

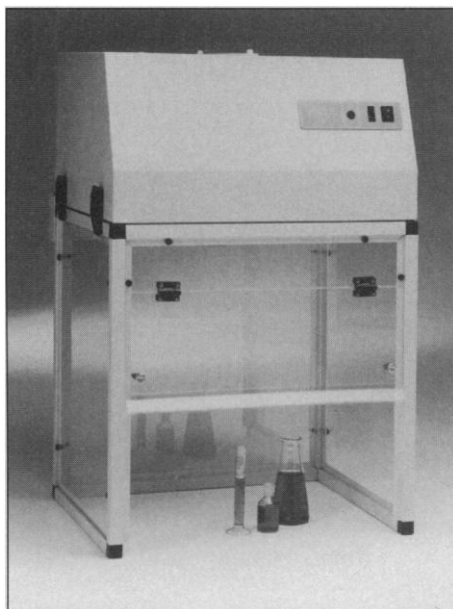
PRODUCTS & MATERIALS

Biotinylated Oligosaccharides

Biotinylated diaminopyridine-labeled oligosaccharides provide a versatile approach to the analysis of oligosaccharide structure and function. The high-affinity binding of the biotinyl group with multivalent streptavidin can be used to create the functional equivalent of glycoproteins carrying multiple copies of known oligosaccharides. These complexes can be used to produce antibodies directed against the oligosaccharide. The antibodies can then be used to localize oligosaccharides in situ and to purify oligosaccharide-specific receptors from expression libraries. **Oxford GlycoSystems. Circle 134.**

Laminar Flow Enclosure

The VLF24 is a low-cost polymerase chain reaction work environment that provides laminar flow protection and ultraviolet lighting to prevent the contamination of nucleic acid samples by airborne particu-



lates or earlier experiments. The ultraviolet lighting inactivates DNA and RNA contamination within minutes to ensure reliable results during sample preparation for nucleic acid amplification. Sample protection is provided to better than class 100 by bathing the work surface with 0.12 μm of filtered air. The VLF24 provides true laminar air flow and ensures nonturbulent air

flow over the entire working area. The air is filtered through a pre-filter and high-efficiency particulate filter for maximum sterility. **Misonix. Circle 135.**

Long PCR Product Kit

The GeneAmp XL PCR Kit with XL Buffer II is designed to amplify long sequences of DNA up to 40 kb in polymerase chain reaction (PCR). The ability to amplify long DNA sequences greatly enhances efforts in genomic mapping, sequencing, and characterization, as well as those in whole viral genome characterization and whole gene analysis. This technology has the potential to enable PCR-based characterization of important gene insertions in medical, genetic, and agricultural applications. **Perkin-Elmer. Circle 136.**

Mutation Detection

Magnetic Mismatch Binding Beads enable rapid and inexpensive mutation and polymorphism detection. They can detect DNA containing mismatches in samples in which only one molecule in a thousand contains a mismatch. The beads can detect all single base change mutations as well as mutations arising from small additions or deletions and recognize those mismatches that most closely resemble base pairs. **Genecheck. Circle 137.**

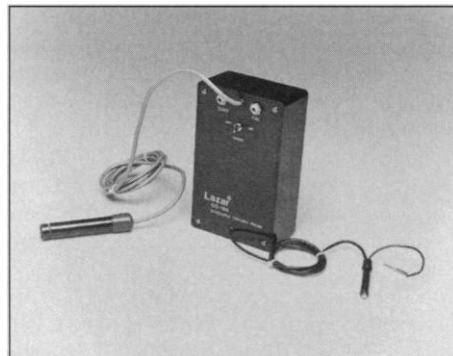
Spill Kits

Emergency spill cleanup kits are available for mercury, acid, caustic, solvent, and hydrofluoric acid spills. The kits help the user react quickly by providing everything needed to clean up, including step by step instructions. **Mallinckrodt. Circle 138.**

Dissolved Oxygen Probe

The DO-166 Dissolved Oxygen Probe can measure dissolved oxygen as easily as pH, using any standard pH meter. The probe plugs

directly into any standard pH meter and can measure dissolved oxygen from 0 to 14 ppm with readability of 0.1 ppm. The probe



eliminates the time-consuming wet chemistry involved with the Winkler method. **Lazar Research Laboratories. Circle 139.**

High Sensitivity Immunoblotting Kit

The High Sensitivity Immunoblotting Kit's unique components provide low background levels and increased sensitivity. The kit takes antigen detection levels to the point of radioisotope detection without the dangers of such methods. The kit is based on luminol oxidation and horseradish peroxidase (HRP) chemiluminescence detection with thiazol enhancement, coupled with a streptavidin-biotin system that results in greater magnitude of binding ability due to provision of multiple site attachment of HRP to antibody. **Wako BioProducts. Circle 140.**

Protein Stain

RAPIDstain is a gel stain based on colloidal properties of Coomassie blue with sensitivity comparable to silver staining. RAPIDstain stains only protein, resulting in a clear background with high-band visibility. Protein bands are visible within 1 hour of staining. **Geno Technology. Circle 141.**

Antibody Pairs and Cytokine Standards

Matched antibody pairs and cytokine standards provide researchers with high-quality reagents to develop cost-effective enzyme-linked immunosorbent assays (ELISA) in their own labs. Coating and detecting antibodies have been validated specifically for use in ELISA. Detecting antibodies are bio-

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.

tinylated and can be used with a variety of streptavidin detection systems. Antibodies are provided as concentrates and cytokine standards are lyophilized, giving researchers maximum flexibility in titrating each reagent to meet their needs. **Endogen. Circle 142.**

Monoclonal Antibody Measuring Kit

The QUICKMeasure monoclonal antibody (mAb) measuring kit is an easy way to determine the concentration of mAbs in cell culture or during purification. It can be used to determine the concentration of any class or subclass of antibody including immunoglobulin G (IgG), IgM, IgA, and IgE in 30 to 60 min. If serum supplements are used in the culture medium, bovine IgG does not interfere with QUICKMeasure. The kit can help optimize cell culture and monitor purification conditions. **Sterogene. Circle 143.**

DNA Sequencing Kits

IsoTherm DNA Sequencing Kits are designed for researchers who prefer to sequence using isothermal (nondcycle) methods but desire the advantages of high reaction temperature

to sequence even difficult DNA templates containing high GC-content or secondary structure. The kit for internal labeling makes use of ^{35}S -labeled nucleotide and produces high-quality sequence data from an overnight exposure with most templates. The kit for end labeling is used with ^{32}P end-labeled primers and is adaptable to high throughput sequencing. **Epicentre Technologies. Circle 144.**

Literature

Laboratory Accessories for Ultra-Low Temperature Freezers, Laboratory Refrigerators, and Refrigerated Products is a 20-page catalog. **LabWorks. Circle 145.**

Prodigy is a Guaranteed Alternative to Inertsil Columns at a Fraction of the Cost highlights the high-efficiency Prodigy columns, packed with ultrapure silica for analysis of acidic, basic, and amphoteric compounds. **Phenomenex. Circle 146.**

DX Series X-Ray Microanalysis System is a brochure that shows spectra, computer screen images, and control panels to illustrate the qualitative and quantitative analysis capabilities of this series. **Edax. Circle 147.**

LABOPORT Laboratory Vacuum Systems describes a series of systems available in four configurations. An oil-free Teflon pump handles liquid condensate without damage and eliminates the use of cold traps. The system can replace water aspirators for gel drying, rotary evaporation, filtration, and other uses. **KNF Neuberger. Circle 148.**

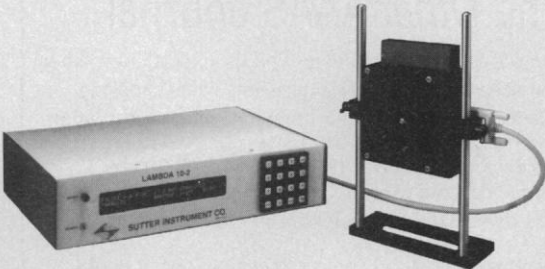
Advances in Biochemical Production is a quarterly newsletter of new products and company news. A recent issue features more than 100 new products, including unusual amino acids, differentially protected and standard amino acid derivatives, phenylglycines and cyclohexylglycines, organic synthesis reagents, and more. **Advanced ChemTech. Circle 149.**

Novacastra Laboratories Product Catalog 1996 features monoclonal and polyclonal anti-human antibodies and probes for use in immunohistochemistry, microbiology, in situ hybridization, and flow cytometry. It features more than 50 new products, including a monoclonal antibody (mAb) to estrogen receptor and NCL-CD23-1B12; a mAb to CD23 glycoprotein; anti-CD4, effective on frozen and paraffin-embedded tissue; and an antibody to heat shock protein 27. **Vector Laboratories. Circle 150.**

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Wang, X. et al. Matrix metalloproteinase inhibitor BB-94 inhibits human colon tumor growth and spread in a patient like orthotopic model in nude mice. *Cancer Res.* 54, 4720-28, 1994

Hoffman, R. Orthotopic is orthodox: why orthotopic transplant metastatic models are different from all other models? *J. Cellular Biochem.* 56, 1-4, 1994



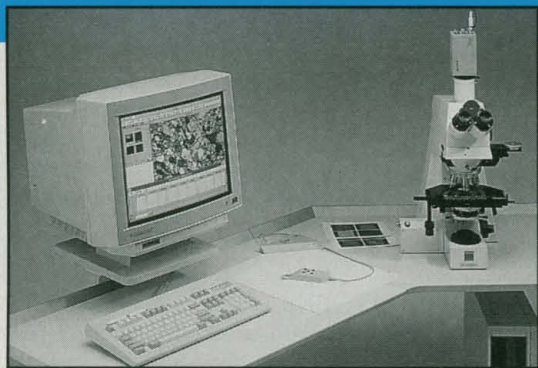
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EUKARYOTIC MOLECULAR BIOLOGIST

Founded in 1867, Cedar Crest College is a four-year independent liberal arts college for women. 1,700 students attend from 26 states and 20 countries and choose from over 35 majors and pre-professional programs. The beautiful 85-acre campus (a registered national arboretum) is located in the Lehigh Valley of Pennsylvania. The College is 90 miles from New York City and 60 miles from Philadelphia.

The Department of Biology is seeking applications from qualified Ph.D.'s for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level to start in September 1996. Preference will be given to candidates with research interest in non-mammalian systems focused in neurobiology or development biology areas. The applicant will be expected to teach core courses in the Genetic Engineering Program, develop senior level courses in the candidate's area of interest, and have involvement in other departmental courses. Active participation in intense undergraduate research is expected. Applicants should submit a letter describing teaching and research interests, curriculum vitae, and the names of three references to: Dr. Brian S. Misanko, Chair, Department of Biology, Cedar Crest College, Allentown, PA 18104. Equal Opportunity Employer.

TWO POSITIONS IN BIOLOGICAL SCIENCES VERTEBRATE PHYSIOLOGY LANDSCAPE ECOLOGY

The Department of Biological Sciences in the Faculty of Science at the University of Alberta invites applications for two tenure-track positions: one in vertebrate physiology and the other in landscape ecology. However, excellent candidates in related areas are also encouraged to apply. The effective date of employment will be January 1, 1997. The candidate must have a Ph.D. and postdoctoral research experience. Appointments will be made at the level of ASSISTANT PROFESSOR (\$39,230 to \$55,526). Candidates should forward a curriculum vitae, list of publications, a one-page statement of research and teaching interests, and the names of three referees to: Dr. M. Dale, Department of Biological Sciences, CW405 Biological Sciences Building, University of Alberta, Edmonton, Alberta T6G 2E9 Canada. Email: mark_dale@biology.ualberta.ca. For additional information about the department see: <http://gause.biology.ualberta.ca/biosci.html>. Closing Date: April 30, 1996. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.

ASSISTANT PROFESSOR

The Departments of Pharmacology and Anesthesiology at The University of Illinois at Chicago School of Medicine are accepting applications for a joint ASSISTANT PROFESSORSHIP. Ph.D. or M.D. applicants should have strong publication records, extramural funding, and experience with the application of molecular approaches to basic studies in neurobiology relevant to both pharmacology and anesthesiology. Research interest should be in one or more of the following general areas: receptor regulation, signal transduction pathways, gene transfer, neuropathology of stroke or brain trauma, brain protection, or cerebrovascular physiology/pathophysiology. The successful candidate will be expected to maintain a funded research program, to integrate with other neurobiology programs, and to participate in the teaching missions of the two departments. A generous start-up package is available. Applicants should send a letter containing names of three references, a brief statement of research interests, and a complete curriculum vitae to:

Chairman
Anesthesiology/Pharmacology Search Committee
Department of Pharmacology (m/c 868)
University of Illinois at Chicago
835 South Wolcott
Chicago, IL 60612

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DUKE UNIVERSITY FACULTY POSITION IN BIOMEDICAL ENGINEERING

Applications are being received by the Department of Biomedical Engineering, Duke University, for a tenure-track faculty position available as early as the fall semester 1996. Candidates will be evaluated based on their anticipated collaborative research with the Center for In Vivo Microscopy. The Center is an NIH National Resource with specific focus on development and application of magnetic resonance microscopy. Candidates should hold a Ph.D. in engineering, physics, or a related field and should have significant experience in magnetic resonance imaging. An appointment is envisioned at the ASSISTANT PROFESSOR level, with a possible secondary appointment in Radiology. Applications from more senior investigators will be considered. In addition to maintaining a vigorous research program, new faculty will be expected to participate in graduate and undergraduate advising and to give instruction in one or more of the following areas: medical imaging, medical instrumentation, signal processing, and image processing. All applications received within 30 days of the appearance of this ad will be considered. A curriculum vitae including a list of publications, current research funding, teaching interests, and a description of research activities should be sent immediately to: Professor Gregg E. Trahey, Chair, Imaging Search Committee, Box 90281, Department of Biomedical Engineering, Duke University, Durham, NC 27708-0281.

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MONTANA STATE UNIVERSITY DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Applications invited for a tenure-track position in Biochemistry from individuals whose research program makes extensive use of NMR. We anticipate an appointment at the ASSISTANT or ASSOCIATE level to begin preferably in the fall of 1996. Required: Ph.D. in chemistry or related area; background, ability, and motivation to teach effectively in biochemistry and to establish a vigorous, competitive research program in the general area of biological applications of NMR. Montana State University (MSU) has DRX 500, DPX 300, DRX 250, and CMC/Tecmag 200 NMR spectrometers. The successful candidate will be able to provide leadership in the further development of NMR capabilities at MSU. Send letter of application, detailed curriculum vitae, and written statement of research plans. Arrange to have three letters of recommendation sent directly to: Biochemical NMR Search Committee, Department of Chemistry and Biochemistry, MSU-Bozeman, Bozeman, MT 59717. Screening begins March 29, 1996 and continues until a hire is made. American Disabilities Act/Equal Opportunity/Affirmative Action/Veterans Preference.

YALE UNIVERSITY DEPARTMENT OF CHEMISTRY

The Department of Chemistry of Yale University solicits applications for a TENURED POSITION in Inorganic Chemistry in the sub-discipline of bio-inorganic chemistry. An outstanding teacher-scholar's research interests should complement those of the current tenured faculty. The position is expected to be filled for the academic year 1996-1997.

Applicants should submit curriculum vitae and a list of publications to: Donald M. Crothers, Chair, Senior Bio-Inorganic Search Committee, Department of Chemistry, Yale University, 225 Prospect Street, New Haven, CT 06520-8107 by April 15, 1996. Yale University is an Equal Opportunity/Affirmative Action Employer.

PSYCHOPHARMACOLOGIST

The University of Chicago (Psychiatry) seeks an outstanding candidate at the ASSOCIATE PROFESSOR level with expertise in psychopharmacology. Applicants should have an established, extramurally funded research program in clinical and/or basic psychopharmacology (e.g., substance abuse, affective disorder, or schizophrenia) with some teaching responsibilities. Send letter with curriculum vitae to: H. de Wit, Department of Psychiatry, University of Chicago, MC3077, 5841 South Maryland Avenue, Chicago, IL 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

Postdoctoral Opportunities In The Biomedical Sciences.

The following research training opportunities are currently available at the National Institutes of Health.

Characterization of Receptor-Ligand Interactions **Kenneth Tomer, PhD**

Mass spectrometry combined with protection assays is being used to probe structural motifs involved in molecular interactions, such as the interaction of HIV gp120 and immunoglobulin, relevant to an understanding of the basic processes occurring during HIV viral infection. Candidates should have expertise in protein and immunochemistry and less than five years of postdoctoral experience. Laboratory of Molecular Biophysics (OE-114), NIEHS, P.O. Box 12233, Mail Drop 6-01, Research Triangle Park, NC 27709.

Eicosanoids, Airway Inflammation and Asthma **Thomas Eling, PhD**

The expression and/or activation of prostaglandin H synthase, lipoxygenases and phospholipases which metabolize arachidonic acid to inflammatory lipids as related to the inflammatory response of trachea-bronchial epithelium is being investigated. A rat or human culture system is used for these studies in which differentiation to mucociliary or squamous phenotypes is regulated by retinoids. Experience with molecular biology techniques required and an interest in pulmonary biology desirable. Candidates must have less than five years of postdoctoral experience. Laboratory of Molecular Biophysics (OE-114), NIEHS, P.O. Box 12233, MD B3-01, Research Triangle Park, NC 27709, Phone 919-541-3911 or Fax 919-541-1460.

Immunology **Kathryn E. Stein, PhD**

Antigen processing and presentation of polysaccharide-protein conjugate vaccines are being investigated. Emphasis will be placed on differences between thymus independent and thymus dependent immunization for polysaccharides antigens. Experience in working with cell fractionation and lysosomes/endosomes or other relevant experience is desirable. Applicants must have less than five years postdoctoral experience and must be a US citizen or permanent resident. Laboratory of Molecular and Developmental Immunology (OE-114), FDA/CBER (HFM-55), Building 29B, Room 5E08, 1401 Rockville Pike, Rockville, MD 20852-1448.

Mechanisms of Gene Regulation **Vera M. Nikodem, PhD**

The molecular mechanisms involved in hormonal and developmental control of gene expression are being investigated. The immediate focus is on transacting factors of the steroid/thyroid hormone receptor gene superfamily utilizing two hybrid system and homologous recombination. Applicants must have less than five years of postdoctoral experience. Genetics and Biochemistry Branch (OE-114), NIDDK, Building 10, Room 8N317, 10 CENTER DR, MSC 1766, BETHESDA MD 20892-1766.

