaction within the research/academic complex of the biomedical community of the Boston area. Applicants are sought who can work at the radio-biology/biochemistry/molecular biology interface in a challenging environment. Preference will be given to candidates with experience in thiol biochemistry or molecular biology related to DNA damage/repair in cells. Ph.D. in radiation biology, biochemistry, or molecular biology required. Appointment could be at postdoctoral or faculty level depending upon experience. Concurrent faculty appointment at Harvard Medical School available for suitably qualified individual. Please apply to: **Dr. K. D. Held, Department of Radiation Medicine, Massachusetts General Hospital, Boston, MA 02114.**

*Massachusetts General Hospital/Harvard University are Equal Opportunity/Affirmative Action Employers. Qualified women and minorities are encouraged to apply.*

## POSITIONS OPEN

The Department of Veterinary Anatomy and Public Health at Texas A&M University invites applications and nominations for 12-month, tenure-track, fully budgeted **FACULTY POSITIONS** in food safety/food toxicology. These individuals will be expected to utilize state-of-the-art bioanalytical and biomolecular techniques and contribute to the core of a multidisciplinary and intercollegiate toxicology research program aimed at: (i) the elucidation of fundamental cellular mechanisms of toxic action/interaction of hazardous chemicals (i.e., food-borne and environmental carcinogens, mutagens, teratogens, developmental toxicants, etc.), and (ii) the development of chemical and biological methods to rapidly detect these substances and detoxify/remediate toxin-contaminated sources. Preference will be given to candidates who are trained in food science with emphasis on molecular food toxicology, food engineering, or biochemical engineering. A Ph.D. and a minimum of 2 years of postdoctoral training are absolute requirements. The D.V.M. degree and/or experience in a College of Veterinary Medicine is highly desirable, but not mandatory. Successful applicants will be expected to develop an independently funded research program, which will significantly complement active interdisciplinary programs in molecular toxicology and genetics, engineering biosciences, developmental biology/embryology, reproductive biology, and neurobiology.

Rank and salaries are negotiable and the starting dates are open. Submit nominations and applications with a statement of research interests, curriculum vitae, and the names, addresses, and telephone numbers of at least three references to:

**Dr. Timothy D. Phillips, Professor  
Department of Veterinary Anatomy  
Texas A&M University  
College Station, TX 77843-4458  
Telephone: 409-845-3517**

*Women and minorities are encouraged to apply. Texas A&M is an Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL POSITIONS

Applications are invited for positions in a multidisciplinary research group studying the biogeochemistry of inorganic pollutants in the aquatic environment. Current topics include trace element speciation, exchange processes at the sediment-water interface, metal bioaccumulation by aquatic plants and animals, sulfur cycling. Applicants with a Ph.D. in such fields as analytical chemistry, geochemistry, biochemistry, or toxicology should send their curriculum vitae to: **Dr. P. G. C. Campbell, R. Carignan, L. Hare, or A. Tessier, Institut National de la Recherche Scientifique-Eau, C.P. 7500, Sainte-Foy (Quebec), G1V 4C7 Canada.**

### UNIVERSITY OF SOUTHERN CALIFORNIA SCHOOL OF MEDICINE DEPARTMENT OF MICROBIOLOGY PROGRAMS IN VIROLOGY, IMMUNOLOGY, CELLULAR AND MOLECULAR BIOLOGY

Four predoctoral and three postdoctoral positions funded by the National Institutes of Health are open in the Department of Microbiology at the University of Southern California (USC) School of Medicine. Research advisors for predoctoral and postdoctoral students are available in the following areas. Virology: Deans, Lai, McMillan, Ou, Stohman, Tahara, Vogt, Weiner. Molecular and cellular immunology: Deans, Dennert, Horwitz, Kohn, McMillan, Mitchell, Moore, Parkman, Pattengale, Stohman, Walker. Cellular and molecular biology: Bogenmann, Fong, Fung, Groffen, Heisterkamp, Hill, Jong, Landolph, Lieb, Nguyen-Huu, Suzuki, Tahara, Taylor, Vogt. Individuals interested in postdoctoral positions should contact prospective advisors directly. Deadline for receipt of completed predoctoral applications is 1 May 1991. Starting date for predoctoral studies is approximately 1 August 1991. There is no deadline for postdoctoral applicants. *NIH requires that applicants must be U.S. citizens or permanent residents.* Correspondence and information: **Graduate Administrator, Department of Microbiology, USC School of Medicine, 2011 Zonal Avenue, HMR 401, Los Angeles, CA 90033-1054. Telephone: 213-342-2337. FAX: 213-342-1721.**

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## POSITIONS OPEN



### UNIVERSITY OF MANITOBA FACULTY OF MEDICINE

#### POSTDOCTORAL POSITIONS

Postdoctoral positions are available immediately in the Department of Physiology and Spinal Cord Research Centre at the University of Manitoba's Faculty of Medicine and the Winnipeg Health Sciences Centre. This is an interdisciplinary group focusing on spinal cord functional systems and spinal cord injury. Major research efforts currently under way include neural control of locomotion, micturition and spasticity, neuropharmacology of spinal cord mechanisms, anatomy and electrophysiology of spinal neuron innervation by descending and propriospinal pathways, anatomical and pharmacological localization of neurotransmitters, receptors and intracellular signaling mechanisms, the role of gap junctions and gap junction proteins in neuronal communication, and the role of novel growth factors in promoting regeneration in spinal neurons and related clinical studies. The applicant would have an opportunity to receive multidisciplinary training through interaction with 12 investigators having a concerted interest in the above areas. *The University of Manitoba encourages applications from qualified men and women, including members of visible minorities, aboriginal people and persons with disabilities. The University provides a smoke-free work environment.* Send curriculum vitae, a brief statement of research interests and the names of three individuals who would be willing to write a letter of reference to: **Dr. Larry M. Jordan, Director of Neuroscience Research Program, Department of Physiology, Faculty of Medicine, University of Manitoba, 770 Bannatyne Avenue, Winnipeg, Manitoba, Canada, R3E 0W3.**

**POSTDOCTORAL POSITION.** Gene therapy to investigate an anticancer strategy utilizing retroviral vectors to insert "suicide genes" into murine tissues. Molecular biology experience required. Send curriculum vitae and names of three references to: **Dr. Frederick L. Moolten (151), Edith Nourse Rogers Memorial Veterans Hospital, Bedford, MA 01730. An Equal Opportunity Employer.**

**POSTDOCTORAL POSITIONS. (2).** Available to study the molecular basis of neuronal ACh receptor channel diversity. The laboratory integrates molecular and biophysical approaches to study the developmental regulation and modulation of neuronal AChR function. Molecular biologists and/or biophysicists are encouraged to apply. Send curriculum vitae and references to: **Dr. L. Role, Department of Anatomy and Cell Biology in Center of Neurobiology, 630 West 168th Street, New York, NY 10032. FAX: 212-305-3970.**

**POSTDOCTORAL POSITIONS.** Two positions will become vacant spring/summer 1991. The first position is for a biophysicist or physical chemist to work on protein-lipid interactions in lipid bilayers and biological membranes using time-resolved fluorescence spectroscopy. The second position is for a biochemist to work on the interaction of extrinsic membrane proteins (e.g., protein kinase C) with cell membranes. For the latter position experience in membrane proteins, including purification and reconstitution, would be an asset. Send curriculum vitae and names of references to: **Dr. C. D. Stubbs, #271 JAH, Thomas Jefferson University, Philadelphia, PA 19107. We are committed to a smoke-free environment. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION.** Argonne National Laboratory has an opening beginning March 1991 for a fisheries biologist/aquatic ecologist. The successful candidate, working with an interdisciplinary team will be responsible for investigating the effects of daily dam operations on the native fishes, benthos, plankton, aquatic habitats, and water quality of the upper Colorado River. Qualifications are a Ph.D. in fisheries biology or aquatic ecology, with experience in assessing habitat requirements (including instream flow requirements) of fish. Experience with HSI, HEP, and IFIM preferred. Please submit curriculum vitae, the names and addresses of three references, and a personal statement of qualifications and research interests by 31 January 1991 to: **Susan Walker, Box J-EID-Postdoc-55, Employment and Placement, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439. An Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** Available immediately to participate in research on molecular virology and immunology of HIV/SIV in vitro and in vivo studies using chimpanzees and macaques under the direction of Dr. Jorg Eichberg. A Ph.D. in microbiology/immunology with experience in the virological and immunological aspects of human and nonhuman primate retroviruses is preferred. Salary ranges from \$22,339 up, with consideration for prior relative postdoctoral experience. Send curriculum vitae and the names and telephone numbers of three references by 15 January 1991 to: **Personnel Director (054), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78228-0147. Equal Opportunity Employer, M/F.**

