

NEW PRODUCTS

THREE-MICROMETER PARTICLES IN HPLC COLUMNS

All 14 of this manufacturer's high-performance liquid chromatography (HPLC) columns are available packed with 3- μ m particles. This includes columns for reversed phase (PRP-1, PRP-3, PRP-Infinity), ion chromatography (PRP-X100 anions, PRP-X200 cations), ion exchange (PRP-X500, PRP X600), ion exclusion (PRP-X300), and carbohydrate analysis (RCX-10, RCX-30, HC-40, HC-75) columns. Columns packed with 3- μ m particles separate early eluting peaks better than those packed with 5- or 7- μ m particles. Column lengths of 5, 10, and 15 cm are available. All Hamilton HPLC columns are polymeric, so they are stable as to pH, pressure, and organic solvent.

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The ClonCapture cDNA Selection Kit is a gene isolation system designed to greatly enrich target clones from any plasmid library without extensive library screening. Using this kit and a partial cDNA probe, a researcher can isolate full-length target cDNA clones in just 2 to 3 days. The proprietary method is simple: In the presence of the RecA protein, a 200- to 600-base pair biotinylated probe binds homologous cDNA clones, which are then captured by streptavidin-coated magnetic beads.

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STATISTICAL SOFTWARE

MVSP is a Windows (3.1, 95, 98, and NT) multivariate statistical package that performs a variety of ordination and cluster analyses. It provides an inexpensive yet easy means for analyzing data in fields ranging from ecology and geology to sociology and market research. MVSP can perform principal components analysis, principal coordinates analysis, correspondence analysis, and cluster analysis (using 20 different distance or similarity measures and seven clustering strategies). Diversity in-

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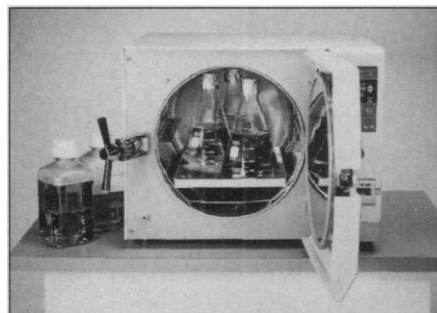
dices can be calculated on ecological data, and a new feature of version 3.0 is canonical correspondence analysis.

AUTOClave

Model 3850 Autoclave is large enough to hold two Erlenmeyer flasks yet small enough to fit on a lab bench. The footprint is only 26 inches by 27.5 inches by 20.7 inches. It is supplied with a stand. The 15 inch by 20 inch chamber accommodates two slide-in trays for small items or up to 15 500-ml media bottles. The unit requires no plumbing or installation; the user simply connects the power cord and fills the reservoir. It offers fast and slow exhaust for sterilization of solids and liquids and a drying cycle for removal of residual moisture. Safe-

Brinkmann Instruments

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ty features include a heat-insulated, double-locking door to guard against burns, an over-temperature cutoff, an over-pressure valve, and low water level protection.

INTERNAL REFLECTANCE CELL

The CIRCLE (Cylindrical Internal Reflectance Cell for Liquid Evaluation) Cell is for rapid, nondestructive, and reproducible analysis of liquids. The patented device provides the optimum energy throughput for demanding analyses: protein absorption studies, multicomponent quantitative analysis, highly absorbing solvents, and aqueous samples. The versatile CIRCLE Cell can be used as a flow cell or high-pressure cell. It is also available with a heat/cool jacket or a high-temperature jacket. The cell comes in both a macro and a micro version to accommodate different sample volumes.

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MICRO-COMBINATION AND IN VIVO PH MEASUREMENT

The all-plastic, glass-free AMANI series of micro-combination pH electrodes is engineered to minimize fouling due to the adsorption of proteins and surfactants and to resist corrosive solutions. The electrodes offer fast response time, Nernstian behavior, flat tip, minimum depth of immersion, and dry storage. The AMANI-650, with a 0.65 mm by 20 mm tip, can measure the pH of a 250-nl sample. Electrodes with tip lengths of 75 mm and longer are available. The AMANI-IV has a special needle tip design to provide maximum electrode protection and ease of insertion into tissues without compromising performance.

Innovative Instruments

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LITERATURE

MultiDose and MultiDose Plus: Dissolution Capabilities describes workstations for totally automated dissolution testing. It describes how automation in pharmaceutical dosage form testing can reduce the cost of testing, reduce cycle time, improve the quality of results, simplify technology transfers, and control outsourcing costs.