Molecular Biology and Immunology **Michael A. Steller, MD**

Novel peptide epitope-based vaccine therapies are being developed aimed at the prevention or treatment of human papillomavirus associated cervical cancer. Future studies will involve immunologic and molecular techniques to optimize recognition by T-lymphocytes and of target tumor cells harboring the virus. Investigations are also ongoing to examine if HPV-induced malignant transformation involves corruption of apoptotic molecular pathways. Candidates must have less than five years of postdoctoral experience. Section of Gynecologic Oncology, Surgery Branch (OE-114), NCI, Building 10, Room 2B-42, 10 CENTER DR MSC 1502, BETHESDA, MD 20892-1502.

Molecular Carcinogenesis **Brenda I. Gerwin, PhD**

Major interests of the laboratory include the molecular carcinogenesis of mesothelioma and the contribution of c-erbB-2 to lung adenocarcinoma. Cellular models have been developed. Current projects focus on p16^{INK4} loss in mesothelioma and erbB-2 heterodimer formation in tumorigenic model cells. Applicants should have a strong background in molecular or cellular biology and have less than five years of postdoctoral experience. Laboratory of Human Carcinogenesis (OE-114), NCI, Building 37, Room 2C08, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

T-cell Immunology/Vaccines **Jay A. Berzofsky, MD, PhD**

Mechanisms of antigen presentation and T-lymphocyte recognition are being studied, with applications to design of vaccines for HIV, hepatitis C, papillomavirus, and cancer. Clinical trials have begun. Position is about 75% lab/25% clinical. Applicants must have an MD degree and residency training to be board eligible, preferably in internal medicine or pediatrics, and laboratory experience, preferably in immunology. Molecular Immunogenetics and Vaccine Research Section, Metabolism Branch (OE-114), NCI, Building 10, Room 6B-12, 10 CENTER DR MSC 1578, BETHESDA, MD 20892-1578.

Viral Pathogenesis **Stephen E. Straus, MD**

The regulation and expression of genes involved in latent herpes simplex virus and varicella-zoster virus infections is under investigation using relevant animal models and human tissues. Methods include sequence-specific mutagenesis, in situ-PCR, and immunohistochemistry. Applicants should have a strong background in molecular neurobiology and/or molecular virology and must have less than five years of postdoctoral experience. Laboratory of Clinical Investigation (OE-114), NIAID, Building 10, Room 11N228, 10 CENTER DR MSC 1888, BETHESDA MD 20892-1888.

X-ray Crystallography **Wei Yang, PhD**

Two positions are available to study molecular assemblies and mechanisms of DNA recombination and repair, particularly of V(D)J rearrangement in immune systems. Motivated candidates from a biochemistry, molecular biology or structural biology background with less than five years of postdoctoral experience are encouraged to apply. Laboratory of Molecular Biology (OE-114), NIDDK, Building 5, Room B1-03, 5 CENTER DR MSC 0560, BETHESDA MD 20892-0560.

Additional Information

An electronic version of the *Postdoctoral Research Fellowship Opportunities* catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: <http://www.nih.gov>). When connected with Gopher, select **Grants and Research Information** and then **NIH Office of Education**. When connected with WWW, select **Grants and Contracts** and then **NIH Office of Education**. If you have further questions, please contact the NIH Office of Science Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



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FACULTY POSITIONS IN MOLECULAR NEUROBIOLOGY AT VANDERBILT

The Center for Molecular Neuroscience in the Vanderbilt University School of Medicine (VSM) has been established to promote research programs of cellular and molecular neurobiology faculty, enhance graduate and postgraduate training opportunities, and facilitate recruitment of talented, new faculty. In particular, we invite applications at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level from individuals capable of bridging disciplines of genetics, biochemistry, cell biology, physiology and pharmacology in pursuit of questions related to the development, plasticity, and dysfunction of the nervous system. Research programs targeting mechanisms involved in coordinate gene expression in neural development and plasticity, organization of macromolecular structures responsible for neuronal polarity, secretion and signaling, or molecular mechanisms contributing to dysfunction and pathology in neural disease are particularly desired. Candidates should send a curriculum vitae, description of research interests and accomplishments, and supporting letters from at least three mentors or former colleagues to:

Dr. Randy D. Blakely, Director
Center for Molecular Neuroscience
MRB II Room 419, Vanderbilt School of Medicine
Nashville, TN 37232-6600
Telephone: 615-936-3037
FAX: 615-936-3040
Email: molneuro.center@mcmail.vanderbilt.edu
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ASSISTANT PROFESSOR PHARMACOLOGY

Wilkes University School of Pharmacy is seeking to fill a nine-month, tenure-track position in the Department of Pharmaceutical Sciences at the **ASSISTANT PROFESSOR** level. Minimum requirements are a Ph.D. in pharmacology or related field. Preference will be shown to candidates who possess specialization in cardiovascular pharmacology, an undergraduate degree in pharmacy from an ACPE accredited school, extramural funding, or teaching experience at an ACPE accredited School of Pharmacy. Experience with medicinal chemistry is a plus.

Applicants should submit a letter outlining professional goals, curriculum vitae, and a list of references to: **Dr. Arthur H. Kibbe, Chair, Department of Pharmaceutical Sciences, Wilkes University, School of Pharmacy, Wilkes-Barre, PA 18766.** Applications received by March 29, 1996 will receive first consideration. The search will continue until the position is filled. *Wilkes University is an Equal Opportunity/Affirmative Action Employer.*

FACULTY POSITION MOLECULAR MICROBIOLOGIST

The Department of Veterinary Pathobiology is seeking applications for a **TENURE-TRACK FACULTY** position at the Assistant or Associate Professor level with emphasis on molecular virology or microbiology in the study of pathogenesis and mechanisms of infectious disease. A Ph.D. or equivalent and postdoctoral experience in the study of microbial pathogenesis, especially virology, is highly desirable. The primary responsibility is to develop and maintain an independent research program and participate in graduate training. Please submit curriculum vitae, a summary of research interest, names of four references, and a letter of application to: **Dr. Cynthia Besch-Williford, Department of Veterinary Pathobiology, W213 Veterinary Medicine, 1600 East Rollins, University of Missouri-Columbia, Columbia, MO 65211.** Applications will be accepted until April 15, 1996, or until position is filled. *The University of Missouri is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minorities.*

The Division of Pediatric Infectious Diseases at the University of Texas Health Science Center at San Antonio (UTHSCSA) is seeking Ph.D. applicants for a tenure-track position at the **ASSISTANT PROFESSOR** level. The applicant should have a proven record of research experience in molecular virology complementary to existing faculty interests in EBV and HHV6. Salary commensurate with experience. Interested persons should submit curriculum vitae and letter of interest to: **Hal Jensen, M.D., Associate Professor and Head, Division of Infectious Diseases, UTHSCSA, 7703 Floyd Curl Drive, San Antonio, TX 78284-7811.** *The UTHSCSA is an Equal Employment Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FOREST WILDLIFE ECOLOGIST

The School of Forestry at Northern Arizona University invites applications for a nine-month, tenure-track **ASSISTANT PROFESSOR** position. The appointee will teach at all levels, advise graduate students (M.S., Ph.D.), and develop an externally funded research program. Applicants must have a doctorate with emphasis in habitat ecology of wild vertebrates, coursework or experience in forestry, and expertise in statistical analysis. Preference will be given for a degree in forestry, evidence of teaching skills, strength of peer-reviewed publications, and ability to obtain external funding. Please send a statement of qualifications and interests for teaching and research, a curriculum vitae, three letters of recommendation, reprints of recent publications, copies of transcripts, and a listing of courses grouped by subject area, by April 1, 1996 to: **Paul Beier, Box 15018, Flagstaff, AZ 86011-5018. Telephone: 520-523-9341; Email: paul.beier@nau.edu.** *Equal Opportunity/Affirmative Action Employer.*

Tenure-track or tenured positions at the **ASSOCIATE/ASSISTANT PROFESSOR** level for physician/scientists (M.D. or M.D./Ph.D.) or scientists (Ph.D.) are available at the Vanderbilt Cancer Center with appropriate academic appointments in basic science and/or clinical departments. A competitive start-up package including newly constructed laboratory space is included. A strong commitment to basic science based cancer research is required. Novel experimental approaches relevant to cancer biology and/or therapy are encouraged. Please send curriculum vitae, a brief description of future research plans, and three letters of recommendation to:

Chair, Cancer Research Search Committee
Vanderbilt Cancer Center
649 Medical Research Building II
Nashville, TN 37232-6838

Vanderbilt is an Equal Opportunity/Affirmative Action Employer.

HARVARD UNIVERSITY Appointment in Earth Science

The Department of Earth and Planetary Sciences, Harvard University, plans to make two appointments in areas dealing broadly with paleoclimate and surficial or near-surface processes.

The appointments will ordinarily be made at the junior level, although in exceptional circumstances a senior appointment may be considered.

In addition to carrying out an active research program, the successful candidate will be expected to teach at both the undergraduate and graduate level. The appointments are expected to start in the spring or fall of 1997.

Applicants should send curriculum vitae, descriptions of research and teaching interests, and names of three references to: **Geology Search Committee, Department of Earth and Planetary Sciences, Harvard University, 20 Oxford Street, Cambridge, MA 02138.** Applications are due by 1 May 1996. *Harvard University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

BIOLOGY COMPUTER RESOURCE CENTER University of Massachusetts, Amherst

The Biology Department is seeking a **DIRECTOR** of the newly created Center, a Power-Macintosh based facility with full network services. The Director will oversee all aspects of the Center, play a leadership role in implementing current advances in computer-based instruction, and provide support for faculty in the form of training in the use of software and hardware and generation of text and image databases for instructional use. Duties will also include management of student-staff, interaction with the network administrator, and maintenance and troubleshooting of hardware and software. This 12-month appointment will be made as a full-time Lecturer, with competitive salary commensurate with experience. A Ph.D. in computer or biological science is preferred and extensive experience with Macintosh-based instructional computing is required. Please send a curriculum vitae, statement of career goals, and arrange to have three letters of recommendation sent to: **Dr. Randall Phillis, Department of Biology, University of Massachusetts, Amherst, MA 01003-5810. FAX: 413-545-1696.** Selection of applicants will begin on April 1, 1996 and continue until the position is filled. *The University of Massachusetts is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSORS DEPARTMENT OF MOLECULAR AND HUMAN GENETICS Baylor College of Medicine

The Department of Molecular and Human Genetics invites applications for two tenure-track positions in basic genetic research. One position could be considered at the **ASSOCIATE PROFESSOR** level. The research program of applicants is not restricted as to organism or biological focus, although the fields of developmental biology, mammalian genetics, cross-species genetic analysis, complex traits, and carrier genetics are of particular interest. The Department currently includes 22 tenure-track faculty with primary appointments, an outstanding predoctoral graduate program, an excellent postdoctoral training program, and a Human Genome Center. The funded research programs in the Department are broad and include human, mouse, *Drosophila*, yeast, and prokaryotic systems. Research activities of the faculty are described in a Home Page at <http://ginger.bcm.tmc.edu:8088/#>. Teaching activities are primarily directed toward graduate students. Salary and start-up funds will be highly competitive.

Applicants should send a curriculum vitae, a statement of research activities/plans, and three letters of reference to:

Dr. Allan Bradley, Chair
Genetics Search Committee
Department of Molecular and Human Genetics
Baylor College of Medicine
One Baylor Plaza
Houston, TX 77030

An Equal Opportunity/Affirmative Action/Equal Access Employer. Women and minorities are encouraged to apply.

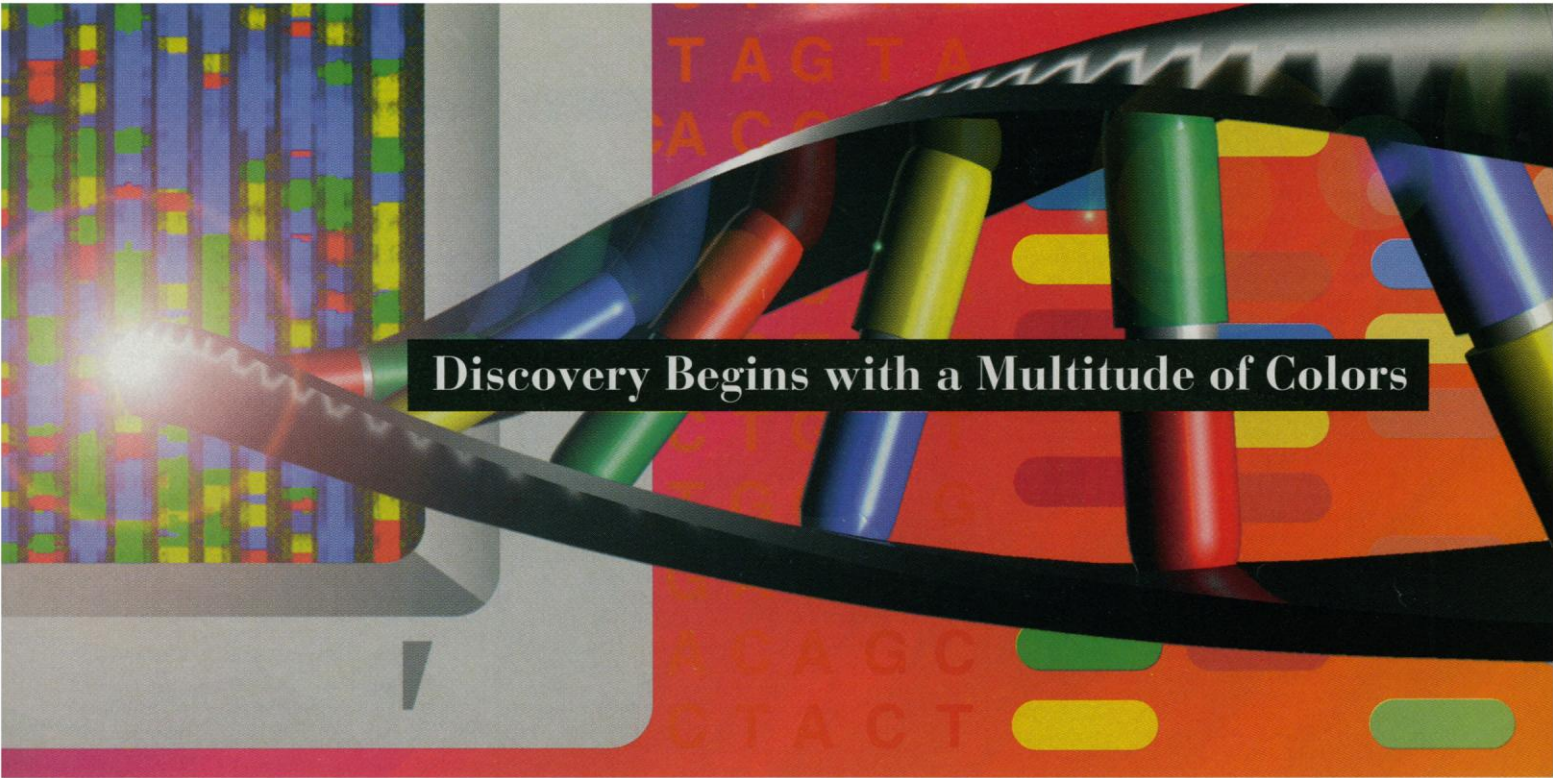
BIOCHEMIST

If you wish to participate in fashioning a new school of pharmacy based on a curriculum and teaching methodologies that are student and learning-oriented rather than faculty and teaching-oriented, we invite your application for a 12-month tenure-track **FACULTY POSITION**. Candidates should possess a Ph.D. in biochemistry with postdoctoral experience, ability to develop an extramurally funded research program, a commitment to excellence, ability to communicate clearly and effectively, commitment to working within a multicultural environment that fosters diversity, and interpersonal skills necessary to interact effectively with other faculty, students, staff, and external constituencies. Application materials should include a letter of interest, a full curriculum vitae, and the names, addresses, and telephone numbers of three references. Review of applications will begin immediately and continue until the position is filled. Complete applications should be sent to: **Dr. Harry Rosenberg, Dean, School of Pharmacy, College of Osteopathic Medicine of the Pacific, 309 East Second Street, Pomona, CA 91766. Telephone: 909-649-5500. FAX: 909-469-5501.** *The College of Osteopathic Medicine of the Pacific is an Affirmative Action/Equal Opportunity Employer and actively seeks applications from women and minorities.*

East Carolina University seeks an individual to serve as **SECTION HEAD** of the Section of Endocrinology/Metabolism and **DIRECTOR** of the Diabetes Center. Preferred candidates are active in basic science in the fields of diabetes or obesity; will collaborate with current research in our Diabetes Center, which focuses on identifying the causes and effects of decreased insulin secretion in obesity, diabetes, and aging; and will want to develop strong educational and clinical programs. Interested individuals should contact or send a curriculum vitae to: **Robert L. Wortmann, M.D., Professor and Chairman, Department of Medicine, East Carolina University School of Medicine, Greenville, NC 27858-4354. Telephone: 919-816-2570.** *An Equal Opportunity/Affirmative Action University. Accommodates individuals with disabilities. Applicants must comply with the Immigration Reform and Control Act.*

NATURAL SCIENCES AND MATHEMATICS DEPARTMENT CHAIR

Trinity College of Vermont seeks qualified applicants with Ph.D., experience with teaching programs, and ability to develop curriculum in support of enrollment growth. Forward cover letter, curriculum vitae, and names and telephone numbers of four references by March 22, 1996, to: **Brent Poppenhagen, Trinity College of Vermont, 208 Colchester Avenue, Burlington, VT 05401. Telephone: 802-658-0337.** *Minorities are encouraged to apply. Affirmative Action/Equal Opportunity Employer.*



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Applied Biosystems, the makers of ABI PRISM™ Genetic Analysis Systems, has openings in the following areas:

Genetic Analysis R&D Scientists

Scientist II/III #3942 Synthetic organic chemist to develop chemistry for DNA instrumentation. Plan, conduct and record moderately complex bench level chemical/biochemical experiments. Prepare reports and analysis related product/process development. Ph.D. and 1-2 years post doctoral or 2 years industrial experience in synthetic organic chemistry. Background in heterocyclic synthesis and HPLC of water soluble compounds.