### MOLECULAR EVOLUTION/SYSTEMATICS

**POSTDOCTORAL POSITION.** Available to study molecular evolution and phylogenetic relationships among avian orders. Candidates should have experience with molecular methods such as DNA sequencing and RFLP analysis. Send résumé and names and numbers of three references to: **Dr. David P. Mindell, Department of Biological Sciences, University of Cincinnati, Cincinnati, OH 45221-0006. Telephone: 513-556-9743. Equal Opportunity Employer.**

### POSTDOCTORAL POSITION IN NEUROPHYSIOLOGY

A position is available immediately at University of California, Los Angeles, to study the circuit properties of long pathways within the rat limbic system and the properties of modulators of synaptic transmission in vivo. Candidates should have demonstrated expertise in at least one of the following techniques in vivo extra- or intracellular recording from vertebrates, intracellular labeling, multibarrel iontophoresis. Send curriculum vitae and names of three references to: **David M. Finch, Ph.D., 73-364 CHS, Brain Research Institute, University of California, Los Angeles, CA 90024. Affirmative Action/Equal Opportunity Employer.**

### POSTDOCTORAL POSITION

A position is available to study RNA-protein recognition, with particular emphasis on RNA structural features recognized by arginine-rich domains [see Calnan *et al.*, *Genes Dev.*, in press, (February 1991); Marciniak *et al.*, *Cell* 63, 791]. A strong background in protein/peptide biochemistry is essential and experience in molecular biology is helpful. Please send curriculum vitae and three letters of reference to: **Dr. Alan Frankel, Whitehead Institute, 9 Cambridge Center, Cambridge, MA 02142.**

**A POSTDOCTORAL POSITION IN BACTERIAL PATHOGENESIS** is available to investigate interactions of pathogenic *Neisseria* with human neutrophils and epithelial cells, including characterizing receptor-ligand interactions, mechanisms of adherence and invasion, and roles of bacterial physiology in modulating these interactions. Training in molecular genetics is preferable but not mandatory. Please send résumé and names of three references to: **Richard Rest, Department of Microbiology and Immunology, Hahnemann University, Philadelphia, PA 19102-1192. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL POSITION.** To research the effect of the structure and mechanics of arteries and/or microvessels on water and solute exchange between blood and tissue. Current projects include studies of: (i) possible mechanisms of atherogenesis and (ii) regulation of water and solute exchange across intestinal capillaries and venules. Experience in microscopy, arterial perfusion, or cannulation of microvessels would be an advantage. This position is funded by an NIH training fellowship. Applicants must be U.S. citizens or permanent residents. Start date: 1 January 1991. Applications accepted until position is filled. Salary: \$17,000 to \$25,000 dependent upon experience. Applicants should send curriculum vitae and three letters of reference to:

**Dr. Ann Baldwin  
Department of Physiology  
College of Medicine  
University of Arizona  
Tucson, AZ 85724**

*The University of Arizona is an Affirmative Action/Equal Opportunity Employer. Females and minority members are urged to apply.*

4 JANUARY 1991

# PROTEIN BIOCHEMISTRY



As one of the world's largest and most well-respected organizations involved in pharmaceutical research and development, Hoffmann-La Roche has a strong commitment to discovery. This commitment has created the following opportunity for a scientist interested in having an impact in pharmaceutical research.

## SENIOR SCIENTIST

Become a member of our research effort in the chemical modification of therapeutic proteins within our portfolio. You will be responsible for analytical to process scale protein purification including methods development, and will assist in transferring this technology for production of pharmaceutical grade proteins. You should have a PhD in Chemistry or Biochemistry. Post-doctoral or industry experience in protein chemistry is desired.

We offer a competitive salary, a generous benefits package and a state-of-the-art environment that encourages professional growth. For confidential consideration, please send your resume, indicating salary history/requirements (those without this information will not be acknowledged), to: **Ms. Lynn M. Harac, Staffing and Employee Services, Department LH011CN, Hoffmann-La Roche Inc., Nutley, New Jersey 07110. We are an equal opportunity employer.**



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**D**ynamic, rapidly growing, and innovative, Genzyme is quickly realizing its goal of becoming a fully integrated healthcare products company. Our projects are expanding. Our diverse R&D teams are developing extraordinary programs for healthcare. And each of our positions represents an opportunity for growth and future responsibilities - an opportunity to achieve success through science.

## Technical Director Product Development

In this leading role, you will direct new research and diagnostic product development, evaluate new immunoassay technologies and assist with the identification and assessment of new product opportunities. You will also develop the technical expertise of the business to provide technical service support for our customers, and manufacturing support for the Operations division.

Candidates must possess a Ph.D. with 5 years of industry experience in immunology, immunoassay development, cellular bioassays and diagnostic product development. An immunochemistry background with experience in antibody purification and labeling is required along with strong supervisory and project management skills. A background in cytokines and growth factors is preferred.

**In addition to success, Genzyme offers an excellent compensation and benefits package, stock options, a 401(k) Plan with a company match, and extensive insurance coverage. For immediate consideration, please send your resume to: Steve Grossman, Dept. SM 0101, Genzyme Corporation, One Mountain Road, Framingham, MA 01701.**

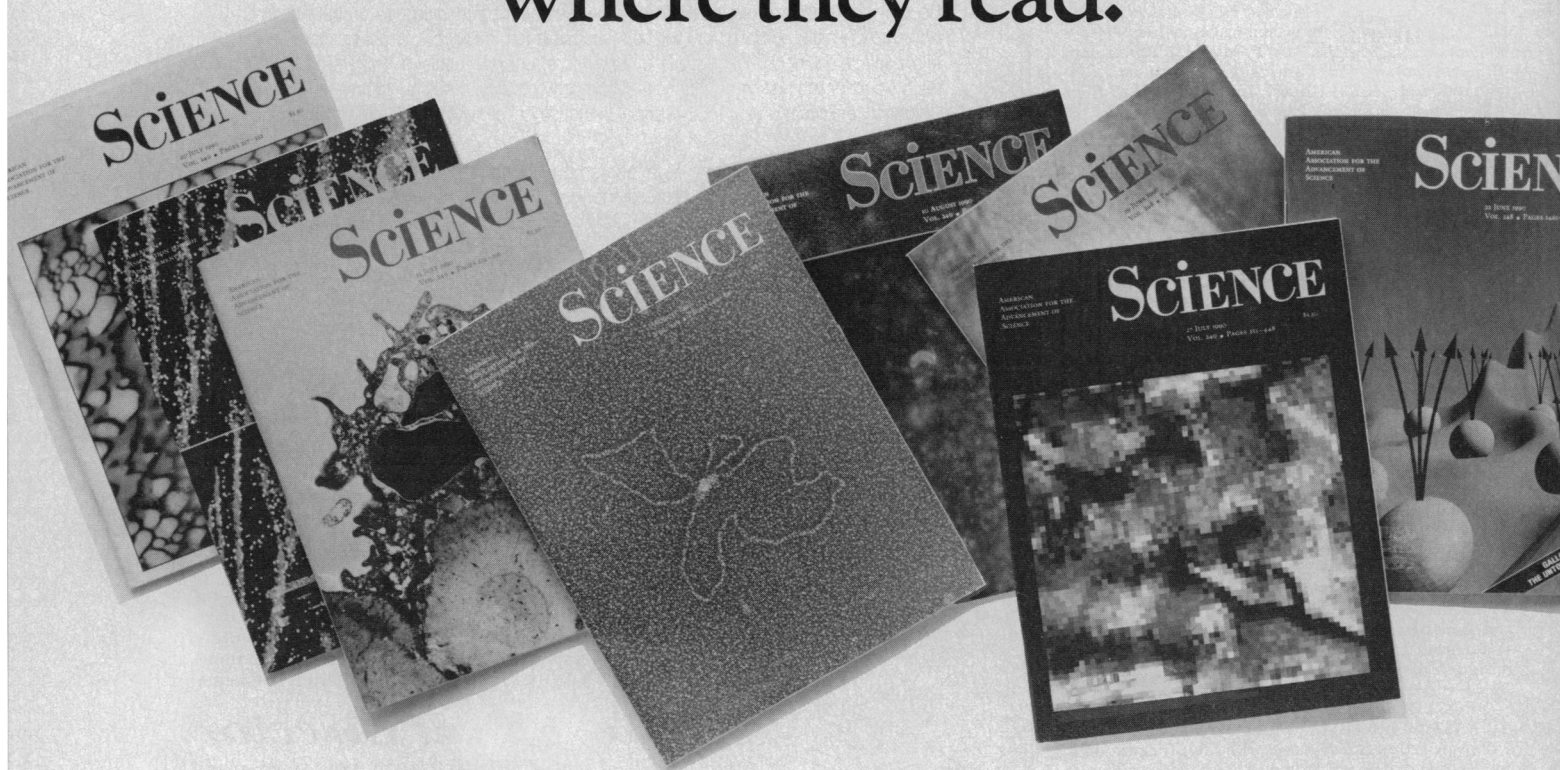
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# ENZYMOLGY RESEARCH

The Biochemistry Division has three positions available within the Enzymology Department. The research efforts in this group concentrate on the mechanisms of enzyme catalysis & inhibition.