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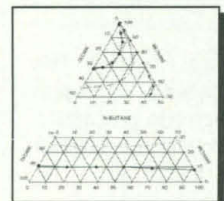
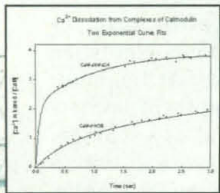
Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement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

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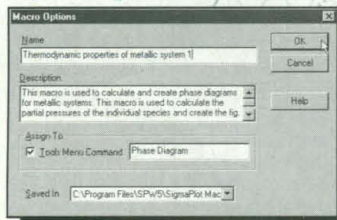
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POSITIONS OPEN

TENURE-TRACK FACULTY POSITION ASSISTANT PROFESSOR

Crump Institute for Biological Imaging, Department of Molecular and Medical Pharmacology, UCLA School of Medicine.

The Crump Institute for Biological Imaging ([website: www.crump.ucla.edu](http://www.crump.ucla.edu)) is seeking a faculty member with research experience in the development of murine models of disease, and with a strong interest in biological imaging. The individual we seek would have the ability to interact with diverse scientists who have come together to advance biological imaging through the merger of fundamental advances in molecular biology, cell biology, and manipulation of the murine genome with those in biological imaging. The Crump Institute faculty includes scientists with strengths in positron emission tomography (PET), magnetic resonance imaging (MRI), cryoelectron microscopy, confocal microscopy, pharmacology, synthetic chemistry, nuclear medicine, molecular biology, imaging physics, and biomathematics. Active areas of current research that bring together various faculty include the repeated imaging of gene expression in living mice using microPET. The ideal candidate will bring to the Institute skills in the development of murine models of disease and in molecular biology, and share with the members of the Institute an interest in imaging biological events in these animals in real time, in a noninvasive manner.

Candidates should have a Ph.D. in molecular biology, cell biology, pharmacology, or another relevant field. Foremost, the applicant should be a highly qualified Biologist with a strong desire to study biological models *in vivo* with rapidly evolving imaging modalities (e.g., PET, MRI). Research experience in the development of disease models (e.g., knockout/transgenics) for biological imaging applications is preferred. Exposure to *in vivo* imaging is preferred but not mandatory. The successful candidate will have made significant scientific contributions and will be expected to develop a well-funded research program. Teaching of graduate students and M.D.-Ph.D. students is expected.

Send curriculum vitae and a description of research accomplishments and plans to: Dr. Sam Gambhir, Chair, Faculty Search Committee, Crump Institute for Biological Imaging, UCLA School of Medicine, A-222 CIBI, P.O. Box 951770, Los Angeles, CA 90095-1770. Applicants should also arrange to have three letters of recommendation sent to the same address.

TENURE-TRACK POSITION DELAWARE VALLEY COLLEGE SMALL ANIMAL SCIENCE

Delaware Valley College invites applications for a tenure-track faculty position in small animal science to teach introductory courses covering the handling and restraint of small animals as well as upper-level courses. Department is expanding its emphasis on environmental enrichment of captive animals; applicants with significant training in behavioral endocrinology or physiological ecology are encouraged to apply. Ph.D. in animal science or biology and commitment to undergraduate teaching and mentoring required. Rank and salary commensurate with educational background and experience. Position is available fall 1999. Closing date is February 26, 1999, or until a suitable candidate is found. Send curriculum vitae, statement of teaching philosophy, transcripts, and the names, addresses, and telephone numbers of at least three professional references to: Small Animal Science Faculty Search, Human Resources Office, Delaware Valley College, 700 East Butler Avenue, Doylestown, PA 18901. *Equal Opportunity Employer.*

FACULTY POSITIONS INDIANA UNIVERSITY SCHOOL OF OPTOMETRY

Indiana University School of Optometry seeks candidates for three **TENURE/TENURE-TRACK** faculty positions in any area of visual science, especially those relating to pharmacology, physiology, cornea and contact lenses, geriatrics, infant vision, low vision, ocular disease, anatomy, cell biology, neuroscience, and visual optics. Send curriculum vitae, three letters of reference, and statement of teaching and research interests to: Edwin C. Marshall, Chair, Search and Screen Committee, School of Optometry, Indiana University, Bloomington, IN 47405. Priority deadline for applications is March 1, 1999; however, applications will be reviewed until suitable candidates are identified. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CORNELL UNIVERSITY Weill Medical College

TENURE-TRACK POSITIONS IN GENETIC MEDICINE FUNCTIONAL GENOMICS

As part of a significant enhancement of its basic biomedical science research programs and laboratory facilities, Weill Medical College of Cornell University (formerly known as Cornell University Medical College) is developing a major initiative in the area of genetic medicine including functional genomics and is seeking to recruit tenure-track faculty at all levels. We are especially interested in candidates with research interests related to the functional analysis of genes, the study of polygenic disease, genome scanning, and chip technology. Exceptional candidates in other related/appropriate fields will also be considered. Candidates for junior positions should demonstrate the potential for establishing a vigorous independent research program, and candidates for senior positions should have an outstanding record of productivity. Candidates should have Ph.D. or M.D. degrees.