Scientist II/III #3921 Innovative, aggressive systematic researcher needed to develop novel reagents and applications for PCR, DNA sequencing, and genotyping for robotics labstation. Requires at least 2 years post doctoral experience.

Scientist II/III/Sr. #3953 Bioanalytical chemist required to analyze sequencing reaction components dynamically during reactions. Analytical skills including HPLC, CE, NMR and MS. Requires the equivalent of Ph.D. with 2 years experience or MS with 5 years experience, or BS with 8 years experience.

Scientist II/III/Sr. #3950 Solid phase nucleotide chemist to synthesize DNA and related polymers covalently linked to solid supports. Solid-phase organic synthesis required, photochemical synthesis experience. Organic chemistry or related Ph.D. plus 2 years or MS plus 5 years or BS with 8 years experience required.

Genetic Analysis Software Development

Sr. Software Manager #5010 For a fast-growing, 30-person development group charged with the creation of imbedded instrument control, PC-based data collection, data analysis applications, and sample file data basing for DNA sequencing and genotyping. Responsible for overseeing, coordinating and expanding the efforts of the group, while assisting with the development of an integrated technical and business strategy. M.S., Ph.D. or equivalent with 10-15 years experience in software development/management.

Sr. Software Engineers #3946 & 3947 Design and develop data acquisition/control for new DNA instrumentation. #3946 requires BSCS or equivalent with 5-7 years experience, C++, MacApp 3.x, Metrowerks. #3947 requires BSCS with 6-8 years experience, UNIX and C++.

Software Engineers #3837 & #3840 Responsible for design and development of automated DNA sequence analysis software and its success in our customers' hands. #3840 requires 2 years UNIX/C++ scientific software development experience. #3837 additionally requires project/team leadership skills and experience.

Firmware Engineer I/II #3943 & 3945 Design and develop embedded control for new DNA instrumentation. #3943 requires BSCS/BSEE with 1-2 years of firmware development or equivalent. Experience with Mac, ICE and 68K development tools desirable. #3945 requires BSCS/BSEE and 3-4 years of experience or equivalent. TCP/IP, CCD and data acquisition experience a definite plus.

Veterinary Diagnostics

Sr. Scientist #3962S Lead the development of PCR-based diagnostics for detecting pathogens in commercial and companion animals. Define and develop products using fluorescent sequence detection technology. Initiate and manage collaborations with scientific community and industry. Requires direct experience and publications in the area of veterinary pathology and diagnostics. Familiarity with molecular biology techniques including PCR. Strong communications and organizational skills, including the ability to prioritize multiple complex projects. Ph.D. desirable and experienced in PCR systems.

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POSITIONS OPEN

CHAIR HARVARD SCHOOL OF PUBLIC HEALTH

A **CHAIRPERSON** is sought to lead the Department of Tropical Public Health at the Harvard School of Public Health. The present department is unique in its combination of strong laboratory-based studies with fieldwork. Utilizing a multidisciplinary approach that melds immunology, molecular biology, and physiology with population biology, ecology, and epidemiology, the department has focused on parasitic infections and has expanded its scope to include tuberculosis, domestic vector-borne infections, and emerging infections that impact the health of populations worldwide.

The new chairperson is expected to maintain the core of the department's research and teaching efforts in the field of parasitology while expanding to incorporate emerging and persistent infectious diseases of worldwide importance. We seek an energetic individual with substantial scholarly credentials, well-developed interpersonal skills, and an ability to recruit and inspire faculty, as well as a commitment to mentoring junior faculty. The chair should also be committed to fostering and developing research and training collaborations with faculty from other departments within the School and other Harvard faculties. While the chair should have an appreciation for the social sciences, he or she should have a strong record of research in the biological sciences. Some overseas experience would be preferable, although not mandatory.

Applicants should send their curriculum vitae to: **Dr. Edgar Haber, Division of Biological Sciences, Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115.**

Harvard University is committed to increasing its representation of women and minority members among its faculty and particularly encourages applications from such candidates.

FACULTY POSITION NEUROPATHOLOGIST Department of Pathology

Northwestern University Medical School, Chicago

The Department of Pathology invites applications for a **TENURE-TRACK** faculty position from qualified neuropathologists with research experience in the areas of molecular and cellular biology related to neurological diseases. Areas of interest can include, but are not restricted to, Alzheimer's Disease, neuronal degeneration, demyelinating disease, and regenerative processes including developmental and tumor biology of the central nervous system. Interest will be centered around individuals with the capacity to develop and lead a strong, vigorous, independent research program. Appointment will be made at the level of Assistant Professor or Associate Professor in the Department of Pathology. The appointee will also become a member of the interdepartmental neuroscience program and participate in the integrated graduated program in the life sciences. Interested candidates should send a curriculum vitae, description of current and future research interests, and three letters of recommendation to:

Janardan K. Reddy, M.D.
Chairman, Department of Pathology
Northwestern University Medical School
303 East Chicago Avenue
Chicago, IL 60611

Northwestern University is an Affirmative Action/Equal Opportunity Educator and Employer.

ASSISTANT PROFESSOR INSECT SYSTEMATICS

Systematics/taxonomy: tenure-track position at the **ASSISTANT PROFESSOR** level is available in the Department of Entomology for an insect systematist with broad taxonomic skills and a primary interest in biodiversity. Candidates employing molecular approaches to systematics and taxonomic research are encouraged to apply. The successful applicant will be expected to develop and teach courses in Insect Taxonomy and Principles of Systematics. Preference will be given to candidates with postdoctoral experience. Send curriculum vitae, statement of interests, and names, addresses, and telephone numbers of at least three references by May 1, 1996 to: **Dr. Donald F. Caccamise, Department of Entomology, Cook College, Rutgers University, New Brunswick, NJ 08903.** *Rutgers is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN



CEDARS-SINAI MEDICAL CENTER Endowed Chair in Atherosclerosis and Vascular Biology

The Division of Cardiology and Department of Medicine at Cedars-Sinai Medical Center and UCLA School of Medicine is looking to recruit an M.D./Ph.D. **SCIEN-TIST** with expertise in basic research in vascular biology (atherosclerosis/thrombosis/lipoprotein biology or gene therapy). The position will include an endowed named Chair, generous laboratory space, state-of-the-art core facilities, and start-up funds. Contact: **Dr. P. K. Shah, Director, Division of Cardiology, Cedars-Sinai Medical Center, Division of Cardiology, Room 5347, Los Angeles, CA 90048. Telephone: 310-855-3884; Email: ShahP@CSMC.edu; FAX: 310-967-0144.**

HOPKINS MARINE STATION OF STANFORD UNIVERSITY MARINE BIOLOGY LECTURER

Hopkins Marine Station (a division of the Department of Biological Sciences) is seeking a **LECTURER** (non-tenure-track, five-year renewable by mutual agreement) to teach undergraduate courses in invertebrate zoology, marine botany, or marine ecology, to act as head of a team-taught course introducing students to experimental design and biological research, and to participate actively in the expansion of the undergraduate curriculum at the Marine Station. Teaching responsibilities will typically be distributed over the winter, spring, and summer quarters, with the fall quarter free for research. Ph.D. in an appropriate area of biology, demonstrated teaching experience, and a strong commitment to teaching excellence are required; knowledge of the nearshore flora and fauna of central California is preferred. Review of applications begins April 15, 1996. Send letter of application, curriculum vitae, statement of teaching philosophy and goals, and the names of three references to: **Dr. Mark Denny, Chair, Marine Biology Lecturer Search, Hopkins Marine Station, Pacific Grove, CA 93950.** *Stanford University is an Equal Employment/Affirmative Action Employer.*

CORNELL UNIVERSITY COLLEGE OF VETERINARY MEDICINE DEPARTMENT OF PATHOLOGY

The Department of Pathology seeks applications for a tenure-track **ASSISTANT PROFESSOR** in Veterinary Pathology. We are looking for a veterinary pathologist committed to a career in diagnostic pathology who will materially contribute to advances in this area. Qualified candidates must hold the DVM degree (or equivalent veterinary degree) and be certified by the American College of Veterinary Pathologists in Anatomic Pathology. The Ph.D. degree is preferred but not obligatory. The person appointed to this position will have major responsibilities in the Necropsy, and to a lesser extent, the Surgical Pathology Services; will interact with hospital clinicians and veterinarians in private practice; and will play a central role in the practical instruction of Residents and DVM students in anatomic pathology. Participation in the new curriculum for DVM students at the College of Veterinary Medicine is expected. A competitive candidate will have demonstrated a contemporary approach to anatomic pathology and this will be reflected in scholarly studies and publications, presentation of seminars, tutorials, etc. Ideally, we are looking for a veterinary pathologist with some experience beyond the completion of residency training and the ACVP certification. Applicants should submit a complete curriculum vitae with three professional references to: **Dr. Brian Summers, Search Committee Chair, Department of Pathology, Cornell University College of Veterinary Medicine, Ithaca, NY 14853-6401.** Applications will be reviewed beginning May 1, 1996. *Cornell University is an Equal Opportunity/Affirmative Action Employer/Educator.*

INDIANA WESLEYAN UNIVERSITY

BIOLOGY: Instruction to include teaching anatomy and physiology to beginning nurses and biology majors. Doctorate required. Candidate will sign an evangelical statement of faith in the Wesleyan tradition. Send dossier to: **Dr. Paul D. Collord, Vice President for Academic Affairs, Indiana Wesleyan University, 4201 South Washington Street, Marion, IN 46953. Email: pcollord@indwes.edu.**

POSITIONS OPEN

STRUCTURAL BIOLOGIST

The Department of Physiology and Biophysics invites applications for a **TENURE-TRACK** position at the assistant, associate, or full professor level. Candidates with interests in applying techniques such as NMR, X-ray, or electron crystallography, as well as electron diffraction and image reconstruction, to elucidate the structure of membrane proteins, are especially encouraged to apply. Candidates must have a Ph.D. and/or M.D. degree. Salaries and start-up funds are highly competitive. The candidate will also be invited to join the newly established Sealy Center for Structural Biology. The Department and the Center offer excellent facilities (X-ray diffraction, computer and NMR equipment) in a stimulating scientific environment and are deeply committed to a high quality research program in Structural Biology of Membrane Proteins. Send complete curriculum vitae, including publications list, brief statement of future research plans, names and addresses of three references, to: **Dr. Javier Navarro, Chair of Search Committee, Department of Physiology and Biophysics, University of Texas Medical Branch, Galveston, TX 77555-0641.** *University of Texas Medical Branch is an Equal Opportunity/Minorities/Females/Disabled/Veterans Affirmative Action Employer.*

PLANT PHYSIOLOGY/BIOLOGY

The Department of Biology at the University of Central Florida invites applicants for a nine-month, non-tenure-track faculty position at the **VISITING ASSISTANT PROFESSOR** level starting August 1996 for one to three year appointment. A Ph.D. in the biological sciences with college teaching experience in biology and plant physiology are required at the time of application. The person filling this position will be assigned exclusively to instructional duties. Candidates should submit a curriculum vitae, names and addresses of three references, and a statement of teaching philosophy. Search will close April 1. Send material to: **Dr. Hank Whittier, Search Committee Chair, Department of Biology, University of Central Florida, Orlando, FL 32816-2368.** *The University of Central Florida is an Equal Opportunity/Affirmative Action Employer. As an agency of the State of Florida, all application materials and selection procedures are available for public review.*

ASSISTANT/ASSOCIATE PROFESSOR Section of Rheumatology

The Department of Medicine of the University of Illinois at Chicago College of Medicine invites applications for a **TENURE-TRACK FACULTY** position at the Assistant/Associate Professor level. We seek an outstanding board-certified M.D. scientist with interest in the application of basic science to the understanding, diagnosis, and treatment of human diseases.

Postdoctoral research in cell and molecular biology of inflammation, cytokines, connective tissue, or related basic sciences is desirable. Excellent laboratory space in newly constructed Molecular Biology Research Building on campus and competitive start-up package with goal of establishing funded independent research program. Opportunities for collaborations and joint appointments in basic science departments. Send curriculum vitae, statement of current and future research plans, selected reprints, and three references to: **John Varga, M.D., Chief, Section of Rheumatology, University of Illinois, M/C 733, 900 South Ashland Avenue, 1158 MBRB, Chicago, IL 60607-7171.** *Affirmative Action/Equal Opportunity Employer.*

ONE-YEAR TERM POSITION MOLECULAR BIOLOGIST

Pacific University seeks a molecular biologist for a one-year position to teach molecular and general biology. Broad background, successful college teaching, and a Ph.D. required. Send material to: **Dr. Robert E. Stockhouse, Department of Biology, Pacific University, Forest Grove, OR 97116.** Review process begins April 1, 1996.

POSTDOCTORAL POSITION immediately available to study the role of cytokine-induced adhesion molecules and class II MHC antigens in glial cell function. A strong background in molecular biology, immunology, and/or neurobiology is required. Please send résumé, statement of research interests, and names of three references to: **Etty (Tika) Benveniste, Ph.D., Department of Cell Biology, University of Alabama at Birmingham, 1918 University Boulevard, Birmingham, AL 35294. FAX: 205-975-6748.** *We are an Equal Opportunity/Affirmative Action Employer.*

Molecular Biologist/ Biochemist

Tularik is a rapidly growing biotechnology company dedicated to the discovery and development of ethical drugs that regulate gene expression. We are continuing to expand our multidisciplinary research team and now seek a motivated and creative scientist skilled in the fields of molecular biology and biochemistry. The scientist will function within the Tularik Biology department and will have a PhD or MD/PhD degree and 2-3 years of postdoctoral experience.

Tularik offers productive and experienced leadership, equity participation, competitive salary and benefits commensurate with experience, and a very exciting research environment. For consideration, please submit your CV and the names of three references to:

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270 East Grand Avenue
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Compensation package includes generous equity.

*For consideration in strictest confidence,
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POST-DOCTORAL FELLOW

Bone/Cell/Molecular Biology

Saint Francis Hospital & Medical Center is seeking candidates who have completed a doctoral degree to join our NIH-supported Bone Biology Laboratory.

Interested candidates should send a resume and references to:

Dr. Ernesto Canalis, Director,
Department of Research, Saint Francis Hospital & Medical Center, 114 Woodland Street, Hartford, CT 06105-1299.



POST-DOCS Molecular Evolution Sexual PCR - DNA Shuffling

Molecular evolution uses pools of related DNA sequences which undergo homologous recombination, known as DNA Shuffling or Sexual PCR, followed by functional selection and amplification of the best sequences. This process is repeated for several recursive cycles. Affymax has created an independent technology center focused on the broad development of this technology for optimization of single genes, pathways, plasmids and viruses. We are currently seeking Post-Docs for the following:

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POSTDOCTORAL POSITION

CELL CYCLE

REGULATION OF

CELL MEMBRANE

SYNTHESIS

- I**nvestigation of modification of the rate controlling enzyme in the pathway of phospholipid formation by regulatory kinases using contemporary techniques
- of molecular and cell biology. Study of phospholipase activation/signaling by growth factors and its role in cell cycle regulation of membrane synthesis and trafficking. (J. Biol. Chem. 269:3858, 1994). Position available immediately and recent Ph.D. required. Send curriculum vitae with names of three references to: **Dr. Suzanne Jackowski, Department of Biochemistry, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38105. An Affirmative Action/Equal Opportunity Employer.**



**St. Jude Children's
Research Hospital**

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POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS in the Neurobiology of Alcoholism are available in the University of Florida Center for Alcohol Research. The training program is designed to provide multidisciplinary research training in the neurobiology of alcohol, including molecular biology, neuropharmacology, biochemistry, neuroscience, and behavioral perspectives. This is an NIH/NIAAA Institutional Training Grant so only United States citizens and permanent residents may apply. Please send a letter of application including research interests, a copy of your curriculum vitae, and the names of three references to: **Marieta B. Heaton, Ph.D.** or **Don W. Walker, Ph.D.**, University of Florida College of Medicine, Department of Neuroscience, P.O. Box 100244 HSC, Gainesville, FL 32610-0244. The University of Florida is an Equal Opportunity/Affirmative Action Employer.

Six **POSTDOCTORAL POSITIONS** at the National Jewish Center available in the areas of 1) genetics/biochemistry of intracellular lipid transport, 2) structure and function of pulmonary surfactant proteins, 3) regulation of cytosolic phospholipase A 2 activation and 4) regulation of pulmonary surfactant protein gene expression and secretion *in vitro*. Contact: **D. R. Voelker** (1, 2), **C. C. Leslie** (3), or **R. J. Mason** (4), National Jewish Center, 1400 Jackson Street, Denver, CO 80206.

Two **POSTDOCTORAL POSITIONS** are open for scientists interested in gene regulation during the development of red blood cells. Applicants must have a Ph.D. or M.D. degree with experience in molecular biology. Projects include erythropoietin signaling during apoptosis and proliferation, analysis of a transcriptional promoter utilized in erythroid cells, identification of growth factors in serum, and quantitation of heme biosynthetic enzymes during erythropoiesis. Send curriculum vitae, reprints, and names, addresses, and telephone numbers of three references to: **Dr. Terry R. Bishop**, The Johns Hopkins University School of Medicine, Ross Building 1125, 720 Rutland Avenue, Baltimore, MD 21205.

BIOLOGIST POSITION LABORATORY OF VIRAL DISEASES NATIONAL INSTITUTES OF HEALTH

A position is available for a **BIOLOGIST**, GS level 9 or 11, in the Cellular Biology Section of the Laboratory of Viral Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health. We are looking for a person with professional knowledge and training in basic virology, cell biology, biochemistry, immunology, and cell culture principles and practices. Applicants with advanced degrees such as Ph.D. are encouraged to apply. U.S. citizenship is required. Application submission deadline is 8 April 1996.

Applications should include a curriculum vitae with bibliography, SF 171 or like information, and the names and addresses of three references. Applications should be sent to: **NIAID Personnel Office, Building 31, Room 7A-20, National Institutes of Health, 9000 Rockville Pike, Bethesda, MD 20892. Attention: Kristie Daniel.** NIH is an Equal Opportunity Employer.