## Senior Research Biochemists

**Position #1:** strong enzymology training with experience in molecular biology and protein purification. Position will involve cloning, purification, and characterization of enzymes of therapeutic interest.

**Position #2:** strong enzymology training with experience in physical organic and mechanistic chemistry. Position will involve detailed kinetic and mechanistic studies of enzymes of therapeutic interest.

Candidates for Senior Research Biochemist positions should have a Ph.D. or equivalent in chemistry or biochemistry, at least two (2) years of postdoctoral experience, and a strong publication record.

## Postdoctoral Fellowship Position

Ph.D. in chemistry or biochemistry with a strong background in enzymology. Position will involve studying mechanisms of protease catalysis and inhibition.

All candidates must also possess strong communication skills and the ability to work in a team environment.

Merck Sharp and Dohme Research Laboratories is located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, send your resume with the names of three references to **Human Resources Manager, Merck & Co., P.O. Box 2000, AD#55, Rahway, New Jersey 07065. R80-A3.**

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**PROCEPT, Inc.**, is a rapidly growing biotechnology company dedicated to the principle of immunotherapeutic drug development. We are working with a world-class team of scientists to exploit our proprietary receptor technology for the successful treatment of allergy, autoimmune diseases and organ transplant rejection.

We are assembling a first-rate team of structural biologists and chemists to conceive and create novel pharmaceutical compounds based on our proprietary receptor technology. You will interface with our existing team of scientists encompassing immunology, cellular and molecular biology, protein biochemistry and macromolecular chemistry to generate three dimensional models for these structures and apply this information to the design and synthesis of unique drug compounds.

## RATIONAL DRUG DESIGN

### ■ Director

We seek a senior-level scientist capable of directing the efforts of this multidisciplinary research group focusing on the molecular analysis, design and synthesis of unique drug compounds. The ideal candidate will have a Ph.D. in a scientific discipline appropriate for this field, 5+ years professional experience beyond the postdoctoral level, and proven expertise in managing a successful research team or program in rational drug design. Strong management skills and the ability to attract, motivate and supervise top quality scientists are essential.

In addition, positions are available at all levels (BS/MS/Ph.D.) for scientists with at least 3 years of post-degree laboratory experience and a demonstrated record of professional achievement in the following scientific disciplines:

### ■ Peptide Chemistry/Medicinal Organic Chemistry

These positions require proven skills in the areas of synthetic organic chemistry and/or peptide synthesis, and the ability to apply these talents to the novel design of effective drugs. Previous medicinal chemistry experience in a major pharmaceutical company is preferred.

### ■ Computational Chemistry/ Macromolecular Modeling

Successful candidates should be familiar with VMS and UNIX operating environments, Silicon Graphics workstations, molecular modeling software (BIOSYM), and have a strong working knowledge of organic chemistry for interacting with medicinal chemists in the drug design team.

### ■ Structural Biology/X-Ray Crystallography

You will utilize your skills in biophysical chemistry to generate three dimensional structures based on single crystal X-ray diffraction and/or 2D NMR studies. Successful candidates will interact across a broad range of biochemical and biophysical disciplines and must be able to integrate solution structures with computational chemistry for the successful design of small molecule drug candidates.

Procept offers an excellent compensation and benefits program including a 401k plan and incentive stock options for all scientists on our staff. We provide a working environment laced with entrepreneurial spirit, a vast network of academic advisors for developing important scientific collaborations, and we encourage the publication of significant research findings in the scientific literature. Please forward your resume, in confidence to: Human Resources, Procept, Inc., 840 Memorial Drive, Cambridge, MA 02139.

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## POSITIONS OPEN

**POSTDOCTORAL POSITION.** Biochemistry of lignin degradation. Research is aimed at identifying and characterizing uptake systems for lignin fragments in white-rot fungi and analysis of intracellular catabolic pathways. Available 1 February 1991 for one year with possibility of renewal. Salary: \$31,000. *Must be U.S. citizen.* Reply: **Kent Kirk, Forest Products Laboratory, One Gifford Pinchot Drive, Madison, WI 53705-2398. Telephone: 608-231-9466; FAX: 608-231-9262. An Equal Opportunity Employer.**

**POSTDOCTORAL POSITION.** In the cellular and molecular biology of Hematopoiesis at the New England Deaconess Hospital Department of Hematology/Oncology Research Laboratory. Available immediately. Requirements include a Ph.D. in biology with a background in molecular and/or cell biology. Interested candidates should send a letter summarizing their research experience and interests, their curriculum vitae, and the names and addresses of three references to: **Dr. Hava Avaraham/Dr. Jerome E. Groopman, Division of Hematology/Oncology, Harvard Medical School, New England Deaconess Hospital, 110 Francis Street, Boston, MA 02215.**

**POSTDOCTORAL POSITION IN CELLULAR BIOLOGY.** (Available immediately). Recent Ph.D. in biochemistry, cell biology, or immunology to undertake studies of membrane changes in airway smooth muscle cells induced by inflammation. Studies include phosphoinositol turnover, derived second messengers, and the role of protein kinases. Experience in techniques related to signal transduction is expected. Send curriculum vitae and the names and addresses of three references to: **M. Souhrada, M.D., The John B. Pierce Laboratory, Yale School of Medicine, Yale University, 290 Congress Avenue, New Haven, CT 06519. Equal Opportunity Employer.**

**POSTDOCTORAL POSITION.** Available immediately for studies of infection of cells of the hematopoietic and nervous systems with murine retroviruses and mechanisms of their immunological elimination. Experience with tissue culture and assays of immune function highly desirable. Excellent opportunity for development in a highly productive and multidisciplinary environment. Send curriculum vitae and names of three references to: **Dr. Philip Furmanski, Professor and Chairman, Department of Biology, New York University (NYU), 1009 Main Building, New York, NY 10003. NYU encourages applications from women and members of minority groups.**

**POSTDOCTORAL POSITIONS.** The Cystic Fibrosis Research Center at the University of California, San Francisco, has openings for Ph.D. and M.D. research fellows. Studies of the cellular and molecular aspects of cystic fibrosis are interdisciplinary, involving members of the Departments of Anatomy, Biochemistry, Medicine, Pathology, Pediatrics, and Physiology. Areas of interest include: ion transport, the biology of inflammation, the CF gene product CFTR, mucin gene regulation, and other areas of epithelial cell biology. Send curriculum vitae and names of three references by 1 February 1991 to: **Jay Nadel, M.D., Cardiovascular Research Institute, Box 0130, University of California, San Francisco, San Francisco, CA 94143.**

## ROCKEFELLER UNIVERSITY

**POSTDOCTORAL POSITIONS IN PROTEIN CRYSTALLOGRAPHY.** Postdoctoral positions are available to work in a well-equipped laboratory on projects involving various areas of protein crystallography. Areas of research involve the following: structure determination of flavoprotein disulfide reductases, transcription factors involved in oxidative stress response, and oncogene products.

Candidates should have a strong background in one or more of the following: biochemistry and molecular biology, crystallography, physical biochemistry, or experience in protein expression and purification. Knowledge of crystallographic techniques is preferred, but consideration will also be given to those trained in other areas and interested in approaching protein function from a structural standpoint. Send résumé to: **John Kuriyan, Laboratory of Molecular Biophysics, The Rockefeller University, Box 3, 1230 York Avenue, New York, NY 10021-6399. An Equal Opportunity and Affirmative Action Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION.** Molecular biology. Available immediately to investigate changes in gene regulation associated with diabetic hypertension and hypertension associated with pregnancy. Applicants should be experienced with methods of investigating eukaryotic transcriptional regulation, including the use of PCR techniques. The several NIH and VA Merit-supported research projects utilize human and animal tissues as well as cultured cell lines. Individuals wishing to apply molecular biological techniques to pathophysiological problems are encouraged to apply. Send curriculum vitae and names of three references to: **Dr. James R. Sowers, M.D., Division of Endocrinology and Hypertension, Wayne State University School of Medicine, 4201 St. Antoine, Pod 4H-UHC, Detroit, MI 48202.**

## MINORITY MEDICAL RESEARCH FELLOWSHIPS

The Minority Medical Faculty Development Program, sponsored by the Robert Wood Johnson Foundation, has up to eight new positions available beginning in 1992. The program offers postdoctoral research fellowships to physicians from underrepresented minority groups as defined by the Association of American Medical Colleges. These individuals must have demonstrated superior academic and clinical skills and have committed themselves to careers in academic medicine and biomedical research. The fellowship supports four consecutive years of research. Each Fellow selected will receive an annual stipend of up to \$50,000 and a \$25,000 annual grant toward support of research activities.

In addition to the above eligibility requirements, *applicants must be U.S. citizens and must have completed their formal clinical training by the projected time of entry into the program.*

Applications for appointment in 1992 must be submitted by 30 April 1991. Interviews with selected applicants will be carried out in July 1991, and successful candidates will be notified in December 1991.

For further information and materials, contact:

**Harold Amos, Ph.D., Program Director, or  
Charlotte Litt, Ph.D., Deputy Director  
Robert Wood Johnson Foundation  
Minority Medical Faculty  
Development Program  
Harvard Medical School  
P.O. Box 446  
Brookline, MA 02147  
Telephone: 617-732-1947**

## INFECTIOUS DISEASES FELLOWSHIP UNIVERSITY OF CALIFORNIA, SAN DIEGO SCHOOL OF MEDICINE

Opening in July 1991 and 1992 for medical doctors who have completed residency in internal medicine. We offer 3 years of National Institutes of Health-supported training, designed for physicians who desire a career in academic medicine. Excellent research opportunities in endotoxin biology, microbial pathogenesis, parasitology, and retro-virology. Clinical and diagnostic microbiology training at the University Hospital and the Veterans Affairs Medical Center. *Must be U.S. citizens or permanent residents.* Send curriculum vitae and letter of intent to: **Joshua Fierer, M.D., Infectious Diseases Section (111F), Veterans Affairs Medical Center, 3350 La Jolla Village Drive, San Diego, CA 92161.**

**POSTDOCTORAL FELLOWSHIP.** The University of Texas Medical Branch (UTMB) at Galveston, Texas, has a position available to study different aspects of host defense against invasive bacterial infections. Ongoing studies include activation of NK cells and T cells by bacteria and cytokine production by bacteria infected and/or stimulated cells. Immunology and/or molecular biology experience required. Submit curriculum vitae and references to: **G. R. Klimpel/D. Niesel, Department of Microbiology J-19, UTMB, Galveston, TX 77550. UTMB is an Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.**

## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIP

A postdoctoral fellowship at the College of Veterinary Medicine, University of Tennessee (UT) is available in the area of cancer therapy. The position will be part of a currently active multi-disciplinary team of experimental oncology investigators studying the mechanisms of action of hyperthermia and photodynamic anti-cancer therapy. The applicant should have a Ph.D., D.V.M., M.D., or equivalent degree and have a strong background in cell culture, biochemistry, and immunology. This is a 2-year position, renewable annually. Please send curriculum vitae and names of three references to: **Dr. Mike Breider, Department of Pathobiology, College of Veterinary Medicine, University of Tennessee, P.O. Box 1071, Knoxville, TN 37901-1071. Telephone: 615-546-9230. UT is an Affirmative Action/Equal Opportunity Employer.**

### NIH TRAINING PROGRAM OPENINGS

(i) **RESEARCH FELLOWSHIPS** available for M.D.'s or Ph.D.'s interested in HIV pathogenesis and opportunistic infections. *Stipends limited to U.S. citizens or permanent residents.* (ii) Unexpected opening in 3-year **INFECTIOUS DISEASES FELLOWSHIP** available for 1 July 1991. Applicants for both fellowships should apply to: **Gerald T. Keusch, M.D., Chief, Division of Geographic Medicine and Infectious Diseases, New England Medical Center Hospitals, Box 041, 750 Washington Street, Boston, MA 02111.**

**RESEARCH FELLOWSHIP IN OTOLARYNGOLOGY AND RELATED BASIC SCIENCE SPECIALTIES.** A fellowship is available for a Ph.D. basic scientist. Opportunities available: tumor preparation, cell culture, flow cytometry, biochemistry of the inner ear, olfactory physiology, energy-linked transport in the inner ear, cancer immunology, deglutition, mucosal immunology, psychosocial intervention of cancer patients, experimental therapeutics, and vestibular physiology.

Send curriculum vitae, brief description of research interests, and three letters of reference to: **Robert Mathog, M.D., Chairman, Otolaryngology 5E-UHC, Wayne State University, 540 East Canfield, Detroit, MI 48201.**

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

**POSTDOCTORAL RESEARCH TRAINING FELLOWSHIPS** in the molecular and cellular pathology of cancer for M.D. or Ph.D. graduates are available at Temple University School of Medicine. The program offers specialized research training in the molecular basis of normal and abnormal cell proliferation and the molecular genetics of cancer utilizing the facility and resources of the Fels Research Institute for Cancer Research and Molecular Biology. *Must be U.S. national or permanent resident.* Send curriculum vitae, statement of research and career objectives, and two letters of reference to: **W. Edward Mercer, Ph.D., Program Director, Department of Pathology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. An Equal Opportunity/Affirmative Action Employer.**

### PREDOCTORAL AND POSTDOCTORAL TRAINING IN VIROLOGY AT UNIVERSITY OF CALIFORNIA LOS ANGELES (UCLA) SCHOOL OF MEDICINE

The Department of Microbiology and Immunology, UCLA School of Medicine, invites applications for training positions in virology. Research programs include the cellular and molecular basis of latency and pathogenesis of herpes simplex and cytomegaloviruses (Jack G. Stevens), molecular biology of influenza viruses, transport and sorting of viral proteins, assembly of viruses (Debi P. Nayak), gene regulation and transformation by papilloma viruses (Felix O. Wettstein), molecular mechanism of viral persistence (Rafi Ahmed), molecular biology of picornaviruses and regulation of eukaryotic transcription (Asim Dasgupta), molecular genetics and pathogenesis of human retroviruses (Irvin S. Y. Chen), and molecular basis for transcriptional activation of herpesvirus genes (Lawrence T. Feldman). Stipends available. For predoctoral training leading to the Ph.D. degree, contract: **Dr. Rafi Ahmed**; and for postdoctoral positions, contact: **Dr. Debi P. Nayak, Department of Microbiology and Immunology, UCLA School of Medicine, Los Angeles, CA 90024-1747.**

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## SCIENTIFIC COMPUTING

SmithKline Beecham, a world leader in pharmaceutical research, has a challenging opportunity for a postdoctoral scientist in its Scientific Computing Group. This position will focus on a research project to apply advanced mathematical techniques to understand tumor heterogeneity. This is an exciting project to use non-traditional approaches to tackle a difficult, but important problem.

The successful candidate will join a multi-disciplinary team consisting of biological and computational scientists. An advanced degree (Ph.D.) in a scientific field as well as strong, documented experience in scientific computing are essential. Candidates should have extensive experience developing and applying mathematical computational techniques to complex scientific problems. Experience with population biology, dynamical systems approaches (chaos or facts), cellular automata, pattern recognition, and neural networks is desired. A biological background is desired, but not required. Especially of interest are self-motivated individuals with interests in mathematics, scientific computation, and biology.

The position will be located at our state-of-the-art research facility in suburban Philadelphia. We offer an excellent compensation and benefits package as well as an exciting and active work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, send your resume to Terry Gallagher, G0158, Senior Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/H/V.



**SmithKline Beecham**  
Pharmaceuticals

## RESEARCH SCIENTISTS

Athena Neurosciences, Inc., located in the San Francisco Bay Area, is a biotechnology-based company committed to the discovery and development of new products to diagnose and treat diseases of the central nervous system. Our research focuses on Alzheimer's disease and the delivery of drugs to the brain.

**Immunochemistry** – An individual is sought at the Ph.D. level who has proven leadership skills in the area of Immunochemistry. The optimal candidate will have several years experience in the development of novel immunoassays applied to biological problems (Ad #123).