ASSISTANT or ASSOCIATE Extension Agronomist, Cotton Production Systems. Academic career-track position (.75 Cooperative Extension/.25 Agricultural Experiment Station). Responsibilities include leadership of statewide extension education programs in cotton production systems, leadership and coordination in planning and conducting research activities related to the ecology, physiology, plant breeding, genetics, pest management, soil/plant nutrition, and water resource management of cotton production systems. Ph.D. or equivalent level of experience in agronomy, crop ecology, crop physiology or crop protection/pest management. Documented experience and/or interest in extension education. Experience and leadership in research and extension involving cotton is preferable, but not essential. Send statement of extension education/research interests, curriculum vitae, publication lists, up to five reprints of key publications, copies of undergraduate and graduate transcripts, and names, addresses, telephone and FAX numbers of up to five professional references to: **Richard E. Plant, Search Committee Chair, Department of Agronomy and Range Science, University of California, Davis, CA 95616-8515. Telephone: 916-752-1705; FAX: 916-752-4361; Email: replant@ucdavis.edu.** Review of applications will begin April 1, 1996. Position to remain opened until filled. The University of California is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN



University of California, San Francisco
...A Health Sciences Campus

IMMUNOLOGY RESEARCHER

The General Clinical Research Center at SFGH and Macy's Center for Creative Therapies seek a detail-oriented **RESEARCHER**. You will establish an immunology-based core laboratory capable of performing sophisticated assays that have been standardized to a GLP level. You will also develop quality control programs and current/new state-of-the-art immunology-based assays; prepare technical reports; and participate in institutional programs.

Requires excellent communication, analytical, and organizational skills; M.S. in immunology or related science; and at least three years' immunology lab experience. Ph.D. preferred.

Send résumé to: **UCSF Human Resources, Job MSIR4532, 1350 7th Avenue, San Francisco, CA 94143-0832.** Affirmative Action/Equal Opportunity Employer/Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITION University of Pittsburgh Medical Center

Position available January 1996 in the Division of Cardiology to study the molecular, cellular, and electrophysiological determinants of cardiac arrhythmias using transgenic and knockout technology in the mouse. Extensive prior experience with myocyte cellular physiology, fluorescent intracellular calcium measurement, or patch clamp techniques is required. Send curriculum vitae and names of three references to: **Attention: Mary Beth Bawden, Division of Cardiology, University of Pittsburgh Medical Center, Fifth Floor Scaife Hall, 200 Lothrop Street, Pittsburgh, PA 15213.**

POSTDOCTORAL POSITION in plant gene regulation available immediately. The focus of the research is to understand both genetic and epigenetic mechanisms of gene regulation using tryptophan biosynthetic genes in the higher plant *Arabidopsis* as a model system. The research will include mutant isolation and cloning of mutant loci. Applicants must have experience in molecular biology and genetics. U.S. citizenship or permanent residency is required for eligibility for funding from an NIH training grant. Send curriculum vitae and names of three references to: **Dr. Judith Bender, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205.** Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available at the University of Pittsburgh Cancer Institute to examine granulocyte colony-stimulating factor receptor structure and signaling in normal and leukemic myeloid cells. Experience in molecular biology, cell signaling, and/or genetic mouse models desirable. This is an NCI-supported position available for up to three years. Interested candidates should send curriculum vitae and names of three references to: **David J. Tweardy, M.D., Departments of Medicine and Molecular Genetics and Biochemistry, Biomed Science Tower W1052, 200 Lothrop Street, Pittsburgh, PA 15213-2582. FAX: 412-624-7736. Email: tweardy@novell1.dept.med.pitt.edu.**

Endocrine Autoimmunity **POSTDOCTORAL FELLOW**—Active T cell laboratory in New York City has a vacancy for a postdoctoral fellow with experience in molecular immunology. Successful applicant will be encouraged to pursue independent work and funding. NIH regulations require U.S. citizenship or permanent residency. Please send curriculum vitae to: **Dr. Terry F. Davies, Box 1055, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** Equal Opportunity Employer.

MOLECULAR BIOLOGIST High Throughput Screening

Our client company, a well-known biotech in the north-east U.S., has retained us to find a Ph.D. **MOLECULAR BIOLOGIST** with industrial experience in cloning and expression of proteins to be used in high throughput screening. A thorough knowledge of screening techniques and data acquisition methods is required in addition to current molecular biology protocols. This biologist will work closely with a multi-disciplined team to develop rapid screening technologies that will be applied to screening combinatorial chemical libraries. Contact: **David G. Jensen, Search Masters International, 500 Foothills, Suite 2, Sedona, AZ 86336. FAX: 520-282-5881.**

POSITIONS OPEN

RESEARCH/TEACHING POSTDOCTORAL FELLOWSHIPS

Three two-year **FELLOWSHIPS** are available in the Departments of Plant Biology (one) and Zoology (two) for recent Ph.D. graduates. In addition to the mentor's research program, each fellow will participate in the undergraduate teaching program for an average of 20 hours per week during both academic years. The teaching assignment will be designed to fit the skill and expertise of the fellow and the needs of the curriculum. Fellowships are available in the following areas:

Plant cell biology: signaling cascades involved in regulating mitotic progression or regulatory pathways that control the cell cycle (**Steve Wolniak, Plant Biology**).

Ecological/evolutionary modeling: developing theory to describe adaptive processes in population and community ecology (**Peter Abrams, Zoology**).

Evolution of bird auditory systems: developmental and comparative studies of sound localization (**Catherine Carr, Zoology**).

Behavioral endocrinology: physiological mechanisms for social behaviors in mammals (**Sue Carter, Zoology**).

(1) *Drosophila* SR proteins and pre-mRNA splicing, (2) Computational and statistical analysis of pre-mRNA splicing signals (**Steve Mount, Zoology**).

Applicants should send a letter of application including research and teaching goals, a curriculum vitae, and three letters of recommendation to be sent to the appropriate mentor in his or her Department at: **The University of Maryland, College Park, MD 20742** by April 1, 1996 for best consideration. Appointments must start by August 17, 1996. Minimum salary is \$25,000 plus health benefits. Equal Opportunity/Affirmative Action Employer.

THREE POSTDOCTORAL POSITIONS for NIH-funded projects to study the signal transduction of inflammatory leukocytes. Projects include the molecular biology of phagocytosis (*Trends Cell Biol.*, 5:93, 1995), tyrosine kinase signal transduction (*Proc. Natl. Acad. Sci.*, 93:1103, 1996), and molecular mechanisms of chemotaxis (*J. Exp. Med.*, 181:1763, 1995). A background in recombinant DNA technology and signal transduction is strongly preferred. Send curriculum vitae and three letters of reference to: **Drs. Steven Greenberg and John D. Loike, Departments of Medicine and Physiology, 630 West 168th Street, New York, NY 10032. FAX: 212-305-1146; Email: greenberg@cucca.ccc.columbia.edu or loike@cucca.ccc.columbia.edu.** An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately for evolution of novel proteins using phage display. This will be part of an ongoing effort in the de novo design of proteins. Candidates should have a strong background in molecular biology with some expertise in protein purification and characterization. Send curriculum vitae and three references to: **Dr. William DeGrado, Department of Biochemistry and Biophysics, University of Pennsylvania School of Medicine, Philadelphia, PA 19104-6059.**

CARNEGIE MELLON

The Department of Engineering and Public Policy seeks a **POSTDOCTORAL FELLOW** and a **DOCTORAL STUDENT** to work on the problem of mixed levels of uncertainty in the integrated assessment of global change. Require science or engineering background and skill in modeling, probability, statistics, and decision theory. Contact: **G. Morgan, EPP Carnegie Mellon, Pittsburgh, PA 15213, USA.**

POSTDOCTORAL ASSOCIATE

A **POSTDOCTORAL POSITION** is available to study the posttranscriptional regulation of early development in *Xenopus* and mouse, particularly with respect to cytoplasmic mRNA processing and translational control. Useful references include: Gebauer *et al.*, *EMBO J.* 13, 5712-5720 (1994); Hake and Richter, *Cell* 70, 617-627 (1994); Kuge and Richter, *EMBO J.* 14, 6301-6310 (1995). We anticipate experiments that will include the analysis of RNA-protein interactions, oocyte microinjection, and the generation of transgenic mice. Interested persons should send a complete curriculum vitae, with the names and addresses of three persons who may act as references to: **Dr. Joel D. Richter, c/o Human Resources, Worcester Foundation for Biomedical Research, 222 Maple Avenue, Shrewsbury, MA 01545, USA.**

United States Department of Agriculture Postdoctoral Research Associates



The Agricultural Research Service, as the principal scientific research agency of USDA, conducts research to solve technical food and agricultural problems of broad scope and high national priority. The agency's work is carried out under six specific research objectives—conservation of soil, water and air, plant productivity, animal productivity, commodity conversion and delivery, human nutrition and well-being, and integration of systems. Overall aim of ARS research is to ensure the continuation of an adequate supply of food and fiber of high quality to meet the needs of American people and for export.

ARS is currently recruiting for postdoctoral positions throughout the United States. Opportunities exist in many research areas, including:

- Human Nutrition
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- Immunology
- Virology
- Biochemistry
- Chemistry
- Microbiology
- Animal Science
- Entomology
- Plant Physiology
- Plant Pathology
- Agronomy
- Soil Science
- Engineering

Successful candidates will be hired initially for up to 2 years in duration. Salary for these positions (\$34,981 to \$41,926 plus locality pay where appropriate) will be based on qualifications and experience. There are some employment restrictions for non-U.S. citizens.

For written descriptions of positions and application procedures, write to:

Susan Dixon
Human Resources Division
USDA/ARS
6305 Ivy Lane, Room 130
Greenbelt, MD 20770-1435
or call:
301-344-8057

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SENIOR BIOANALYTICAL SCIENTIST

NeXstar Pharmaceuticals, Inc., an integrated drug discovery, delivery and development company based in Boulder, Colorado, is a world leader in combinatorial chemistry and liposomal drug delivery. We currently have an excellent opportunity available for a Senior Scientist.

The ideal candidate will have a Ph.D. and 2-3 years experience in bioanalytical studies. Experience in analysis of both small molecules and oligonucleotides is desirable. Effective verbal and written communication skills are essential. We are seeking a highly motivated individual that works well within a team environment.

The individual selected for this position will develop and conduct bioanalytical assays for analysis of intact drug and metabolites from biological samples. Managing specific projects within the group will also be an important function of the position.

In addition to being a part of a growing and exciting company, you will have all the advantages of living in Boulder, Colorado — stunning scenic beauty, a healthy lifestyle, stimulating University atmosphere, diverse culture and superior educational standards. If these requirements match your background, apply now for immediate consideration.

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Amgen, the world's largest biotechnology company, is seeking experienced Medicinal Chemists to join our research efforts in Southern California.

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At Amgen, you'll find our approach to scientific research as rewarding as it is effective. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center, and three weeks' vacation. For immediate consideration, e-mail, fax or mail your resume to: jobs@amgen.com. Fax: (805) 447-1985. Mail to: Amgen, Job Code: TPSCMC, P.O. Box 2569, Thousand Oaks, CA 91319-2569. Please consult our on-line Job Bulletin Board at <http://amgen.bio.com> for information on other career opportunities available at Amgen. Principals only, please.

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EEO/AA Employer M/F/D/V

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS

Circadian Clocks and Photoreceptor Cell Biology. Two **POSTDOCTORAL POSITIONS** are available to study either (1) the cell biology of photoreceptor membrane turnover using vertebrate model systems or (2) cellular/molecular aspects of the photoreceptor circadian clock. The first position emphasizes photoreceptor membrane turnover and the role of membrane-cytoskeleton interaction. The second is directed at identification of vertebrate "clock genes" and analysis of their role in rhythm generation. Both positions require application of biochemical, molecular, and cell biological approaches using vertebrate photoreceptors. Send or FAX résumé and references to: **Dr. Joseph C. Besharse, Department of Anatomy and Cell Biology, The University of Kansas Medical Center, Kansas City, KS 66160-7400. FAX: 913-588-2710.**

POSTDOCTORAL POSITIONS Protein/DNA Interactions and Cancer Genetics

Positions available to study 1) thermophilic DNA recognition proteins and their use in genetic disease detection, especially the Ligase Chain Reaction, and 2) mutations associated with tumor development. Applicants should have a Ph.D., preferably with experience in protein-DNA interactions, structural biology, automated DNA sequencing, DNA synthesis, PCR, and cancer or human genetics. Salary based on experience. Send curriculum vitae and names of three references to: **Dr. Francis Barany, Department of Microbiology, Box 62, Cornell University Medical Center, 1300 York Avenue, New York, NY 10021. FAX: 212-746-8587. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately to study myelinating glia. Studies concentrate on the effect of growth factors on the survival and differentiation of oligodendroglia and Schwann cells, *in vivo* and in tissue culture models. Previous experience with cell culture, immunohisto- and cytochemistry strongly desired. Background in molecular biology would be helpful. Send curriculum vitae and names and addresses of three references to: **J. Grinspan, Research Neurology, 516 Abramson Center, The Children's Hospital of Philadelphia, 3400 Civic Center Boulevard, Philadelphia, PA 19104. Email: Grinspan@email.chop.edu. Equal Opportunity Employer/Affirmative Action, Minorities/Female/Disabled/Veterans.**

A **POSTDOCTORAL POSITION** is available immediately to study allosteric regulation of muscarinic acetylcholine receptors. Experience in the molecular biology of G-protein-coupled receptors is preferred. Please send curriculum vitae, a one-page description of research interests, and names and addresses of three references to: **John Ellis, Ph.D., Department of Psychiatry, Penn State University College of Medicine, 500 University Drive, Hershey, PA 17033-0850. Email: jxe11@psu.edu.**

For your health, the Hershey Medical Center is a smoke-free campus. We are an Equal Opportunity/Affirmative Action Employer and encourage minorities and women to apply.

POSTDOCTORAL POSITION University of Pennsylvania

Position available to study cell cycle control of cellular division. Specific areas of study include the control of chromosome segregation using a *Xenopus*-extract based *in vitro* system. Ph.D. is required.

Send curriculum vitae, research interests and background, and the names and telephone numbers of three references to: **University of Pennsylvania School of Medicine, Attention: Dr. Sandra L. Holloway, 475 CRB, 415 Curie Boulevard, Philadelphia, PA 19104-6145. Equal Opportunity Employer.**

POSTDOCTORAL POSITION(S) in ubiquitin biology/biochemistry available immediately. Possible projects include: 1) function and mechanism of reticulo-cyte-specific ubiquitin conjugating enzymes (*PNAS*, 92: 4982); 2) mechanism of proteolytic targeting by multi-ubiquitin chains (*PNAS*, 93: 861). Background in biochemistry or molecular biology preferred. At least one position must be filled by a U.S. citizen/permanent resident. Send letter, curriculum vitae, and names of three references to: **Dr. C. M. Pickart, Department of Biochemistry, Johns Hopkins University, 615 North Wolfe Street, Baltimore, MD 21205. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITION UNIVERSITY OF CALIFORNIA, IRVINE *Azotobacter* Nitrogenase and Ferredoxin Structure and Function

A position is available to study nitrogenase and ferredoxin structure and function by construction of site-directed mutants, anaerobic purification of the mutated proteins, and characterization of the proteins using biochemical and spectroscopic methods. Applicants must have a Ph.D. Deadline for application is May 3, 1996. Please send curriculum vitae and the names of three referees to:

**Dr. Barbara K. Burgess
Molecular Biology and Biochemistry
University of California, Irvine
Irvine, CA 92717-3900**

University of California, Irvine is an Equal Opportunity Employer committed to excellence through diversity.

POSTDOCTORAL POSITION Membrane Protein NMR

One to two **POSTDOCTORAL** positions to study the structure and folding of submit ϵ of the F_1F_0 ATP synthase—e.g., *Biochemistry*, 34:1365, 1995. Projects include: 1) complete solution structure of subunit ϵ in its two conformations by heteronuclear multidimensional NMR; 2) develop and apply new solution conditions for structural studies of membrane proteins; and 3) analyze the structural features stabilizing membrane protein folding. New 600 and 300 MHz spectrometers arriving July 1996, to complement existing 500, 400, and 200 MHz instruments. Please send curriculum vitae along with the names, addresses, and telephone numbers of three references to: **Mark Girvin, Biochemistry Department, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Email: girvin@aecom.yu.edu. Equal Opportunity Employer.**

POSTDOCTORAL POSITION—A postdoctoral research position is immediately available for a recent Ph.D. to conduct research with atomic force microscopy (AFM) in the area of bacterial toxins and membrane channels. The focus of the project is the translocation of bacterial toxins, such as the cholera toxin and tetanus toxin, and the structure-function of ion channels, such as the K channel. Background in AFM is not required, but the candidate must be well-trained in basic biochemical and molecular biology techniques. The candidate will have the opportunity to learn the art of AFM and participate in other ongoing projects with conventional AFM and cryo-AFM. The position is available for one year and renewable upon mutual agreement. Interested candidates please contact: **Dr. Zhifeng Shao, Department of Molecular Physiology and Biological Physics, University of Virginia School of Medicine, Box 449, Health Sciences Center, Charlottesville, VA 22908. FAX: 804-982-1616; Email: zs9q@virginia.edu.**

POSTDOCTORAL POSITION Ion Channel Structure/Function

One or two NIH-funded **POSTDOCTORAL** positions are available to carry out studies on structure-function relations in ligand-gated ion channels (nicotinic acetylcholine receptors and 5HT₃ receptors) employing a combination of molecular biological, biochemical, and electrophysiological approaches (see *Mol. Pharmacol.*, 48: 379-384, 1995, for a recent publication). Experience in whole-cell and single-channel recording and/or molecular biology is required. Please send curriculum vitae and names of references to: **Dr. Michael M. White, Department of Physiology, Medical College of Pennsylvania and Hahnemann University, 2900 Queen Lane, Philadelphia, PA 19129. Email: mwhite@medcolpa.edu.**

POSTDOCTORAL POSITION available immediately to study the regulation of adhesion molecule function through cytoskeletal interactions. Applicants should have strong background in cell and developmental biology and experience in recombinant DNA technology. Candidates must have a Ph.D. Send curriculum vitae and the names of three references to: **Jack Lilien, Professor, Department of Biological Sciences, Wayne State University, Detroit, MI 48202. FAX: 313-577-6891; Email: jililien@biology.biosci.wayne.edu. Wayne State University (WSU) is an Equal Opportunity/Affirmative Action Employer. Wayne State University—People working together to provide quality service. All buildings, structures, and vehicles at WSU are smoke-free.**