**Biochemistry** – A position is available at the Ph.D. level with 2–5 years of post doctoral experience for an individual with a strong background in Biochemistry. Experience with purification of macromolecules particularly from the nervous system is essential (Ad #124).

Athena Neurosciences, backed by the most prominent and successful venture capitalists in the biotechnology industry, offers an innovative and exciting professional, scientific environment in addition to competitive salaries, benefits and equity participation. Please send curriculum vitae to: Athena Neurosciences, Inc., 800F Gateway Boulevard, South San Francisco, California 94080. Attn: Human Resources. Please refer to the appropriate ad number in correspondence. An equal opportunity employer.

**athena neurosciences**

## POSTDOCTORAL SCIENTIST AND RESEARCH ASSOCIATE

Make a difference. Cetus Corporation is developing therapeutics for cancers and infectious diseases based on biotechnology. We encourage innovation and provide opportunities to become involved in a wide variety of research projects. Join our efforts in one of the following positions.

### POSTDOCTORAL SCIENTIST

You will improve the production and screening of random peptides expressed on phage particles. Working to develop this drug discovery technique, you will be searching for and characterizing peptides that bind to proteins of therapeutic interest. Publication of results is encouraged. PhDs with a strong background in molecular biology or receptor-ligand interactions will be considered.

### RESEARCH ASSOCIATE

As part of our Protein Chemistry department, you will participate in the microisolation and characterization of rare proteins from tissue culture and other sources in addition to purification, refolding, structure and function studies of recombinant proteins produced in a variety of expression systems.

Applicants should have an MS in Biochemistry or a related life science and at least 3 years of direct work experience in Protein Chemistry. Familiarity with state-of-the-art protein isolation methodologies is desirable. You will be part of an interdisciplinary approach to drug discovery, interacting closely with cell and molecular biologists in the project team.

Cetus offers an excellent benefits package along with a collaborative environment that fosters career and personal growth. For consideration, please send your resume to Cetus Corporation, Box 90264/LL, 1400 Fifty-Third Street, Emeryville, CA 94608. We are an Equal Opportunity Employer.



## SCIENTIFIC/TECHNICAL SENIOR RESEARCH POSITIONS

The U.S. Environmental Protection Agency (EPA) is seeking highly qualified candidates for senior research positions at our environmental research laboratories in the following locations: Narragansett, Rhode Island; Research Triangle Park, North Carolina; Athens, Georgia; Gulf Breeze, Florida; Cincinnati, Ohio; Duluth, Minnesota; Las Vegas, Nevada and Corvallis, Oregon. The person filling one of these positions will report directly to the Laboratory Director.

Depending on the specific position, applicants should have an advanced degree (doctorate preferable) in one of the following areas: ecological sciences, health sciences, environmental sciences, physical sciences, engineering or mathematical sciences; and several (at least seven) years experience as a principal investigator and direct experience with scientific assessments for environmental issues. Applicants must also meet the technical qualifications described in the Vacancy Announcement.

To obtain a copy of the Vacancy Announcement for the position in which you are interested, a copy of the Federal Application Form (SF-171), and a description of each laboratory, call or write Ms. Chaunta Gladney, U.S. EPA, Executive Resources and Special Programs Division, PM-224, Room 3910, 401 M Street S.W., Washington, D.C. 20460, (202/382-3328).

**APPLICATIONS MUST BE POSTMARKED BY: February 28, 1991.**

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## TOXICOLOGY

Amoco's Environmental Affairs and Safety Department in Chicago, Illinois, has two new positions available in its Toxicology and Product Stewardship Division.

One position involves developing toxicology and chemical information for Amoco product registrations in the U.S.

The second position involves conducting toxicologic evaluations of Amoco products intended for international markets.

Applicants must have an M.S. in Toxicology or a related discipline. Some industry experience would be advantageous. Strong interpersonal skills are expected.

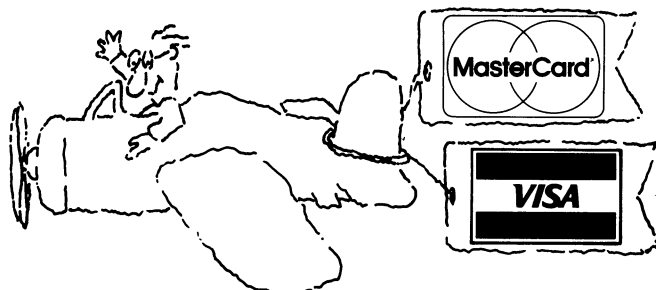
Amoco offers an excellent compensation and benefits package. For consideration, reply with resume and salary history to:



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## CHAIRMAN DEPARTMENT OF CELLULAR AND MOLECULAR IMMUNOLOGY

The Beckman Research Institute of the City of Hope, Duarte, CA, is seeking a Department Chairman to head and staff a newly created Department of Cellular and Molecular Immunology. Applicants should have a PhD or MD degree, and have an established laboratory with a record of significant research accomplishments, and external funding. An appointment will be made at the Associate to Full Professor level. Research areas should emphasize molecular approaches in one or more of the following areas: T-cells and T-cell receptor function, immune response and antigen presentation, lymphokines and immune cell modulation, autoimmunity and suppression, immunogenetics, tumor immunology, vaccines, and immune cell therapy. The City of Hope is a modern research facility with programs in protein chemistry, molecular biology, and neurosciences. Ample opportunities are available for research collaborations in both clinical and basic sciences. Qualified individuals should send their curriculum vitae by February 15, 1991, to Dr. John E. Shively, Chairman of Search Committee for Cellular and Molecular Immunology, Beckman Research Institute of the City of Hope, 1450 East Duarte Rd., Duarte, CA 91010. *An Equal Opportunity/Affirmative Action Employer.*

**PROJECT MANAGER,  
FETAL CELL ISOLATION**



**CellPro,  
Incorporated**

Located in the Seattle area, CellPro is an early stage biotechnology company which is developing cell separation systems for medical research, diagnostic and therapeutic applications. One of the Company's major projects is the development of a system that can be used to isolate fetal cells and make prenatal diagnoses from samples of maternal blood.

To direct this project, we are currently seeking a Medical Geneticist or Cell Biologist at the Ph.D. level. The qualified candidate will have a minimum of five years postdoctoral experience in clinical and/or laboratory research in the field of human genetics. Experience in classical cytogenetics and in situ hybridization, as well as monoclonal antibodies and flow cytometry is required.

Send Curriculum Vitae to:  
Human Resources Administrator  
**CELLPRO, INCORPORATED**  
22322-20th Avenue S.E., #100  
Bothell, WA 98021-8446

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POSITION**

Position available for Associate Scientist (three years post-doctoral experience) and/or postdoctoral fellow. The successful applicant will be engaged in research on the biochemical and molecular mechanisms by which angiotensin peptides and other hormonal and pharmacological stimuli mediate cardiac muscle cell growth. There will also be the opportunity to engage in research defining the role of a localized intracardiac renin-angiotensin system in mediating cardiac muscle cell growth, with an emphasis on the regulation of the precursor genes for this system.

Competitive salary and fringe benefits are available. Please send CV and three names or letters of reference to:

**Dr. Kenneth M. Baker**  
Weis Center for Research  
Geisinger Clinic  
North Academy Avenue  
Danville, PA 17822-2611.

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**Geisinger**



**Postdoctoral Fellow  
Peptide and Peptidomimetic  
Chemistry Related to Amylin**

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert Company is seeking a Postdoctoral Fellow to contribute to its expanding discovery programs on novel mechanistic approaches to the treatment of diabetes. The position will focus on peptide chemistry related to the 37 amino acid peptide, amylin, which has been implicated in NIDDM. The fellow will join a small team of scientists interested in the design, synthesis and structural evaluation by high field NMR and molecular modeling of peptides related to amylin. In addition, there will be the opportunity to work closely with biological scientists involved in the evaluation of novel mechanisms in diabetes.

The ideal candidate will be a recent Ph.D. in Organic or Medicinal Chemistry, with some experience in solid phase peptide synthesis. Familiarity with CD and 2D NMR spectroscopy would also be desirable.

Our modern facilities are located adjacent to the University of Michigan campus, in an outstanding working and living environment. PARKE-DAVIS fosters a dynamic, challenging and highly collaborative professional environment with opportunities for personal and scientific growth. If you are interested in applying for this position, please forward your curriculum vitae and list of references to Human Resources, Box JDM-913PD, PARKE-DAVIS Research Division, Warner-Lambert Company, 2800 Plymouth Road, Ann Arbor, MI 48105. Please refer to job #3290 when responding. "Smoke-Free Work Environment"

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LAMBERT**

**RESEARCH ASSOCIATE  
CNS Diseases Research**

The Upjohn Laboratories, Division of the Upjohn Company, is offering an exciting career opportunity for an individual committed to excellence in CNS discovery research. A B.S. or M.S. degree in Biology, Biochemistry, Pharmacology or related discipline, strong academic background and at least two years of relevant research experience are needed. Under the direction of a scientist, the selected candidate will provide a key role in a research program involving free radicals in neuronal death due to age and ischemia by applying HPLC and chemiluminescence analysis of metabolites from brain slices and in vivo models of cerebral ischemia. Experience with isotopic measurement of calcium, neuroanatomy, and histology would be a plus.

We are committed to your continued scientific development, your participation in scientific publications, with participation at scientific meetings encouraged. Our laboratories are located in downtown Kalamazoo, a mid-sized community in southwestern Michigan, midway between Detroit and Chicago. Upjohn offers a highly competitive compensation and benefits package and in a region with reasonable housing and living costs. Qualified candidates are invited to submit their resumes, cover letters, reference names and copies of transcripts to: **THE UPJOHN COMPANY, CORPORATE RECRUITING/ POSITION 5731-HA, 7000 PORTAGE ROAD, KALAMAZOO, MI 49001-0199.** Please refer to position 5731-HA in your letter. An Equal Opportunity Employer M/F.

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## POSITIONS OPEN

**POSTDOCTORAL FELLOW.** Thomas Jefferson University has a position available in reproductive immunology for Ph.D. Projects include analysis of the relationship of histocompatibility antigens/genes to pregnancy outcome, and laboratory research on cellular and humoral responses in normal pregnancy and recurrent miscarriages. Experience in tissue culture, cell separations, and production of monoclonal antibodies helpful. Please send curriculum vitae to: **J. Bruce Smith, M.D., Department of Medicine, Thomas Jefferson University, 1015 Walnut Street, Room 613, Philadelphia, PA 19107-5099.** We are committed to a smoke-free environment. *Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH FELLOW-SHIP.** A position is immediately available to study the molecular biology of human thromboxane  $A_2$  receptors. Recombinant DNA technology, protein purification, and ligand binding techniques are used. A background in molecular biology and/or protein chemistry is desired. Send curriculum vitae to: **Perry V. Halushka, Ph.D., M.D., Department of Cell and Molecular Pharmacology, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425.** MUSC is an *Equal Opportunity/Affirmative Action Employer.*

### PREDOCTORAL FELLOWSHIP IN ECOLOGY AND ENVIRONMENTAL SCIENCES

Basic and applied research in ecology and environmental science has been conducted on the Southeastern Coastal Plain for over 30 years by the faculty at the University of Georgia's Savannah River Ecology Laboratory (SREL). Applications are invited for a competitive fellowship program that will support Ph.D. students at their home institutions during completion of coursework and prior to full-time residence at SREL to conduct their dissertation research. It is expected that an SREL faculty member will serve on the student's doctoral committee, preferably as major or co-major professor. Particular areas of SREL expertise include, but are not limited to, population biology and genetics, physiological ecology, environmental chemistry, toxicology, life history evolution, aquatic ecology, radioecology, plant ecology, and soil science. Support includes stipend and tuition and is contingent on acceptance into a Ph.D. program. *All applicants must be U.S. citizens.* For further information and application forms contact: **Ms. Teresa Carroll, Savannah River Ecology Laboratory, Drawer E, Aiken, SC 29802. Telephone: 803-725-2472.** Deadline for applications is 15 February 1991. *Equal Opportunity/Affirmative Action Employer.*

### POSTDOCTORAL AND PREDOCTORAL FELLOWSHIPS IN TOXICOLOGY

Postdoctoral position immediately available to study the molecular mechanisms of chemical-induced multistage carcinogenesis with the focus on the perturbation of signal transduction pathways leading to altered cell proliferation and differentiation. Interested candidates should send curriculum vitae to the address below. Predoctoral fellowships are also available in the following areas: xenobiotic metabolism, expression of monooxygenase enzymes, neurotoxicology, molecular carcinogenesis, cutaneous toxicology, and mechanisms of comparative toxicity as well as a variety of other areas pertaining to biochemical, molecular, and environmental toxicology. For more information write to:

**Dr. R. C. Smart**  
Department of Toxicology  
Campus Box 7633  
North Carolina State University  
Raleigh, NC 27695

### POSTDOCTORAL RESEARCH ASSOCIATE

To conduct research on the neurobiology of photoperiodism and circadian rhythms. Training is available in immunocytochemistry, *in situ* hybridization, receptor binding assays, and neural transplantation. Applicants should have a Ph.D. and research experience in neurobiology, biochemistry, pharmacology, or related disciplines. Position available 31 March 1991. Deadline for applications is 1 February 1991 or until a suitable candidate has been identified. Submit curriculum vitae and three letters of recommendation to: **Dr. Eric L. Bittman, Department of Zoology and Program in Neuroscience and Behavior, University of Massachusetts, Amherst, MA 01003.** *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

**POSTDOCTORAL RESEARCH ASSOCIATE.** Available spring 1991 for the study of the effects of space flight on immune responses and resistance to infection. Applicants will be expected to have previous experience in immunology and/or microbiology/infectious diseases research. Please send curriculum vitae and names and addresses of three references to: **Dr. Gerald Sonnenfeld, Department of Microbiology and Immunology, School of Medicine, University of Louisville, Louisville, KY 40292.**

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

**POSTDOCTORAL/RESEARCH ASSOCIATE** (salary: \$17,000 to \$30,000; U.S. citizen/immigrant). To investigate signal transduction events, receptors, and extracellular components in cultured oligodendrocytes. Strong background in cell/molecular biology and biochemistry essential. Send résumé and names of three references to: **Dr. Sara Szuchet, Department of Neurology, BH Box 425, The University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637.** *Affirmative Action/Equal Opportunity Employer.*



Agricultural  
Research  
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United States  
Department of  
Agriculture

**POSTDOCTORAL RESEARCH AFFILIATE, MOLECULAR BIOLOGIST.** Photosynthesis Research Unit, Urbana, Illinois. A temporary position NTE 2 years is available to investigate proton-coupled transport proteins in the plasma membrane. The major focus of this project will be to clone the genes for those proteins by complementing yeast transport mutants with a plant cDNA constructed in a yeast expression vector. A recent Ph.D. with considerable experience in biochemistry and molecular biology is required. The annual salary is \$24,705 with fringe benefits. Position available immediately. Applicants should submit curriculum vitae, and copies of relevant papers or preprints to: **Dr. Daniel R. Bush, University of Illinois, 252 Davenport Hall, Urbana, IL 61801. Telephone: 217-333-6109.** Applicants should be marked IN002. *USDA is an Equal Opportunity Employer. Women and minorities are urged to apply.*

**POSTDOCTORAL RESEARCH POSITION.** Available in new laboratory facilities at Rutgers University to study the role of post-translational modification on function and expression of stress proteins yeast and/or mammalian cells. Biochemistry/molecular biology experience required; experience in yeast genetics preferred. Send curriculum vitae and names of three references to: **Dr. Thomas Leustek, Center for Agricultural Molecular Biology, Rutgers University, New Brunswick, NJ 08903-0231.**

*Rutgers is an Equal Opportunity/Affirmative Action Employer.*

### NEUROPHYSIOLOGIST

**RESEARCH ASSOCIATE.** Position available immediately to study network interactions in the hippocampus with multiple microelectrodes in behaving rats and/or emergence of epileptic patterns and the effects of fetal grafts. State-of-the-art facilities available in a new institution. Candidates should have an M.D. or Ph.D. and preferably, experience with *in vivo* recording techniques, programming, and brain grafting. NIH salary scale. Send résumé and names of references to: **Dr. G. Buzsaki, Center for Molecular and Behavioral Neuroscience, Rutgers University, Newark, NJ 07102.**

### RESEARCH ASSOCIATE

The Arnold Arboretum of Harvard University seeks a postdoctoral research associate who, under the direction of Dr. Peter Ashton, will conduct field and analytical forest research in Lambir National Park, Sarawak, Malaysia as part of a joint Malaysian/Japanese/Arnold Arboretum project. The individual will cooperate with colleagues in tree censusing, assist with data input and analysis, develop a reference herbarium, prepare an annotated field key to tree species, facilitate Cambridge-Lambir communications, and conduct and publish original research. A letter of interest, résumé, and the names, telephone numbers, and addresses of three references should be sent to: **Dr. Robert Cook, Arnold Arboretum, 125 Arborway, Jamaica Plain, MA 02130.**

## POSITIONS OPEN

**POSTDOCTORAL/RESEARCH ASSOCIATE POSITION.** Available immediately in the molecular medicine division to investigate lipoproteins and atherosclerosis, using molecular biological approaches. Send curriculum vitae to:

**Dr. Alan Tall**  
Department of Medicine  
Columbia University  
630 West 168th Street  
New York, NY 10032

### PROTEIN KINASES

**RESEARCH ASSOCIATE.** Position available 1 February 1991 to study mechanism(s) of activation of MAP kinase. Experience and/or interest in protein kinases and protein phosphatases required. Eligibility for NIH postdoctoral fellowship awards desirable. Contact: **Tom Sturgill, Box 419, University of Virginia, Charlottesville, VA 22908. FAX: 804-982-3830.** Please provide telephone numbers of three references.