POSITIONS OPEN

POSTDOCTORAL POSITION MOLECULAR/CELL BIOLOGY

Position available for July 1, 1996 for Ph.D. to study cytokine regulation. Strong background in molecular/cell biology required. Send curriculum vitae, summary of research experience, and names and telephone numbers of three references to: **Dr. Jeffrey Hasday, Director UMAB Cytokine Core Laboratory, University of Maryland Medical School, Room 3D127, 10 North Greene Street, Baltimore, MD 21201. FAX: 410-605-7197; Email: jhasday@umabnet.ab.umd.edu. University of Maryland is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available to carry out structure-function studies of TCRs and antibodies using molecular biological, biophysical (e.g. NMR) and cellular techniques. Prior experience in protein engineering and/or biophysics preferred but strong applicants from other areas will be considered. Please send résumé and names of three referees to: **Dr. E. Sally Ward, Department of Microbiology, U.T. Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-8576, USA. Email: sally@skylab.swmed.edu. Equal Opportunity Employer.**

POSTDOCTORAL POSITION available immediately with NIH funding to study the molecular mechanisms of bacterial enterotoxins. Responsibilities will include membrane receptor purification, cloning and expression of receptors and ligands, and transfection experiments. Ph.D. graduates with strong background in molecular biology or cell biology are encouraged to apply. Send curriculum vitae and three letters of reference to: **Drs. J. T. LaMont and C. Pothoulakis, Beth Israel Hospital, Harvard Medical School, Division of Gastroenterology, Dana 501, 330 Brookline Avenue, Boston, MA 02215. FAX: 617-667-2767.**

Challenging **POSTDOCTORAL FELLOWSHIP** position is available to study the protein-protein interactions associated with amyloid disease. Individuals with a background in protein biochemistry and particularly protein biophysical chemistry are encouraged to apply. Applicants should expect to spend approximately 50% of their time at Texas A&M University with **Jeffery W. Kelly** and the balance at Hoechst-Roussel Pharmaceuticals (New Jersey) with **Sudhir Shasrabudhe**. Salary, health benefits, and travel reimbursement will be provided. Applications accepted until position is filled; review to begin May 1, 1996. Send curriculum vitae and three reference letters to: **Jeffery W. Kelly, Department of Chemistry, Texas A&M University, College Station, TX 77843-3255. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL FELLOWSHIPS Virginia Commonwealth University Medical College of Virginia

Two NIH **TRAINEE** positions are available (July 1, 1996 to June 30, 1998) in the Division of Gastroenterology to study the regulation of genes involved in hepatic cholesterol metabolism. Applicant must be M.D. or Ph.D. and have a background in molecular biology, cell culture, and signal transduction. Applicant (*must be U.S. citizen or permanent U.S. resident*) should send curriculum vitae and three reference letters to: **Z. R. Vlahcevic, M.D., Division of Gastroenterology, P.O. Box 980711, Richmond, VA 23298-0711.**

POSTDOCTORAL TRAINEESHIPS: Biomathematics, Biostatistics, Biomedical Engineering. The Curriculum in Toxicology, University of North Carolina, has three immediate openings for postdoctoral trainees to develop mathematical mechanistic models of developmental and neurotoxicological processes, and to investigate statistical inference issues in complex dynamic models. Each position requires a recent Ph.D. in biomathematics, biostatistics, biomedical engineering, or a related field, with experience in quantitative modeling of biological systems and, for one position, familiarity with statistical methodology. *EPA policy limits awards to U.S. citizens or permanent residents.* Send curriculum vitae and names, telephone and fax numbers of three references to: **Dr. David Holbrook, Curriculum in Toxicology, University of North Carolina, CB Number 7270, Chapel Hill, NC 27599.** For research information, contact: **Dr. Woodrow Setzer, NHEERL MD-55, EPA, Research Triangle Park, NC 27711. Internet: setzer.woodrow@epamail.epa.gov. Affirmative Action/Equal Opportunity Employer.**

TARGETED GENETICS CORPORATION Staff Scientist: Gene Expression

Targeted Genetics Corporation is a biotechnology company developing integrated gene and cell therapies for the treatment of acquired and inherited diseases. We have a new opportunity for a Staff Scientist in our Gene Expression Department. The successful candidate will join a highly interactive group dedicated to the aggressive pursuit of research programs leading to therapeutic products.

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Targeted Genetics offers competitive salaries and an excellent benefits package. For consideration, please submit your resume with names of three references to:

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POSTDOCTORAL FELLOWS



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NEUROSCIENCE RESEARCH

The successful candidate will conduct independent research and be part of an active and multifaceted CNS basic research program focused on the mechanisms of neuropathic pain.

This opening in Spring House, PA (suburban Philadelphia) requires a Ph.D. in Biochemistry, Molecular Biology or Pharmacology with an outstanding publication record and 0-4 years postdoctoral experience. A background in neuroscience and some experience in basic molecular biological techniques are preferred. (Dept. 594)

IMMUNOLOGY RESEARCH

This opening in Raritan, NJ (central New Jersey midway between New York City and Philadelphia) requires a Ph.D. in Molecular Biology, Immunology or Biochemistry with experience in basic molecular biological techniques and application of these techniques to the study of signal transduction mechanisms. Experience with immunological systems would be a plus.

The successful candidate will be an integral member of the immunology team and will investigate T-cell receptor co-signaling pathways. (Dept. 595)

These positions provide liberal research support, excellent laboratory and library facilities, and a good benefits package. Please forward a copy of your CV suitable for scanning into our database (i.e., clean/clear, no graphics and preferably unfolded) to: Dept. # indicated above for the position of your interest, Johnson & Johnson Recruiting, P. O. Box 16597, New Brunswick, NJ 08906-6597.

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POSITIONS OPEN

UNIVERSITY MEDICAL CENTER

POSTDOCTORAL POSITION is available immediately to study drug resistance and cancer. Candidate should have a Ph.D. or M.D. degree with background in drug resistance and molecular biology. Good salary, excellent working environment. Send curriculum vitae to: **Maria Claudia Mallarino, M.D., Texas Tech University Health Sciences Center, Oncology Division, Department of Internal Medicine, 3601 4th Street, Lubbock, TX 79430. Telephone: 806-743-3155; FAX: 806-743-3148.**

POSTDOCTORAL FELLOWS

Positions are available in a multidisciplinary **TRAINING PROGRAM** to study myosin light chain kinase and myosin phosphorylation in smooth and nonmuscle cells, and the role of neuronal nitric oxide in synthesis in skeletal muscle physiology and pathophysiology. Biophysical, biochemical, cell biology, recombinant DNA, and muscle physiology techniques will be used to examine the regulation and functions of these proteins in relation to second messenger pathways. Please address inquiries to: **James T. Stull, Ph.D., Department of Physiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9040. Telephone: 214-648-6849; FAX: 214-648-2974. An Affirmative Action/Equal Opportunity Employer.**

MOLECULAR/CELLULAR IMMUNOLOGY

POSTDOCTORAL RESEARCH POSITIONS are available in the immuno-oncology program to study the molecular basis of immunoglobulin gene instability and repair or the molecular biology of T cell receptor recognition of peptide MHC complexes. Individuals should have experience with molecular and cell culture techniques. Familiarity with molecular immunology is desirable. Mentors: **M. D. Scharff, N. S. Green, S. G. Nathenson.** Send description of research accomplishments, curriculum vitae, and names of three references to: **Dr. Matthew D. Scharff, Cell Biology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. Email: ngreen@ecom.yu.edu. Equal Opportunity Employer.**

RESEARCH ASSOCIATE position available in Department of Neurology at the University of New Mexico (UNM). NIH-funded project on proteolysis in stroke and brain injury. Required: Ph.D. or M.D. plus one year of experience. Desired: Expertise in molecular biology of proteases and small animal physiology. Contact **Dr. Gary Rosenberg, Department of Neurology, Telephone: 505-272-3342** for complete information on salary, duties, department specifications, and conditions of employment, and to obtain a vacancy announcement. Submit applications with résumés to: **UNM Health Sciences Center, Human Resources, Medical Building 2, Room 101, Albuquerque, NM 87131-5023.** Résumés must refer to Requisition Number 960553-B, must list employment dates by month and year, and must be accompanied by a cover letter with an original signature. Application deadline is 5:00 p.m. on March 22, 1996. *Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE

The Department of Human Genetics, Graduate School of Public Health, University of Pittsburgh, seeks a candidate with a Ph.D. degree in molecular biology/genetics with hands-on experience in *in vitro* mutagenesis and gene expression studies to work with an experienced research team to evaluate functional significance of mutations related to cardiovascular disease and Alzheimer's disease. Applicants should send a current curriculum vitae, description of research interests, and names of three references to: **M. Ilyas Kamboh, Ph.D., Department of Human Genetics, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA 15261. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATE in neuroscience. Study effect of anesthetics on ion channels in fine sensory nerve fibers. Patch clamp experience desired. Eighteen-month position with a possible extension. Send résumé, names of three references, and cover letter stating research experience and interests to: **George R. Kracke, Ph.D., Department of Anesthesiology, University of Missouri, Columbia, MO 65212. FAX: 573-882-2226. Equal Opportunity Employer.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN OPHTHALMIC LASER RESEARCH

One or two **POSTDOCTORAL RESEARCH** positions are available at the New England Eye Center, Tufts University School of Medicine, to conduct ophthalmic laser research and to develop novel techniques for optical tomography and laser surgery. Potential candidates should have a strong background in optics and lasers, good communication skills, and an ability to work closely with clinical investigators. A Ph.D. degree in biomedical engineering, biophysics, optics, or related field is preferred. Successful candidate will be encouraged to develop his or her own independent research program. Please send curriculum vitae and three letters of recommendation to: **Carmen A. Puliafito, M.D., Director, New England Eye Center, 750 Washington Street, Boston, MA 02111. FAX: 617-636-4215.**

RESEARCH ASSOCIATE position available for one year to study the metabolism and action of estrogens and their role in carcinogenesis. Position requires a Ph.D. and extensive postdoctoral experience in estrogen metabolism and chemical carcinogenesis. Salary is commensurate with experience and a comprehensive benefits package is available. Please send curriculum vitae by March 29, 1996 to: **Ms. Leithauser, Laboratory for Cancer Research, College of Pharmacy, Rutgers, The State University of New Jersey, Piscataway, NJ 08855-0789. FAX: 908-445-0687.**

ENVIRONMENTAL BIOLOGIST: Tenure-track position available August 1996. Ph.D. with zoological emphasis required. Responsibilities include teaching and assisting in the expansion and administration of the Environmental Biology program. The successful candidate should have expertise in one or more of the following: ecosystem ecology, environmental risk assessment, and wetland ecology. Development of a research program is expected. Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of three references to:

**Dr. Gail Harkey
Search Committee Chair
Department of Biological Sciences
Chicago State University
9501 South King Drive
Chicago, IL 60628**

Review of applications will begin March 31, 1996, and continue until the position is filled. *Chicago State University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

MOLECULAR BIOLOGIST/PATHOLOGIST to establish and direct a molecular biology laboratory in the Department of Pathology and Laboratory Medicine at Temple University Hospital. The laboratory will provide molecular biology support services for the molecular analysis of clinical material submitted to the anatomical and clinical laboratories of the hospital. A Ph.D. in molecular biology/biochemistry/experimental pathology or an M.D. with hands-on experience is required, especially in the use of DNA probes in the detection of drug resistance. A funded research project is a major asset. Temple University Hospital is a 500-bed hospital with heart, kidney, and bone marrow transplant programs. Send curriculum vitae to: **Henry Simpkins, M.D., Ph.D., Temple University School of Medicine, Department of Pathology and Laboratory Medicine, 3400 North Broad Street, Philadelphia, PA 19140. Temple University is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from women and minorities.**

CELL CULTURE and MOLECULAR BIOLOGY MANAGER. Analytical Biological Services Inc. (ABS) is a rapidly growing company providing custom biochemical preparations and cell culture services to most of the major pharmaceutical companies in the U.S. and Europe. We are looking for an individual with expertise in the scale-up culture of a variety of mammalian cells. Experience with mammalian and Baculovirus expression systems is highly desirable. Scientific competence, the flexibility to manage a variety of quickly changing projects, and the capacity to relate to customer needs on a daily basis are essential. Competitive salary, medical benefits, and 401(K) plan are offered. Please send résumé and references to: **ABS Inc., Cornell Business Park 701-4, Wilmington, DE 19801.**

POSITIONS OPEN

SCIENTIFIC COMPUTER SUPPORT

The Holland Laboratory of the American Red Cross is seeking a **SCIENTIFIC SUPPORT SPECIALIST** to provide high quality scientific computing support for our research operations in a multi-platform environment of PC DOS/Windows, Macintosh, UNIX, NetWare, Windows NT, and Internet. Supporting instrumentation control, data acquisition, molecular modeling, sequence analysis, microscopic imaging, morphometry, and densitometry scanning.

Candidate must have excellent interpersonal and customer service skills, including software instruction and trouble shooting. Must also be familiar with graphics, presentation, word processing programs, and the Internet. B.S. degree in computer science or related field, and/or three to five years of experience in science/computer fields are required.

Excellent salary and benefits. Submit résumé to: **Holland Laboratory, Human Resources (B00-086), American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. An Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.**



American Red Cross

MOLECULAR BIOLOGISTS

Positions available for B.S., M.S., and postdoctoral molecular biologists in drug discovery and metabolism research. Requires experience in gene cloning, DNA sequencing, recombinant protein expression, and cell culture methods. Prior experience in dermatology research is desirable. Southern Research Institute is a diversified research and development organization. Our Life Sciences Division provides comprehensive pre-clinical drug development and testing capabilities as well as basic research in drug design and synthesis, pharmaceutical formulations, toxicology, virology, microbiology, and pharmacology. To apply, send résumé or curriculum vitae to: **Southern Research Institute, Attention: Suzann Allen, Human Resources, Department 118, P.O. Box 55305, Birmingham, AL 35255-5305. Affirmative Action/Equal Opportunity Employer.**

MEDICAL SCIENCE WRITER/EDITOR sought by the University of Pittsburgh Medical Center. Position includes writing about medical research and clinical topics for lay readers and writing/editing copy for physicians, other health care professionals, and basic researchers. Minimum requirements: bachelor's degree in English, journalism, scientific/medical writing, health sciences, or related field plus three years of experience or the equivalent. Strong writing, interviewing, and interpersonal skills a must. Prefer M.S./A.B.D./Ph.D. in the biomedical sciences. Qualified applicants should send three copies of their résumé and two to three writing samples to: **University of Pittsburgh Medical Center, Human Resources Department, SPD, 200 Lothrop Street, Pittsburgh, PA 15213. Equal Opportunity Employer.**

TOXICOLOGISTS/RISK ASSESSORS

Leading environmental consulting firm has career opportunities available in Tallahassee, Houston, and San Francisco for individuals with doctorates in toxicology, public health, or pharmacology, plus risk assessment experience. Senior positions available with five to ten years' experience; junior positions for two to four years. Competitive salaries consistent with training and experience. Send résumé, salary history, and locational preference to: **Cheryl Cramer, Ecology and Environment, Inc., 368 Pleasant View Drive, Lancaster, NY 14086-1397. Ecology and Environment is an Equal Opportunity/Affirmative Action Employer.**

COURSES AND TRAINING

TECHNIQUES FOR CHARACTERIZATION OF COMPLEX CARBOHYDRATES

Three **LABORATORY COURSES** will be offered in 1996 at the Complex Carbohydrate Research Center, University of Georgia: Separation and Characterization of Glycoprotein Oligosaccharides (June 10 to 14); Structural Analysis of Oligosaccharides (June 17 to 21); Mass Spectrometry Analysis of Glycoconjugates (August 19 to 23). For information contact: **Dr. R. Merkle, CCRG, 220 Riverbend Road, University of Georgia, Athens, GA 30602-4712. Telephone: 706-542-4402. Email: RMERKLE@UGA.CC.UGA.EDU.**

Research Scientist

Cardiovascular Pharmacology

COR Therapeutics, Inc. is a publicly-held biopharmaceutical company located in South San Francisco. We are focused on the discovery and development of novel therapeutics for the treatment of severe cardiovascular disease. We are currently seeking a Scientist/Senior Scientist for our Cardiovascular Pharmacology Department.

This position involves the development and use of innovative *in vivo* models to evaluate the efficacy and pharmacological profile of new cardiovascular therapies. Candidates must possess a broad knowledge of *in vivo* cardiovascular pharmacology and be technically skilled in the design and execution of complex *in vivo* experimentation. The ability to write project reports and make data presentations is essential. The position also requires a Ph.D. and academic or industry research experience in *in vivo* physiology or pharmacology. A scientific background or work experience in thrombosis or coagulation is required.

COR Therapeutics, Inc. offers competitive salaries and benefits, attractive equity positions and the opportunity to make significant research contributions. Please send resume to: **COR Therapeutics, Inc., Human Resources, Attn: Job Code R1-96, 256 East Grand Avenue, South San Francisco, CA 94080.** COR is an equal opportunity employer.

COR
COR THERAPEUTICS, INC.

Corvas International, Inc., a biopharmaceutical company based in La Jolla, is engaged in the design and development of a new generation of therapeutic agents for the prevention and treatment of major cardiovascular and inflammatory diseases. We have the following opportunity available:

GROUP LEADER (SR. SCIENTIST), CELLULAR AND MOLECULAR BIOLOGY

Corvas is seeking a Ph.D. or equivalent level Scientist with minimum 8 years' experience in the area of cardiovascular research, with an emphasis on vascular biology preferred. Will participate and manage the research and development efforts of a diverse staff and array of projects. Specific and demonstrated technical expertise in the areas of molecular and cell biology, protein structure function using mutagenesis, phage display, cDNA cloning, and recombinant expression of heterologous proteins in microorganisms and/or eucaryotic cells is required. Experience in small to intermediate scale protein purification, and the enzymology of proteolytic enzymes and inhibitor design is preferred. The qualified candidate will help establish a strong

basic research presence, establish and maintain external collaborations, and assume a scientific leadership role at Corvas in the areas of molecular and cellular biology. Must have an established track record of innovative, yet practical research consistent with the goals of product discovery at Corvas. Prior experience with and an understanding of the issues involved in basic research as it relates to innovative drug development is required.