**RESEARCH ASSOCIATE.** Ph.D. with at least 2 years of postdoctoral experience and a strong background in bacterial genetics, especially DNA manipulation and sequence analysis of *Pseudomonas*. Duties for this research position include elucidation of molecular mechanisms for genetic control of a capsular polysaccharide in *P. aeruginosa*. The candidate will determine sequences of genes which control polysaccharide production, identify encoded proteins and sites of their control, and use biochemical methods to determine mechanisms of control. Manuscripts will be prepared for publication. Salary at \$22,000 per year. Send résumé by 31 January 1991 to: **Mrs. Edna Flynn, Tennessee Job Service, 1295 Poplar Avenue, Memphis, TN 38104.**

### RESEARCH ASSOCIATE

Two positions are available immediately to study the metabolic fate of novel antiviral agents and the molecular action of natural carcinogens. A Ph.D. with experience in HPLC separations and metabolite identification is sought. Experience in mammalian cell culture, DNA purification and sequencing, hybridization, and similar techniques is a plus. Send curriculum vitae and names of three references. Contact: **Roger A. Coulombe, Jr., Ph.D., Associate Professor, Department of Veterinary Sciences, Utah State University (USU), Logan UT 84322-4620.** *USU is an Affirmative Action/Equal Opportunity Employer.*

### RESEARCH ASSOCIATE

Purification and characterization of proteins relevant to cardiovascular control and the pathogenesis of hypertension, the HPLC-EC analysis of catecholamines and metabolites, and methods in molecular biology. Applicant must be able to work independently and to assume responsibility for the quality control of his or her own work. The job involves the analysis of large number of catecholamine samples from a variety of biological fluids, including blood plasma, cerebrospinal fluid, and push-pull perfusates. B.S. in analytical chemistry with 2 years of experience. Salary: \$22,680 annually. Send curriculum vitae to: **Sandy Starnes, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222. JO# 626352.**

### MOLECULAR BIOLOGIST/ NEUROPHARMACOLOGIST ALCOHOL RESEARCH

The Psychiatry Department and Alcohol Research Center at the University of North Carolina (UNC) are seeking applicants for a **RESEARCH ASSOCIATE** position in molecular neuropharmacology. We are seeking a candidate who has applied techniques of molecular genetics to investigate the mechanisms of alcohol action in the CNS. The ideal candidate will have a background in receptor/second messenger systems as well. A doctorate in molecular biology and several years of postdoctoral experience in neuroscience or pharmacology are required. Candidates should have published work in the molecular biology of alcoholism and demonstrated the ability to compete for research awards. Position is available 1 July 1991. Send curriculum vitae, descriptions of research accomplishments, and the names and addresses of three references to: **A. Leslie Morrow, Ph.D., Department of Psychiatry, CB 7175, University of North Carolina, Chapel Hill, NC 27599.** *Women and minorities are especially encouraged to apply. UNC is an Affirmative Action/Equal Opportunity Employer.*

## RESEARCH ASSOCIATE DNA SEQUENCING

**Amgen** has emerged as the recognized leader in the development of innovative human therapeutic products through applications of biotechnology. Our continued commitment to excellence in research has resulted in an environment in which scientists have the resources and support to develop their full potential. As a result of our continued growth, we have an excellent opportunity for a Research Associate in our DNA sequencing group. Responsibilities for this position will include DNA sequencing in support of on-going research and product development programs.

Qualified applicants for this position must have a Bachelor's or Master's degree in Molecular Biology, Biochemistry or a related discipline and a minimum of two years' experience in the di-deoxy chain termination method of DNA sequencing. Basic skills in Molecular Biology are also essential.

**Amgen** offers a stimulating and challenging research environment on the leading edge of biotechnology as well as an excellent compensation and benefits package including comprehensive relocation benefits.

If you have the necessary qualifications and would like the opportunity to develop your skills as a technical expert in an organization that places a high value on its human resources, please send a resume, in confidence, to:

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**Amgen Center**  
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### Senior Biochemist

We seek an experienced Biochemist with a strong background in protein physical chemistry to head a group engaged in the study of transmembrane permeation of peptides. A broad base in biology and a good understanding of protein-lipid interaction is desirable. A PhD in Biochemistry or a related discipline is required, and 5-10 years' related experience is preferred.

### Protein Chemist

You will determine the possibility of delivering peptides by electrotransport. Requires a PhD, 2-5 years' postdoctoral experience and a significant understanding of protein stabilization and characterization. A background in physical chemistry or electrochemistry is desirable.

For consideration, please call Darlene Markovich at (415) 494-5214; or fax your cv/resume to (415) 494-5151; or send it to: ALZA, Employment Department, 950 Page Mill Road, P.O. Box 10950, Palo Alto, CA 94303-0802. EOE.

# alza

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Our ideal candidate will be an experienced laboratory manager and will clearly demonstrate:

- strong administrative, budgetary and personnel management skills.
- comprehensive knowledge of water/wastewater laboratory support services
- familiarity with state-of-the-art technology
- advanced academic background in chemistry, bacteriology, environmental or sanitary engineering or a closely related field
- excellent public relations skills with a customer service orientation
- strong communications skills

The District offers a comprehensive and competitive benefits package. Relocation assistance is available. To apply, send resume and a cover letter illustrating your qualifications by January 25, 1991 to:

**East Bay Municipal Utility District**  
**Exam Unit, 2127 Adeline Street**  
**P.O. Box 24055**  
**Oakland, CA 94623-24055**  
**Fax (415) 451-1289**

For job announcement phone (415) 287-0735. Resumes will be screened by a review committee and successful candidates will be invited to a Qualifications Appraisal Interview tentatively scheduled for the week of February 4, 1991.



EEO/AA

## POSITIONS OPEN

### EXPERIMENTAL HEMATOPATHOLOGIST

The center has an opening for an individual with expertise in clinical hematopathology and research interest in the application of molecular techniques to the study of normal and malignant hematopoiesis. Demonstrated ability to successfully compete for research funding preferred. Please send curriculum vitae to: **Irwin D. Bernstein, M.D., Fred Hutchinson Cancer Research Center, 1124 Columbia Street, Seattle, WA 98104. We are an Equal Opportunity Employer. Smoke-free environment.**

### PHYSIOLOGIST, PHARMACOLOGIST, BIOCHEMIST

Applications are invited for full-time positions at the GS-12 level in the Physiology Branch, U.S. Army Medical Research Institute of Chemical Defense, Aberdeen Proving Ground, Maryland. Positions are available immediately for two scientists to join a group working on the development of concepts for prophylaxis and therapy against compounds that induce pulmonary edema. We are a multidisciplinary group, therefore, candidates with expertise in respiratory physiology, pharmacology, biochemistry, and/or immunology will be considered. An appropriate Ph.D. and U.S. citizenship is required and the applicant must be able to obtain a security clearance. Salary range is \$35,825 to \$46,571 depending upon qualifications. Résumés should be sent to: **Commander, USAAPGSA, Attention: STEAP-CP-RT (Ms. M. Boggs), Aberdeen Proving Ground, MD 21005-5001. Equal Opportunity Employer.**

### PROTEIN CRYSTALLOGRAPHER

A RESEARCH SCIENTIST position is available at the Wadsworth Laboratories, New York State Department of Health, and Department of Biomedical Sciences, School of Public Health, State University of New York at Albany. Generous resources for start-up crystallization and diffraction laboratories will be provided. Active research programs exist at the Wadsworth Laboratories in the areas of supramolecular structure by electron microscopy, structure prediction and modeling, and structure-function analysis by biochemical and genetic techniques. Candidates interested in collaborative research in one or more of these areas are encouraged to apply. A Ph.D. in biophysics or related discipline and postdoctoral experience in macromolecular crystallography are required. This position is funded through Health Research, Inc. Send curriculum vitae, statement of research interests, and the names of three references to: **Dr. Joachim Frank, Chairman, Crystallography Search Committee, Wadsworth Center for Laboratories and Research, P.O. Box 509, Empire State Plaza, Albany, NY 12201-0509. Affirmative Action/Equal Opportunity Employer.**

### THE UNIVERSITY OF QUEENSLAND DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY RESEARCH OFFICER/ SENIOR RESEARCH OFFICER (TWO POSITIONS)

We are seeking neuroscientists (or electrical engineers) to join a team working on the characteristics of autonomic neurones and their response to damage. Applicants should have research interests in synaptic mechanisms, neural connectivity, and/or development and regeneration.

Experiments involve primarily in vitro studies on central and peripheral neurones. Postdoctoral experience in electrophysiological recording, intracellular dye techniques, immunohistochemistry, and/or computer modeling of neurones is preferred. Appointment to 31 December 1991 in the first instance, with renewal possible to end of 1994. Salary: research officer, A\$28,792 to \$32,762; senior research officer, A\$33,163 to \$37,420.

For further details, please contact: **Professor E. M. McLachlan, 61-7-377-3133, or Dr. J. R. Keast, 61-7-377-4524.** Send written applications to: **Professor E. M. McLachlan, Department of Physiology and Pharmacology, University of Queensland, Queensland 4072, Australia.** Closing date: 31 January 1991. Ref. No. 60790.

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## POSITIONS OPEN

**CHEMIST, CODE 2196.** Geo-Centers, Inc., one of the fastest growing high-tech firms in America, specializing in R&D work for chemical, optical, and materials sciences, is seeking analytical chemists to support an R&D effort involving basic chemical analysis, diagnostic techniques, instrument design, and system verification. Duties will include the evaluation of analytical systems for the detection of organics in ambient air and other research projects. Requirements for these positions are a B.S., M.S., or Ph.D. degree in chemistry; research experience; demonstrated writing skills; familiarity with GC, HPLC, optical spectroscopies, and coulometry; and U.S. citizenship. We offer a competitive salary and attractive benefits. Applicants are encouraged to send their résumés to: **Geo-Centers, Inc., 10903 Indian Head Highway, Fort Washington, MD 20744, Attention: Deborah Hall-Greene, Human Resources Department/Code 2196. Geo-Centers, Inc., is an Equal Opportunity/Affirmative Action Employer. (Principals only.)**

**SMALL FRUIT PRODUCTION PHYSIOLOGIST.** Department of Pomology, University of California (UC), Davis, invites applications for an assistant pomologist in the Agricultural Experiment Station and assistant cooperative extension (CE) specialist located at the UC South Coast Field Station, Santa Ana, California. Appointee will develop a statewide research program on ecologically sound production systems and coordinate CE education and research for strawberries and other small fruits. Ph.D. degree in plant physiology, horticulture, pomology, or a related field is required, and postdoctoral experience is desirable. Submit curriculum vitae, college transcripts, statement of research interests, list of publications, and names and addresses of three referees to: **Steven A. Weinbaum, Search Committee Chair, Department of Pomology, University of California, Davis, CA 95616-8683 by 1 February 1991. The University of California is an Affirmative Action/Equal Opportunity Employer.**

### MARINE ECOLOGIST, GS-408-9/13 (\$25,717 TO \$44,348 PER ANNUM)

The Ocean Minerals and Energy Division of the National Oceanic and Atmospheric Administration, National Ocean Service (NOS), is seeking a marine ecologist to assist in the development and implementation of ocean research projects. This exciting opportunity based in Washington, D.C., will include: assisting in the development and participating in research cruises, analyzing environmental information, and developing and monitoring research initiatives for deep seabed mining and Ocean Thermal Energy Conversion. A strong background in multidisciplinary approaches to ecology, benthic ecology, ocean processes, statistics, and sampling strategies is preferred. Qualifications include a bachelor's degree or higher in marine biology or a related field of science underlying ecological research. In addition, 1 year of specialized experience is required equivalent to the GS-7 level in the federal service. Education may be substituted for experience. Send Application for Federal Employment, SF-171, citing **Announcement #OA/N91-36JWS**, by 31 January 1991 to: **NOS Personnel, 1335 East West Highway, #3230, Silver Spring, MD 20910. Equal Opportunity Employer.**

**ASSISTANT PHYSICIST.** Ph.D. in x-ray optics/physics. Education and/or experience should include: design and construction of x-ray optical components, synchrotron-based equipment, and using synchrotron x-rays for surface reflection and imaging, x-ray coherent optics and its use. All of the above evidenced by a minimum of three to five publications in refereed journals. Conceive and implement innovative design and carry out development work of synchrotron-based equipment. Conceive and implement novel x-ray optics to make full use of the high power of coherent x-ray photons provided by the Advanced Photon Source. Test the performance and use of such state-of-the-art equipment at synchrotron sources. Publish results in refereed journals and present them at meetings, conferences, workshops, etc. Actively participate in the synchrotron effort of x-ray optics and novel instrumentation for the 7-GeV Advanced Photon Source. Salary: \$3825 per month; 40 hours per week, 8:30 to 5:00 p.m. Send résumés to: **Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605. Attention: Mary Millea, Reference #V-IL 1506-M. An employer-paid ad.**

## POSITIONS OPEN

**ENVIRONMENTAL SPECIALIST (HYDROLOGIST).** Duties include assisting in the development and use of analytical and numerical groundwater models, evaluation of groundwater resources, contamination and remediation, and preparation of environmental databases. Requires an M.S. in environmental studies or geography with 2 years of experience as an environmental analyst (water quality). Also requires at least one course each in cartography, hydrogeology, groundwater hydraulics, and G.I.S. (Geographic Information Systems). Salary is \$25,000 per year. Hours are 40 per week beginning at 8:00 a.m. to 5:00 p.m. Send résumé to: **7310 Woodward, Room 415, Detroit, MI 48202. Refer to #81290.**

## MEETINGS

### AMERICAN-ROMANIAN WORKSHOP FOR RECENT POSTDOCTORAL GRADUATES

The National Academy of Sciences and the Romanian Academy will jointly sponsor a 3-week summer workshop in ecology/environmental sciences. The workshop will include ten American scientists and ten Romanian scientists, all of whom earned the Ph.D. degree or achieved equivalent accomplishments since 1 January 1984. The workshop will consist of one 3-week session to be held in the Danube Delta of Romania in June 1991. The National Academy of Sciences will support an interdisciplinary team of American scientists that can contribute to an integrated assessment of ecological problems in the Danube Delta.

The program's emphasis will be on such topics as: wetlands and floodplain restoration and management; pollutant cycling and impacts, with emphasis on eutrophication; fisheries restoration and management; wildlife management; effects of pesticides and toxic substances; environmental engineering; hydrodynamics and sediment flux; ecosystem modeling; landscape characterization and development of geographic information systems; and other aspects of applied ecology. Application requirements include curriculum vitae, a list of publications, a description of the relevance of participation in the workshop to present activities and long-term plans, and two letters of recommendation.

Application deadline: 8 February 1991. Notification date: by 1 March 1991. To receive a program announcement please contact: **Office of Soviet and East European Affairs, National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington, DC 20418, Attention: Angela C. Dredden. Telephone: 202-334-3650. FAX: 202-334-2614.**

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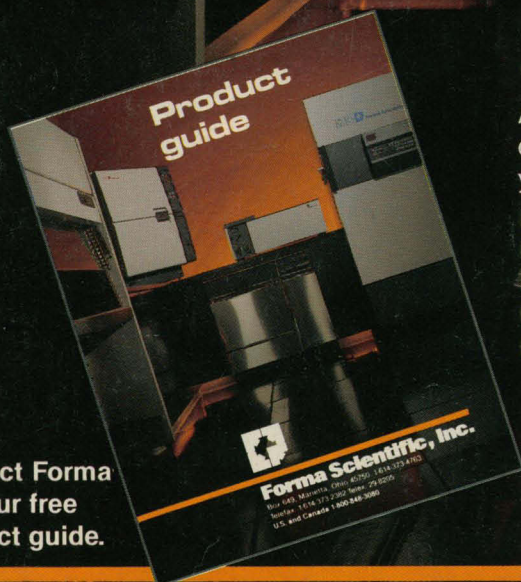
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