Our beautiful Torrey Pines location places us in the midst of academic and institutional research excellence, as well as the area's prominent biotech industry. We offer an attractive compensation package, equity participation, and a highly interactive and stimulating scientific environment. For consideration, please send/fax CV and letter of interest to: **Corvas International, Inc., Attn: Human Resources, 3030 Science Park Road, San Diego, CA 92121; FAX: (619) 455-5169.**

Visit our homepage at:
<http://www.free.cts.com/crash/c/corvas/>
Equal Opportunity Employer.

CORVAS
INTERNATIONAL

FACULTY POSITIONS IN MAMMALIAN GENETICS

The University of Massachusetts Medical Center invites applications for TWO TENURE-LEADING FACULTY POSITIONS which are immediately available at the **Assistant Professorship** level. Positions which are associated with a new Howard Hughes interdisciplinary programmatic initiative in mammalian genetics will include an appointment in an academic department, as well as a generous multi-year start-up package. Applicants should possess a Ph.D., M.D., or M.D./Ph.D. degree, and should have several years of relevant postdoctoral experience. The successful applicants will be expected to develop an extramurally-funded research program, to participate in educational programs in genetics for graduate and medical students, and to contribute to the realization of a center in Mammalian Genetics. Preferred research areas include rodent or human cancer genetics, developmental genetics, pharmacogenetics, or immunogenetics, although high quality research in any related area will be given consideration.

Applicants should send a curriculum vitae, a one page statement of research interest, names, addresses, and phone numbers of three references to: **Dr. Edward Bresnick, Vice Chancellor for Research, University of Massachusetts Medical Center, 55 Lake Avenue North, Worcester, MA 01655-0118.** For additional employment opportunities,

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Roche

ANIMAL DRUG SAFETY

PROJECT MANAGER

Hoffmann-La Roche, a major force in the field of international Animal Health and Nutrition, has recently expanded its animal drug portfolio. As part of an aggressive plan to further strengthen our position as a world leader, we are inviting applications for the position of Project Manager in the Animal Health Preclinical Development Group.

The successful candidate will be responsible for planning and managing drug safety research programs to support worldwide registration of animal health drugs. The research will focus on the evaluation of the Toxicity and environmental impact of new animal drugs and will involve extensive international collaboration with external researchers and consultants.

The ideal candidate will possess a Ph.D. in toxicology, pathology, pharmacology or related field with a minimum of three years directly related industrial or academic experience. Strong communication and presentation skills and the ability to work in a multi-discipline team environment are essential. Experience in performing studies to GLP standards and in dealing with regulatory agencies is highly desirable. This position will involve overseas travel.

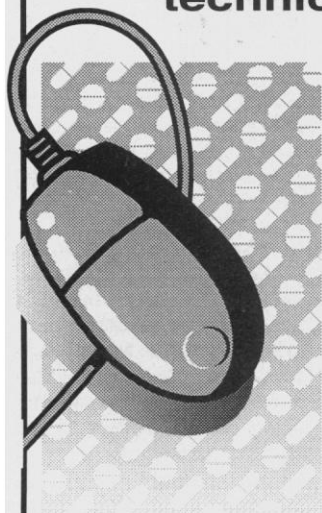
We offer a competitive salary and progressive benefits package. To apply, please send resume and salary requirements to: **Human Resources Department 95050/51, Roche Vitamins and Fine Chemicals, 45 Eisenhower Drive, Paramus, New Jersey 07652, USA.** We are an equal opportunity employer.

Roche

**Roche Vitamins &
Fine Chemicals**

A Member of the Roche Group

Intensive technical breakthroughs



At **Glaxo Wellcome**, the world's largest pharmaceutical company, we believe in maximizing the potential offered by new technologies in every area of our operations. Our Bioinformation group is a leader in the field, and we are seeking highly motivated candidates to join this interdisciplinary team of molecular biologists and computer scientists in one of the following openings.

PROGRAMMER ANALYST II/ SYSTEMS ANALYST

Individual will develop and implement bioinformatics software for the management and analysis of physical mapping/positional cloning and sequence data. Will also provide software support for positional cloning and sequencing projects. Position requires a BS/BA in Computer Science or Biology with a minimum of 3 years relevant experience in bioinformatics application software and 2 years experience in C programming on UNIX systems. A strong interest in research and excellent teamwork, interpersonal and communication skills are required. Knowledge of object oriented technology is desired. **Refer to Job #ASC1167-1 on all resumes.**

PROGRAMMER ANALYST I/II

Individual will assist in the design and development of bioinformatics software in support of our Genetics Initiative and Systems Based Research, with a focus on nucleotide and protein sequence analysis. Position requires BS/BA in Computer Science or Biology with a minimum of 2 years relevant experience in bioinformatics application software. Experience in C programming on UNIX systems, and knowledge of object oriented technology and/or Macintosh programming is required. Biology background preferred. Candidate must possess excellent teamwork, interpersonal and communication skills. **Refer to Job #ASC1166-1 on all resumes.**

SYSTEMS ANALYST/ SR. SYSTEMS ANALYST

Individual will design and develop bioinformatics software in support of our Genetics Initiative. While interacting with researchers in IR and Research, this individual will define and implement large-scale nucleotide and protein sequence analysis strategies. Position requires BS/BA Degree in Computer Science or Biology (Master's preferred) with a minimum of 4 years relevant experience in the development of bioinformatics application software and 4 years experience in C programming on UNIX systems. A biology background is essential, as are excellent teamwork, interpersonal and communication skills. Knowledge of object-oriented technology and/or Macintosh programming is desired. **Refer to Job #ASC1165-1 on all resumes.**

POSTDOCTORAL FELLOW Bioinformatics

We seek a Ph.D. in Computer Science or Biology to develop and implement methods for analyzing physical mapping/positional cloning and sequence data. A minimum of 1 year experience in the development of bioinformatics application software and 2 years experience in C programming on UNIX systems are required. A strong interest in research and excellent teamwork, interpersonal and communication skills are required. A biology background and knowledge of object-oriented technology is desired. **Refer to Job #ASC1367-1 on all resumes.**

The rewards of working at Glaxo Wellcome include excellent salaries, a flexible benefits package, a beautiful headquarters campus, ultra-modern facilities, and an excellent location in the Raleigh-Durham area of North Carolina. For confidential consideration, send your resume, indicating the position title, job # and salary history, to: **Human Resources Department, Glaxo Wellcome, P.O. Box 13398, Research Triangle Park, NC 27709.** (No Phone Calls or Agency Referrals, Please). An Equal Opportunity Employer M/F/D/V.

GlaxoWellcome

Working Together For A Healthier World

NEUROSCIENCE

THE EJLB FOUNDATION

SCHOLAR RESEARCH PROGRAMME

The EJLB Foundation awards each year up to six (6) grants for research projects in all areas of neuroscience that pertain directly or indirectly to schizophrenia and mental disease.

Eligibility for such grants is restricted to young scientists who are pursuing an independent research career and have given evidence of having significant potential. It is also a requirement that these scientists (i) have earned an MD and/or a Ph.D. degree; (ii) have completed their post-graduate training; and (iii) have been admitted after **June 15, 1991** as faculty members of a leading university, or an affiliated non-profit research centre, in Canada or elsewhere in the world.

Each grant is of CAN\$300,000, is disbursed over three (3) years and is non-renewable.

The next closing date for receipt of letters of intent is **May 31, 1996.**

Full details regarding this programme and required letter of intent forms may be obtained from:

The EJLB Foundation
1350 Sherbrooke Street West
Suite 1050
Montréal, Québec
CANADA H3G 1J1.

Fax (For inquiries only 514-843-4080).



DEKALB Genetics Corporation

Molecular Marker Laboratory Supervisor

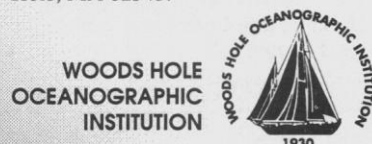
DEKALB Genetics Corporation, a leading agricultural seed company, has an opening for an experienced and ambitious molecular geneticist to join our expanding effort in molecular marker assisted plant breeding. We seek a well organized individual with a solid background in genetics and molecular biology to oversee the daily operations of our molecular marker lab, including supervision of technical staff, and to contribute to the development of new methodologies in molecular marker mapping. An M.S. degree with experience in molecular biology, genetics and computers is required. Experience in gene mapping, quantitative trait analysis, and laboratory management is desirable.

The successful candidate will be located at DEKALB's research facility in Mystic, CT, a scenic shoreline community located on Long Island Sound halfway between New York and Boston. In addition to a stimulating scientific environment, DEKALB offers competitive compensation, an attractive benefits package and an outstanding work environment.

Qualified individuals should submit a resume and the names, addresses and telephone numbers of three professional references to **DEKALB Genetics Corp., Laboratory Supervisor, 62 Maritime Drive, Mystic, CT 06355-1958.**

ASSISTANT, ASSOCIATE OR SENIOR SCIENTIST Marine Mammal Program

Woods Hole Oceanographic Institution invites applications for faculty position in marine mammal biology. Candidates's research program should complement existing strengths in behavior and bioacoustics at WHOI. Successful candidate will be expected to have vigorous research program, demonstrated ability to secure external funding, and encouraged to participate in MIT/WHOI graduate education program. Ph.D. and postdoctoral experience required. Send curriculum vitae, statement of research interests and names and addresses of three references by May 1, 1996 to: Human Resources Office, Box 54PCE, Woods Hole Oceanographic Institution, Woods Hole, MA 02543.



EOE/M/F/D/V.

Director Gene Therapy

The Barbara Ann Karmanos Cancer Institute and The Center of Molecular Medicine and Genetics at Wayne State University in Detroit, Michigan are seeking applicants for Director of Gene Therapy. Applicants must have an M.D. and/or Ph.D. degree and a background in gene therapy. The director will be responsible for developing a broadbased program focusing on the molecular therapy of neoplastic, hematologic and other diseases. The director will interact with scientists in the Cancer Institute, The Center of Molecular Medicine and Genetics, and other departments in the university to develop the laboratory facilities and expertise for the design and implementation of cutting edge molecular therapies; design specific therapeutic approaches and test them in appropriate animal and cell culture models; help define the specific clinical situations that most lend themselves to a gene therapy approach and define the logistical goals of the ultimate delivery of the therapy in a clinical setting.

Women and members of minority groups are encouraged to apply. Wayne State University School of Medicine, the country's largest single campus medical school, is an equal opportunity/affirmative action employer.

Send curriculum vitae to: Gloria Heppner, Ph.D., Wayne State University, c/o Harper Hospital, 3990 John R, 1 Webber, Detroit, MI 48201.

BARBARA ANN
KARMANOS
CANCER INSTITUTE

BIOGEN

OUR EXPANDING UNIVERSE

In May 1995, we filed for U.S. regulatory approval of a new treatment for multiple sclerosis. We are now in the process of building the infrastructure and capabilities we will need to commercialize this drug, which is our first proprietary product. Our record of success to date is based on the hard work and dedication of our employees. We are now seeking a select number of committed professionals with strong values to join the Biogen team.

Scientist—Mass Spectrometry

We are seeking an individual to perform mass spectrometric analyses of proteins, glycoproteins and small molecules in support of our on-going research activities. In addition, the successful candidate will provide critical interaction with our Research/Development and Quality Control departments to assist in defining project needs and analytical strategies/solutions. The successful candidate will hold a Ph.D. in mass spectrometry with several years of postdoctoral/industry experience in applied mass spec. We will consider candidates who hold a Master's degree and have equivalent experience. In addition, we are seeking specific expertise in MALDI-TOF mass spectrometry of peptides and proteins and LC-MS analysis of protein digests. This candidate will be able to operate/maintain mass spectrometry instrumentation and related data systems. Familiarity with protein chemistry techniques and drug metabolism would be an asset. Good written and oral communication skills are essential.

Scientist—Computational Chemistry

We seek an independent and creative individual to work within our medicinal chemistry group to help guide our synthetic chemistry efforts. Candidate should hold a PhD in computational or physical organic chemistry required with an expertise in small molecule modeling and proven experience on 3D QSAR methods. A background in database management is a plus, and experience in C or Fortran programming is desirable.

Research Associate—Organic Chemistry

We are currently seeking an individual to work in our Medicinal Chemistry Department. The successful individual will synthesize drug candidates, perform analytical analysis, maintain notebooks and assist in laboratory support. You will hold a Bachelors degree in Chemistry (ideally with an emphasis in Organic Chemistry) and will have had a minimum of 2 years' related lab experience.

Research Associate—Analytical Protein Chemistry

We currently have a need within our Analytical Protein Chemistry group for an individual to perform protein sequencing and amino acid analysis. You will prepare samples as well as operate, maintain and optimize instrumentation performance. Additionally, you will be encouraged to participate in methods design and development. Ideally, you will hold a BA/BS in Biochemistry or related field and have a minimum of two years' experience operating and maintaining sophisticated analytical instrumentation. Good mechanical abilities and the patience to perform repetitive and routine precision analyses are essential.

Biogen offers what few companies in our industry can—Professional Challenge, Stability, Growth, and one of the strongest financial profiles in the industry. In addition, our compensation and benefits package, including equity participation, is one of the best in the industry, and is designed to attract and retain the finest talent available. If you are one of the best, this is your opportunity to join our expanding universe. Please forward your resume, to the address below.

Dept. JT, Biogen, Inc., 14 Cambridge Center,
Cambridge, MA 02142. FAX: (617) 679-2546

BIOGEN

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For more information about opportunities at Biogen, find us on
the World Wide Web at CareerMosaic: <http://www.careermosaic.com>

The Science of Agricultural Genetics

RESEARCH ASSOCIATE

Nucleic Acids Analysis (Job # AB-601)

This person will join a laboratory that is responsible for analysis of nucleic acids in, primarily, transgenic plants. The successful candidate will be interacting with several research groups and will participate in the planning and implementation of experiments. MS degree or equivalent in molecular biology, biochemistry, or related field OR as BS degree plus 2 years of relevant research experience is required. Experience with a variety of nucleic acid analysis technologies (e.g. Southern, PCR, RT-PCR) is desired and experience with analysis of transgenic plants is preferred. Strong communication skills are also essential.

We offer competitive salaries and excellent, comprehensive benefits such as 401(k), tuition and relocation reimbursement. Des Moines is a prospering heartland city that ranks well above the national averages in affordability and education. Our location provides a mix of beautiful open spaces and city life advantages. For confidential consideration send 3 copies of your resume and cover letter indicating job number by March 29, 1996 to: Pioneer Hi-Bred International, Inc., Attn: PERSONNEL (Job #AB-601), P.O. Box 1004, Johnston, IA 50131-1004.

Pioneer Hi-Bred International, Inc., is the world leader in agricultural genetics. Founded in 1926, we are a publicly held company that invests more than \$115 million in research and product development. Pioneer® brand products are grown in almost every crop-producing continent in the world. At our headquarters in Des Moines, Iowa, we're adding to our Research team.



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INTERNATIONAL, INC.**
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Employer*

SENIOR FACULTY POSITION IN HUMAN GENETICS

Initiative in Human Genetics

College of Medicine

UNIVERSITY OF CALIFORNIA, IRVINE

Applications are invited for a tenured, senior faculty position in the College of Medicine at the University of California, Irvine. This individual is expected to take a leadership role in the planned Initiative in Human Genetics. The successful candidate will be one who demonstrates appropriate leadership skills, including the ability to maintain effective interactions over a range of basic science and clinical disciplines related to human genetics. Candidates should have a record of outstanding research accomplishment as evidenced by national and international recognition, appropriate funding record and proven ability to train graduate and postdoctoral researchers. The position includes a primary appointment in the Department of Biological Chemistry at a level commensurate with the credentials of the successful candidate.

Candidates holding the Ph.D. and/or M.D. degree are invited to apply by sending a letter of interest and curriculum vitae prior to May 15, 1996 to: **Dr. Ralph A. Bradshaw, Chair, Human Genetics Search Committee, Department of Biological Chemistry, College of Medicine, UCI, Irvine CA 92717-1700.**



*The University of California, Irvine:
rooted in education, enriched by diversity.*

PHYSICAL CHEMISTRY OF THE LUNG

The University of Calgary Respiratory Research Group invites applications for a full-time academic position at the Assistant Professor level or higher. This position offers an excellent opportunity to develop an independent research program in the general area of the physico-chemical interfaces between the lung and the environment. Duties will also include teaching and graduate student supervision.

Qualifications include a PhD or equivalent and at least two years' postdoctoral experience. Expertise in biophysics, surface chemistry and/or biochemistry, and cell biology is preferred.

The selected candidate must compete successfully for salary and establishment funding from the Alberta Heritage Foundation for Medical Research and/or Medical Research Council of Canada, and will have 75% of time protected for research.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary is committed to Employment Equity.

Please submit a curriculum vitae and a statement of research interests, and arrange to have three letters of reference send directly, by May 15, 1996, to:

**Dr. S. Schurch, Co-Chair, Respiratory Research Group
The University of Calgary, 3330 Hospital Drive N.W.
Calgary, Alberta, Canada T2N 4N1**



Assistant Professorships

The University of Iowa, College of Medicine

The Department of Pharmacology invites applications from highly qualified individuals for up to three tenure track positions. Successful applicants will be expected to develop dynamic, extramurally funded research programs, excel in the teaching programs of the department, and contribute actively to a strong, NIH-supported departmental graduate program.

New leadership in the department is committed to appointment and support of highly promising individuals applying modern approaches to the study of contemporary questions in the pharmacological sciences. New research initiatives in the college and department include cell and molecular biology of signal transduction, gene expression and function, oncogenes and cancer biology, and cell and molecular biology of drug action and metabolism. Current departmental faculty interact with collegiate faculty in the Cancer Center, Cardiovascular Center, and Diabetes and Endocrinology Research Center, and participate in interdisciplinary graduate programs in Molecular Biology, Genetics and Neuroscience.

Candidates with a Ph.D. and/or M.D. and an excellent record of research productivity and quality should submit before June 1, 1996 a curriculum vitae, summary of research accomplishments (including copies of key publications), description of future research plans, and names of three to five referees:

**G.F. Gebhart, Ph.D.
Department of Pharmacology
Bowen Science Building
The University of Iowa
Iowa City, IA 52242-1109.**

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

SYMPOSIUM



NATIONAL SYMPOSIUM BASIC ASPECTS OF IMMUNOLOGY May 1-3, 1996

To be held at the Uniformed Services University of the Health Sciences, Bethesda, MD, and sponsored by the Walter Reed Army Institute of Research, Washington, DC

ANTIGEN PROCESSING AND PRESENTATION (Ron Germain, NIAID, NIH, Chair); Peter Cresswell (Howard Hughes, Yale); Hidde Ploegh (MIT)

COSTIMULATORY MOLECULES (Ron Schwartz, NIAID, NIH, Chair); James P. Allison (UC, Berkeley); Tak W. Mak (Ont. Cancer Inst); Arlene H. Sharpe (Brig. Women's Hosp); Christian Larsen (Emory U)

SUPERANTIGENS (John W. Kappler, Howard Hughes, Natl Jewish Ctr Imm Resp Med., Chair); Brigitte Huber (Tufts U); Barry Cole (U Utah); David Posnette (Cornell U)

INFLAMMATION AND HOST DEFENSE (Carol A. Nacy, Entremed, Chair); Joost Oppenheim (NCI, NIH); Robert Schreiber (Wash U); Phillip A. Scott (U PA)

HIV IMMUNOLOGY (Dani Bolognesi, Duke, Chair); Anthony Fauci (NIAID, NIH); Richard A. Koup (Aaron Diamond); Andrew McMichael (Oxford); Bruce D. Walker (Mass Gen Hosp); John P. Moore (Aaron Diamond)

For further information, contact Conference Secretary, Department of Membrane Biochemistry, Walter Reed Army Institute of Research, Washington, DC 20307-5100 U S A, Tel 202-782-3248, Fax 202-782-0721
EM symposium@wrair-ernh1.army.mil

Home page

<http://wrair-www.army.mil/symposia/dmbsym.htm>

SUPERVISORY VETERINARIAN NHLBI GENE THERAPY PROGRAM

The National Heart, Lung and Blood Institute, NIH, is seeking applicants for the position of Attending Veterinarian of the 5 Research Court gene therapy facility. The successful applicant will have responsibility for planning, directing, coordinating, and evaluating all aspects of Animal Care and Use activities and maintaining NIH AAALAC accreditation. This includes working with the individual investigators to assure that scheduling of resources corresponds to research program priorities.

This is a Civil Service career-conditional appointment at the GS-14 (salary range \$62,473 to \$81,217). Applicants may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.

Minimum qualification requirements are Doctor of Veterinary Medicine or equivalent from an accredited AVMA School of Veterinary Medicine, board eligibility or certification in laboratory animal medicine, and five years of progressively responsible experience as a manager of a research animal facility. U.S. citizenship is required.

For additional information, contact Dr. Bryan Brewer, Chairman, Search Committee at 301-496-5095. *To apply, please send curriculum vitae and the names of three references by April 15, 1996 to:*

H. BRYAN BREWER, M.D.
CHIEF, MOLECULAR DISEASE BRANCH
NATIONAL HEART, LUNG AND BLOOD INSTITUTE
NATIONAL INSTITUTES OF HEALTH
BUILDING 10, ROOM 7N-117
BETHESDA, MD 20892-1666

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LABORATORY OF CARDIOVASCULAR SCIENCE, GERONTOLOGY RESEARCH CENTER, NIA, NIH INVITES APPLICANTS FOR A TENURED POSITION.

The qualified candidate should have an M.D. degree and experience with circulatory diseases and heart failure. This senior scientist will independently initiate a creative research program on the biophysical basis of localized calcium signalling and calcium release in cardiac muscle and other tissues. This scientist will collaborate with the Molecular Biology and Gene Therapy units of LCS to develop genetically manipulable cellular models of cardiac excitation-contraction coupling, leading eventually to genetic approaches to diseases affecting cardiac calcium regulation. The applicant should have a track-record of independent peer-reviewed research in intracellular calcium signalling and theoretical and experimental cardiac biophysics.

NIH is committed to increase representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. Applicants should send a curriculum vitae, and the names, addresses and telephone numbers of three references to **DR. DAN LONGO, SCIENTIFIC DIRECTOR, NIA OR TO NIKKI HOLBROOK, CHAIRPERSON, SEARCH COMMITTEE, LABORATORY OF MOLECULAR AND CELLULAR BIOLOGY, GERONTOLOGY RESEARCH CENTER, 4940 EASTERN AVENUE, BALTIMORE, MARYLAND 21224.**

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

PROTEIN EXPRESSION GROUP

The members of the Macromolecular Structure Laboratory (MSL) in the ABL-Basic Research Program, NCI-Frederick Cancer Research and Development Center are seeking to establish a Protein Expression Group. The primary purpose of this Group is to provide proteins for structural studies involving crystallography and NMR for the MSL as well as for other Laboratories within the Basic Research Program. This group will be recognized as an integral component of the MSL. We wish to recruit a **Ph.D. scientist** to establish and maintain this core support service. The successful candidate will recruit and supervise a staff of several associates and will have at least three years of postdoctoral experience in protein chemistry, recombinant protein expression, purification and protein characterization. The ability to work in an interactive collaborative environment is expected.

The NCI-Frederick Cancer Research and Development Center is in Frederick, MD, a suburban community located at the foot of the scenic Catoclin Mountains, 45 miles north of Washington, DC and the same distance west of Baltimore, MD. The ABL-BRP offers a full complement of benefits, a competitive salary, and an excellent work environment. Please send a CV with current salary, and contact information for three references to:

Personnel Department/MSL
ABL-Basic Research Program
NCI-Frederick Cancer Research & Development Center
P.O. Box B, Building 428
Frederick, MD 21701-1201



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AN IMPORTANT LINK IN HEALTHCARE SERVICES

SmithKline Beecham is a \$9.2 billion global pharmaceutical and healthcare company. Our world famous products and reputation mean unsurpassed opportunities for individuals to combine their scientific and marketing expertise for the following positions:

Oncology Medical Associates

In anticipation of FDA approval of SmithKline Beecham's latest breakthrough in cancer therapeutics, we are seeking individuals to expand a nationwide sales force of highly skilled professionals. Because oncology is different from other areas of healthcare, it is necessary that qualifying candidates possess a high degree of empathy and flexibility. Among their responsibilities, selected candidates will develop business plans, maximize customer rapport, create effective presentations, coordinate educational symposia, maintain a technical data base and create an environment where customers share SmithKline Beecham's mission to improve healthcare. Candidates should have at least 6 years' experience in a technical sales or marketing capacity, a PharmD or PhD in Pharmacology or related scientific discipline, and expert knowledge of oncology and the changing medical environment. Refer to Job Code OMA.

Regional Medical Associates

As Medical Associates, successful candidates will establish relationships within major managed care organizations for the purpose of acting as scientific liaisons and providing in-depth information regarding SmithKline Beecham products. This includes training representatives and medical professionals, and being responsible for outcome models. To qualify, you must have a PharmD or PhD in Pharmacology, strong marketing/communication skills and a high degree of initiative. Refer to Job Code RMA.

Both Oncology Medical Associate and Regional Medical Associate positions are available in various locations across the United States. Therefore, when you reply, please indicate if you are able to relocate and/or what geographic area to which you are limited. 40-50% travel required for both positions.

We offer one of the best compensation packages - including a car - in the industry. If you'd like to be a part of our success, send your resume with salary history, indicating desired Job Code, to: SmithKline Beecham, Central Employment, Job Code ___, 200 N. 16th Street, Philadelphia, PA 19101. We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham



Faculty Position

The Department of Physiology at the Wayne State University School of Medicine has an opening for a Research Assistant or Associate Professor. The Department is seeking to build on its strengths in the areas of diabetes, cardiovascular disease, or stroke. The Department is looking for an individual who is applying modern molecular techniques to any of these areas. The successful candidate will be expected to conduct an outstanding research program and be active in the teaching programs of the Department.

Additional opportunities for collaboration and interaction are available with the members of the Karmanos Cancer Institute, the Institute for Molecular Medicine, the Neuroscience Program and the Neurotrauma Center. Wayne State University is a Research University I, as designated by the Carnegie Foundation, and is located in the heart of the Detroit metropolitan area. Candidates should have a Ph.D. or equivalent degree and appropriate postdoctoral training. Applicants having significant grant funding will be given strong preference. Excellent start-up funds and competitive salary are available.

Please send a CV, description of research interests, and reprints of up to three of your best publications to:

John W. Phillis, Professor and Chair
Department of Physiology
Wayne State University School of Medicine
540 E. Canfield
Detroit, MI 48201

Three letters of reference should be sent directly to the above address.

Wayne State University is an equal opportunity/affirmative action employer. Wayne State University - People working together to provide quality service. All buildings, structures and vehicles at WSU are smoke-free.

POSTDOCTORAL ASSOCIATE CENTER FOR WATER AND THE ENVIRONMENT NATURAL RESOURCES RESEARCH INSTITUTE UNIVERSITY OF MINNESOTA, DULUTH

The Natural Resources Research Institute (NRRI) at the University of Minnesota, Duluth has an opening for a Postdoctoral Associate to work with two principal investigators on on-going projects to assess the landscape effects of management and landuse change on the biological diversity of vertebrates (primarily birds and mammals).

Minimum Qualifications: Completed PhD by date of hiring in relevant field related to landscape ecology and conservation biology.

Desired Qualifications: PhD, up to 2 years of relevant post-PhD research experience, two or more relevant peer-reviewed publications in landscape/ecology/conservation biology, and experience with geographic information systems.

Responsibilities: Participate in an interdisciplinary research group. Coordinate and participate in field work, analyze data, co-author publications, and further develop an externally funded research program. Participate in developing a landscape model of bird response to management and forest change using geographic information systems and remote sensing data.

Appointment is for up to 2 years depending on starting date. Position available April 1996. To apply, send a letter of application, resume, and the names, addresses, and telephone numbers of three references. All applications must be postmarked by March 30, 1996. Send applications to **Postdoctoral Associate Search Committee, Natural Resources Research Institute, 5013 Miller Trunk Highway, Duluth, MN 55811.**

*The University of Minnesota is an
equal opportunity educator and employer.*

MOLECULAR BIOLOGIST

The Laboratory of Biochemistry, National Cancer Institute, National Institutes of Health, seeks an outstanding molecular biologist to carry out studies on energy-dependent processes of nucleosome disruption. The position requires a Ph.D. or its equivalent in the area of transcriptional regulation, and a minimum of 3 years of post-doctoral training in the area of chromatin structure and gene regulation. Candidates must have expertise in molecular cloning and protein biochemistry, and research experience in biochemical methods for chromatin assembly and nucleosome disruption *in vitro*. Experience in purifying ATP-dependent biochemical activities from *Drosophila* that affect nucleosome integrity is also essential. Research experience should be demonstrated by a track record of quality publications. Salary ranges between \$31,000 and \$41,000 depending on experience. United States citizenship or permanent residency is required for this position.

To apply, please send curriculum vitae, reprints, description of research experience, and a list of references within 30 days of publication to:

**Beverly Miller, Laboratory of
Biochemistry, National Cancer Institute
National Institutes of Health
Bldg. 37, Room 4E-28
37 Convent Drive, MSC 4255
Bethesda, MD 20892-4255**

NIH/NCI is an Equal Opportunity Employer. Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation or membership or non-membership in an employee organization.

Biotech Research Laboratories (BTRL), a growing biotechnology company located in Rockville, MD, is a leading supplier of contract and service support for government and private industry. On the cutting edge of Cellular and Molecular Biology, BTRL's major focus is the development of innovative diagnostic tests and reagents for infectious diseases. Come join BTRL, and grow with the best.

Ph.D. SCIENTIST **Virology/Cellular Immunology**

A successful candidate will possess a Ph.D. in Virology and/or Cellular Immunology with 3-5 years' postdoctoral experience in working with Human and/or Simian Immunodeficiency Virus. This individual must be capable of developing assays that evaluate HIV/SIV neutralization activity, that screen agents for their anti-HIV ability, and that determine the mechanism of action for promising agents identified in our Drug Discovery Program. In addition, this individual needs to be knowledgeable and able to generate virus stocks, perform TCID₅₀ evaluations, and generate cytolytic T cells. Excellent written and oral communication skills a must. Applicants need to be independent and be able to supervise technical staff.
Job Code: MC

We offer competitive salaries and benefits. Please send resume indicating Job Code in strictest confidence to:

Biotech Research Laboratories
A Boston Biomedica, Inc., Company
3 Taft Court
Rockville, MD 20850

IN IT FOR LIFE.

Bioinformatics at Genetics Institute

Researchers at Genetics Institute are developing several technologies at the forefront of the genomic revolution. Our Signal Sequence Trap system is leading to the rapid discovery of large numbers of novel genes encoding proteins that are secreted from cells. As this and other genome projects proceed, gene expression studies will become increasingly important for determining protein function and therapeutic potential. In collaboration with Affymetrix, Inc., we are using GeneChip™ technology to assess the expression of a large number of genes in parallel. As a result of rapid developments in these information-intensive technologies, we have the following positions available in Bioinformatics. Full-time permanent as well as 1 year temporary positions are now available.

Staff Scientist

A position exists for a Computational Biologist with a PhD in Genetics, Biochemistry, or Cell Biology. The incumbent's goal will be to identify leads for therapeutically useful molecules. Responsibilities include reviewing sequence data from an internal cDNA sequencing effort, a gene expression survey, and publicly available data. Experience using comprehensive nucleic acid and protein sequence analysis software, sequence database, and Internet-based tools is essential. **Job Code SC-16**

Associate Scientist

A position exists for a scientist to organize and analyze data generated by a high throughput cDNA cloning and sequencing project. An MS degree in a biological science plus two years' experience or equivalent is required. Experience with sequence analysis software, sequence database, and Internet-based tools are essential. Good communication skills, organizational skills, and attention to detail are also important. **Job Code SC-111**

Scientific Software Specialist

A position exists for a software specialist to develop sequence analysis programs and to integrate commercial and public domain sequence analysis software into a unified environment for a high throughput cDNA sequencing project. This position requires a Master's degree in Computer Science and experience implementing software tools for analysis of molecular sequence data. **Job Code SC-49**

Lab Informatics Specialist

Primary Responsibilities include the design and implementation of a relational database and DNA chip data information system for a gene expression monitoring program. The design of the database must support the correlation of gene expression data with biological function of cells/tissues. Duties will include programming in a client/server architecture using a relational database and other software development tools. Responsibilities will include interacting with molecular biologists in all stages of database development. Requirements include a minimum of a BS in Computer Science or life science and 2+ years' related software development experience. Previous experience in a molecular biology laboratory setting is essential; experience and knowledge of UNIX, DOS, and MS Windows operating systems are important; strong interactive and communication skills are valuable. **Job Code SC-LIS**

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

For consideration, please send or fax resume, suitable for scanning indicating Job Code, to: Human Resources Department, Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140. Fax: (617) 498-8089 or (617) 876-8847. Genetics Institute is dedicated to building strength through diversity.

GENETICS  **INSTITUTE®**

Harnessing the Body's Power to Heal™

MOLECULAR BIOLOGIST

Merck Research Laboratories in West Point, Pennsylvania, a world leader in biological and pharmaceutical research, has an immediate opening for a Molecular Biologist in the department of Virus and Cell Biology.

The successful candidate must have experience in molecular biology research emphasizing plasmid design and E. coli host modification for increasing plasmid replication. Strong background in bacterial genetics, genome manipulation, and DNA replication required. Specific skills include thorough understanding of bacterial plasmid and expression systems, ability to facilitate manipulate and analyze plasmids, host systems, and bacterial phenotypes. Additional experience with mammalian gene regulation and fermentation would be an advantage. A Ph.D. in Molecular Biology/Biochemistry or equivalent with specific background in bacterial genetics and 2-3 years of post-doctoral research experience is required.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. For consideration, please forward a copy of your resume suitable for scanning into our database (i.e., no staples, no graphics and preferably unfolded). Send to: **Merck & Co., Inc., 1 Merck Drive, P.O. Box 100, ERWASCB2, Mail Stop WS1F-55, Whitehouse Station, NJ 08889-0100** - or - **FAX (using fine mode) to (908) 423-2592**. Only qualified candidates will be contacted. EEO/AA/V/Employer.



ASSOCIATE DEAN FOR RESEARCH. The Ohio State University College of Veterinary Medicine invites applications and nominations for the position of Associate Dean for Research. Applicants should have a distinguished record of scholarly achievement in veterinary medical or biomedical research, and substantial experience in attracting extramural funds as principal investigator to support research and graduate education programs. The successful candidate will have the opportunity to maintain an active and competitive research program. D.V.M. (or equivalent) and Ph.D. degrees are desirable; administrative experience is preferred. The candidate must qualify for an appointment as Full Professor with tenure in one of the College's three academic departments (viz. Veterinary Biosciences, Veterinary Preventive Medicine, or Veterinary Clinical Sciences). The Associate Dean provides leadership and administrative oversight for the extramural and intramural research programs of the College; promotes research development by working with College faculty to enhance research funding; and serves as College liaison with funding agencies, the OSU Research Foundation, and the Office of Research. The successful candidate will be a member of the Dean's cabinet and have administrative responsibilities for the Alice Lloyd Finley Research Farm and the College research committee.

Applicants should submit a letter of interest, current curriculum vitae, and names of five references to: **Dr. Charles C. Capen, Chair of Search Committee, Department of Veterinary Biosciences, The Ohio State University, 1925 Coffey Road, Columbus, OH 43210 (Phone: 614-292-4489; Fax: 614-292-6473).**

The College of Veterinary Medicine is an integral part of the most comprehensive health sciences center in America with Colleges of Dentistry, Medicine, Nursing, Optometry, Pharmacy, Allied Medical Professions, University Hospitals, and the James Cancer Hospital and Research Institute. College faculty are active participants in the University's Molecular Life Sciences initiative and provide leadership in the Center for Retrovirus Research. In addition, the College maintains strong collaborative programs with the College of Food, Agricultural, and Environmental Sciences and the Ohio Agricultural Research and Development Center. The Ohio State University is an equal opportunity/affirmative action employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disabilities are encouraged to apply.

NIMH TENURE TRACK POSITION for Geriatric Neuroimaging

The Section on Geriatric Psychiatry, National Institute of Mental Health (NIMH) is seeking candidates for a tenure track position to develop the Section's neuroimaging program and participate in ongoing interdisciplinary studies. The position requires that the candidate have an M.D. and completed residency training in psychiatry or neurology and experience in nuclear medicine. U.S. medical licensure is required. Brain imaging experience as evidenced by published research, especially using PET, fMRI or SPECT in conjunction with cognitive or psychopharmacologic paradigms, is required. Experience and a strong publication record in geriatric psychiatry is also recommended, as is experience in administering inpatient or outpatient research protocols, including treatment trials. Ongoing work within the Section on Geriatric Psychiatry includes studies of the pharmacology of memory, treatment trials in Alzheimer's disease patients, and studies of second messenger systems in that illness, so an ability to integrate clinical, neuropsychological, and basic science knowledge is important. Scientists from under-represented groups are particularly encouraged to apply.

Applicants should submit letters, C.V., and brief description of current and proposed research immediately to **Trey Sunderland, M.D., Chief, Section on Geriatric Psychiatry, NIMH, 9000 Rockville Pike, Bldg. 10, Rm 3D41, Bethesda, MD 20892; Fax 301-402-0188.**

NIMH is an Equal Opportunity Employer

NORTHWESTERN UNIVERSITY MEDICAL SCHOOL

ASSOCIATE DIRECTOR OF THE INTEGRATED GRADUATE PROGRAM

The Northwestern University Medical School invites applications for the position of Associate Director of the Integrated Graduate Program (IGP) in the Life Sciences. The IGP is a multidisciplinary program that includes 150 graduate students and 120 faculty involved in training and research in basic biomedical sciences. The Associate Director is responsible to the Director for development and implementation of policies and procedures for the IGP. The duties of the Associate Director include coordinating and organizing graduate student recruitment, orientation, laboratory research rotations, and qualifying examinations. The Associate Director is also responsible for collecting and maintaining records on past and present graduate students. The Associate Director has a non-tenure track faculty level appointment at the Medical School. Information on the IGP can be viewed at <http://www.nums.nwu.edu/~igp>

Candidates for the position must have a Ph.D. or equivalent experience with graduate education, and organizational and administrative skills. Strong interpersonal skills are required and experience with computer database management is desirable.

The position is available in April, 1996. Processing of applications will begin immediately and continue until the position is filled. Applications should include a curriculum vitae, a brief statement describing the applicant's qualifications for the position, and the names of three references. Applications should be mailed to: **IGP Associate Director Search, Ward 4-295 W150, Northwestern University Medical School, 303 E. Chicago Ave., Chicago, IL 60611.**

Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring is contingent upon eligibility to work in the United States.

Associate Director for Fellowship Training

National Institute of Mental Health Intramural Research Program

Newly established, full-time position located on the campus of the National Institutes of Health, Bethesda, Maryland to oversee the post-doctoral training process for approximately 200 NIMH trainees enrolled in either clinical or basic science research fellowships. The incumbent will have the responsibility and authority for the quality of the fellowship training experience in the NIMH Intramural Program. Develops/administers orientation programs, clinical fellowship core curriculum, performance review process, grantsmanship didactic, fellowship recruitment process, and career counseling. Candidates should have a strong background in biomedical research (competitive grant awards) and extensive post graduate training experience. Experience in curriculum development and/or as a mentor of research/clinical fellows is highly desirable. Position reports directly to the Scientific Director and is equivalent to the academic rank of associate or full professor. Send CV, brief description of research and training background, and three letters of reference to: **Alan Breier, MD, Chair, Fellowship Education and Training Committee c/o Mrs. B. Múshinsky, Bldg 10/4C101, 9000 Rockville Pike, Bethesda, Maryland 20892-1364.**

The NIH is an Equal Opportunity Employer.

The National Institutes of Health National Center for Human Genome Research

The Intramural program of the National Center for Human Genome Research (NCHGR), the National Institutes of Health (NIH), Bethesda, Maryland, is now in operation. Scientists with a unique range of expertise and interests have been recruited to focus on the identification, localization, diagnosis, and treatment of human genetic disease.

We are actively recruiting a tenure-track scientist in the field of

Human and Murine Molecular Cytogenetics

for a position within the Diagnostic Development Branch. The successful applicant will be provided with the space and resources needed to pursue an independent research program in identifying chromosomal aberrations in human and murine solid tumors.

Candidates must have a Ph.D. and/or M.D. as well as advanced training in genome science, including demonstrable expertise in multicolor Fluorescence In Situ Hybridization (FISH) and comparative genomic hybridization, as well as digital imaging and confocal laser scanning microscopy.

Salary range \$54,000 - \$80,000 and benefit packages are available. Please forward curriculum vitae to:

Molecular Cytogenetics Search Committee
NIH/NCHGR
Building 9 Rm. 1N105
9 Memorial Drive, MSC-0940
Bethesda, MD 20892-0940



Closing Date: April 15, 1996

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

MDC MAX-DELBRÜCK-CENTER FOR MOLECULAR MEDICINE BERLIN-BUCH

The Max Delbrück Center for Molecular Medicine (MDC) Berlin-Buch invites applications for

one independent group leader position

in the field of molecular and cellular neurosciences. The MDC is a national research center supported by the Federal Government of Germany and the Land Berlin. Scientists are specifically encouraged to integrate into clinical research programs. Applicants should have an outstanding record of scientific accomplishment.

The position is guaranteed for 5 years. Appropriate laboratory space, funds for laboratory set-up and operation will be provided; fellowships for post-doctoral fellows and graduate students are subject to negotiation.

Candidates should submit their curriculum vitae, a list of publications, a short description of their future research objectives, and the names of three references to:

Dr. Helmut Kettenmann
Max-Delbrück-Center for Molecular Medicine
Robert-Rössle-Strasse 10
13122 Berlin, Germany

Deadline for application is April 9, 1996

Faculty Position in Cytokine Regulation Departments of Surgery and Physiology Michigan State University

The Departments of Surgery and Physiology invite applications for a tenure-track joint appointment, preferably at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. We seek an outstanding candidate with a Ph.D. degree or equivalent with training in physiology, biochemistry or molecular biology. Preference will be given to individuals with an interest in metabolic regulation with an emphasis on cytokine regulation of lipid and carbohydrate metabolism. We seek individuals using modern molecular approaches to understand normal and disease processes associated with trauma or chronic disease. Candidates are expected to develop a vigorous externally funded research program and to teach undergraduate, graduate, or medical students. Interested individuals should provide a complete curriculum vitae, a brief statement of research interests and bibliography and copies of key publications or reprints. Applicants should arrange to have at least three (3) letters of recommendation sent from scientists who can evaluate their accomplishments and future potential for research and teaching. Applications should be sent to: **James Harkema, M.D., Search Committee Chairperson, Department of Surgery, Michigan State University, B424 Clinical Center, East Lansing, Michigan 48824-1315.**

Michigan State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

Fellowships for Mexican Graduate Students and Sabbatical Investigators

International Training and Research in Population and Health Program at The Oregon Regional Primate Research Center and Oregon Health Sciences University.

Fellowships are available for Mexican nationals interested in pursuing a Ph.D. degree in the Reproductive Sciences or seeking sabbatical support.

The **predoctoral training program**. Successful candidacy requires proficiency in the English language and acceptance by the OHSU Graduate Program. Trainees will be exposed to a broad spectrum of research opportunities in the Reproductive Sciences, including the use of physiological, cellular and molecular approaches. GRE and TOEFL scores are required.

Sabbatical candidates will be selected with special consideration to those with the highest potential for developing/expanding research programs upon returning to Mexico. Individuals already holding faculty appointments are strongly encouraged to apply.

Send a letter indicating which of the two programs is of interest, a **curriculum vitae**, 3 letters of reference sent directly from the writer to the address below, transcripts, and any other supportive information to:

Dr. P. Michael Conn
Associate Director, ORPRC
Associate Provost
and Professor of Physiology and Pharmacology, OHSU
Oregon Regional Primate Research Center
505 N.W. 185th Avenue
Beaverton, Oregon 97006-3499 U.S.A.



ASSISTANT PROFESSOR DEPARTMENT OF MEDICINE UNIVERSITY OF CALIFORNIA SAN FRANCISCO (UCSF)

The Department of Medicine at UCSF is seeking qualified applicants for a faculty position at the assistant professor level who will primarily be engaged in basic biomedical research related to human disease. Qualified applicants should hold an M.D. or M.D./Ph.D. and have a strong research background in human genetics, cancer, or cellular/molecular biology. Clinical training and board certification are desirable but not required. Send a curriculum vitae, summary of research experience/future interests and 3 letters of recommendation to:

Arthur Weiss, M.D., Ph.D
Chair, Search Committee
Department of Medicine
University of California, San Francisco
3rd & Parnassus Avenue, Box 0724
San Francisco, California 94143

Deadline for applications: 2 months post ad publication date. *The University of California is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

ROYAL ADELAIDE HOSPITAL

North Terrace, Adelaide, 5000. Phone (08) 222 4000



ROYAL ADELAIDE HOSPITAL CANCER SERVICE STAFF SPECIALIST MEDICAL ONCOLOGY

Applications for this full-time position are invited from medical practitioners eligible for Specialist Registration by the Medical Board of South Australia. Medical Oncology is part of a comprehensive multidisciplinary Cancer Service of the Royal Adelaide Hospital which includes Haematology, Radiation Oncology, Breast, Endocrine and Surgical Oncology and Palliative Care. In addition to the patient care functions, the unit has a large clinical research program. The Hanson Centre for Cancer Research is located on the campus and provides a resource for basic research endeavours.

The successful applicant will be involved in providing a clinical service in Medical Oncology and will pursue clinical or basic research. A proven record of research grants from the NH&MRC or equivalent and of publications in high profile journals is essential. The appointee will also be involved in undergraduate and postgraduate teaching. The appointee will be responsible to the Director, Medical Oncology.

Qualifications: Fellowship of the Royal Australasian College of Physicians with advanced training in Medical Oncology as an essential requirement.

Salary: \$64,958 to \$84,412 per annum depending on experience, plus on call allowance and recall payments as appropriate. In addition, an amount of up to 45% of the base salary may be earned from limited rights to private practice. Conditions of employment are in accordance with the SA Medical Officers Award.

Applications and Enquiries should be directed to Associate Professor Ian Oliver, Clinical Director, Royal Adelaide Hospital Cancer Service, Royal Adelaide Hospital, North Terrace, Adelaide SA 5000, telephone 61 8 222 5577, facsimile 61 8 232 2148. Applications should include curriculum vitae and names and addresses of three referees.

Closing Date: 30 April 1996.

The Royal Adelaide Hospital is an equal opportunity employer and promotes a non-smoking environment.

CH25422

国際感覚豊かな研究者を募集します。

ドイツ・バイエル社は医薬品研究の「世界三極体制」をめざし、'88年にアメリカの中央研究所を開設。次いで、'95年に日本の中央研究所を誕生させた。ここでは、アレルギー・自己免疫疾患分野を担当し、その一極を担う。21世紀には日本で発見された新薬を世界に送り出すことを目標に、現在研究者を増員中。海外との交流が頻繁なため、国際感覚豊かな研究者を求めています。

- 募集職種 次の分野に関わる研究職
アレルギー・自己免疫疾患分野 薬物動態学分野 化学分野
- 応募資格 上記分野の研究者でPh.Dまたは同等の知識・経験のある方。
日本語・英語必須。入社時期等は相談に応じます。
- 勤務地 関西学研都市(近鉄奈良駅より車10分)

《《《《《 Chemist 急募 》》》》》

- 職 務... 1 / 医薬品探索のための合成・構造化学分野の研究。(天然物化学関連の研究者歓迎)
2 / コンピュータによる薬物デザイン (Molecular Modeling) の研究。
- 資 格... 上記分野の研究者でPh.Dまたは同等の知識・経験のある方。特に免疫・アレルギー関連の経験者を歓迎します。日本語・英語必須。入社時期等は相談に応じます。
- 応 募... 履歴書・研究概要を日本語・英語で作成。論文リスト又は論文別刷を添付の上
【問合せ先】宛送付下さい。
- 選 考... 1次/書類審査 2次/面接他



バイエル薬品株式会社

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TEL06(398)1145 担当/野本 ミレコトコールを
弊社の社員及び応募者は全て公平に扱われます。



The University of Sydney AUSTRALIA

McCAUGHEY CHAIR OF GEOGRAPHY

Department of Geography

Reference No. A06/01

With the retirement of Professor Maurice T Daly from the McCaughey Chair and the departure of Professor Bruce G Thom to the Vice-Chancellorship of the University of New England, the McCaughey Chair of Geography has become vacant. Applications are invited from suitably qualified geographers for this position.

The McCaughey Chair is presently the only Chair in the Department of Geography and the successful applicant must be able to create a cohesive Department. The University wishes to appoint a person with demonstrated skills in the leadership, administration and management of a multistranded department. The ability to cooperate with cognate fields, departments and organisations is essential. Candidates should have shown a high level of expertise in the specific fields of one of the main teaching and research areas of the Department: coastal and marine studies, land and water studies, restructuring and Asia/Pacific development. The successful applicant must have a strong record of research collaboration and leadership, as indicated by international publications, awards, grants and successful postgraduate supervision. Candidates should also have an excellent teaching record and a proven record in teaching innovation. Demonstrated skills in administration are essential and a high level of community involvement is desirable.

Membership of a University approved superannuation scheme is a condition of employment for new appointees. For further information contact Associate Professor R F Warner ph 61 2 351 2886; fax 61 2 351 3644.

Salary will be at the rate of A\$80,176 per annum (under review)

Four copies of the application, quoting Reference No, curriculum vitae, list of publications and the names, addresses and FAX numbers of at least three and not more than five referees must be lodged by **2 May 1996** with the Personnel Officer (Sciences Group), Carslaw Building (F07), The University of Sydney, NSW 2006, Australia, from whom a detailed statement of information concerning the Chair should be obtained.

Equal employment opportunity and no smoking in the workplace are University policies. The University reserves the right not to proceed with any appointment for financial or other reasons.

128856

University of Heidelberg

Applications are invited for a

Professorship (C4) in Biocomputing

at the Interdisziplinäres Zentrum für Wissenschaftliches Rechnen (IWR), University of Heidelberg.

The appointment will be attached to the Faculty of Biology. Duties will include research and teaching as well as training and advice in scientific computing in the biological sciences. The candidate is expected to collaborate with the Centers for Molecular Biology (ZMBH) and Biochemistry and with the Medical Faculty of the University. In addition there are possibilities for collaboration with the German Cancer Research Center (DKFZ), with the Max Planck Institute for Medical Research, and with the European Molecular Biology Laboratory (EMBL).

Applicants should have an international standing in the area of modelling and simulation of biological macromolecules. They should be prepared to collaborate with genome research projects.

Applications should include CV, publication list with reprints of the five most important publications, an account of teaching experience, and a short summary of the intended scientific research, and should be sent to the **Dean of the Faculty of Biology, Im Neuenheimer Feld 234, D-69120 Heidelberg** (closing date: 15 April 1996)

A COMMITMENT TO EXPLORATION AND DISCOVERY

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& Chemical
Scientists**



Unilever's Research and Engineering Division delivers advanced innovation in science and technology to support our worldwide businesses.

Already one of the world's largest consumer goods companies, we market thousands of famous brands globally and are a leading manufacturer of foods, detergents, personal products and speciality chemicals.

Our future success will be driven by world class scientists with a shared commitment to scientific exploration and discovery.

At Port Sunlight where we research into detergents, personal products and speciality chemicals, a number of highly innovative **Physical & Chemical Scientists** are required to join our programmes in colloid & surface science and materials & measurement science.

The major areas of interest involve the physics and chemistry of solid and liquid phases; particularly materials in contact with or containing water.

Unilever has an ongoing commitment to studying inorganic materials and reaction mechanisms in materials utilised across all their areas of technological interest. The main growth areas of interest are in particle science, the physical chemistry of surfactants and polymers, structuring of soft phases and the rheology of films and concentrated dispersions.

Additionally, there are a number of openings for specialists who are experienced in the measurement techniques that underpin the above areas, such as confocal microscopy and surface scattering techniques.

You will be qualified to PhD level - possibly with additional post-doctoral experience gained within your specialist field. Excellent communication skills and the ability to work in an integrated team of scientists and business managers are essential.

In return for your commitment and dedication, you can anticipate a competitive salary and benefits package commensurate with the depth of your relevant experience. Relocation to this attractive part of the North West will be available where appropriate.

If you have the desire to join an innovative company, achieve excellence in your field and contribute to the future scientific direction of a dynamic project team, please write with full CV clearly quoting reference number FEB 03 on your application envelope, to: Debbie Smith, Personnel, Unilever Research Port Sunlight Laboratory, Quarry Road East, Bebington, Wirral L63 3JW UK. Closing date: 5.4.96.



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S	L	A	B	G	P	G	R	O	G	A	M	M	A	I	W	D	N	E	E	N	V
T	E	R	O	F	A	R	6	F	G	F	9	X	N	N	P	O	O	L	I	E	X
E	U	E	P	5	H	O	C	Y	T	O	K	I	N	E	S	M	F	L	O	C	P
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S	I	I	I	I	L	E	T	A	F	U	Q	7	L	I	F	H	J	A	R	O	S
5	N	C	E	V	A	T	F	F	G	E	V	I	T	A	T	I	G	C	O	S	E
Q	1	U	T	K	F	A	J	E	H	Q	P	A	C	O	C	L	C	T	P	I	I
H	X	L	I	J	G	N	R	K	D	1	T	I	D	Y	I	1	S	O	H	S	D
R	G	D	N	F	T	I	L	1	0	S	D	N	M	W	S	5	F	R	I	F	O
N	E	R	Y	T	H	R	O	P	O	I	E	T	I	N	A	P	3	T	N	A	B
A	4	Y	6	P	Z	W	H	C	C	A	Z	E	G	F	B	D	N	F	K	C	I
W	L	L	M	B	R	A	N	T	E	S	M	I	F	V	F	G	K	Q	Z	T	T
I	I	A	N	G	I	O	G	E	N	I	N	H	B	E	G	F	N	T	4	O	N
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