Recruited faculty will receive generous start-up support. Candidates may participate in the Graduate School of Medical Sciences program, which includes faculty from the Weill Medical College and the Sloan-Kettering Institute. Applications should include a curriculum vitae, statement of research interests, and three letters of recommendation. Applications should be sent to: **Bernadette M. Mosellie, Genetic Medicine Recruitment Team, Box# 27, Weill Medical College of Cornell University, 1300 York Avenue, New York, NY 10021.**

Equal Employment Opportunity/Affirmative Action/Minorities/Females/Disabled/Veterans.

FACULTY POSITION IN ENVIRONMENTAL TOXICOLOGY

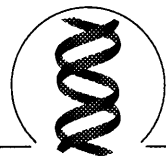
The Occupational and Environmental Health Sciences Program at Jefferson Medical College is seeking qualified applicants for a full-time academic position at the rank of **ASSOCIATE PROFESSOR** or **FULL PROFESSOR**. A Ph.D. degree, M.D. degree, or equivalent is required, and there must be substantial evidence of scholarly accomplishments and extramural, peer-reviewed research support. The new faculty member will join a group of scientists, Physicians, and other specialists who are members of a multidisciplinary research and teaching group. The new member will be free to spend a majority of time conducting scholarly research, either independent in nature or collaborative with other members of the program. Special consideration will be given to applicants whose areas of investigation are neurotoxicology, hepatotoxicology, the study of agents that cause cancer, or the study of agents that cause developmental disorders. Interested persons should send a curriculum vitae, history of relevant experience, and the names of at least three persons who can provide letters of evaluation. These materials should be mailed to: **Lance L. Simpson, Ph.D., Professor of Medicine and Director, Jefferson Occupational and Environmental Medicine Program, Room 314-JAH, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107.** *Jefferson Medical College is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITIONS CENTER FOR IMMUNOTHERAPY OF CANCER AND INFECTIOUS DISEASES

Applications are invited for three tenure-track faculty positions at either **JUNIOR** or **SENIOR LEVEL** in the newly established Center at the University of Connecticut School of Medicine. Successful candidates will be leaders of independent research and/or clinical programs at the cutting edge of basic immunology and/or immunotherapy of cancer or infectious disease or questions of autoimmunity. The Center is a collegial, scientific, and clinical group focused on these areas. To apply, please send curriculum vitae, description of research interests, and the names of three references to:

Pramod K. Srivastava, Ph.D.
Director, Center for Immunotherapy of Cancer
and Infectious Disease
University of Connecticut
School of Medicine, MC 1601
263 Farmington Avenue
Farmington, CT 06030-1601

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The University of Georgia

ENDOWED PROFESSORSHIP IN MOLECULAR GENETICS

The Department of Genetics (www.genetics.uga.edu) at the University of Georgia invites applicants for a newly created full professorship which has been endowed in honor of Professor Emeritus **Norman H. Giles**. Candidates are expected to have established a dynamic program of independent research using genetics to explore the molecular basis of biological processes. Salary and start-up funds will be provided by the state. The endowment provides additional yearly support for research.

The Genetics faculty, which includes five members of the National Academy of Sciences, welcomes candidates interested in joining their interactive and collegial efforts in both teaching and research. Like other faculty, the new professor will participate in undergraduate teaching within the Franklin College of Arts and Sciences and in a graduate program supported by an NIH training grant. The department is housed in a state-of-the-art research building with numerous support facilities.

Applications received by March 15 are assured of full consideration. To apply, please send a letter of intent and a curriculum vitae to: Chair, Giles Professor Search Committee, Department of Genetics, University of Georgia, Athens, GA 30602.



The University of Georgia

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CHEMICAL/BIOLOGICAL DEFENSE – DUGWAY PROVING GROUND

Dugway Proving Ground, Utah, the Department of Defense designated test center for chemical/biological warfare protective equipment has 2 challenging, important and high visibility positions open as the Chiefs of its Chemical and Life Sciences Divisions. The Chemical Division employs approximately 75 scientists and technicians in state-of-the-art \$47 million facilities executing a \$12 million test budget. The Life Sciences Division employs 45 scientists and technicians in newly constructed laboratories (including BL-3) conducting about \$8 million in testing. These are both exciting opportunities to lead critical national programs at a time when there is intense concern over the threat of chemical or biological agent use by foreign nations or terrorists. The positions each require strong and proven technical and management skills. For the Chief of the Chemical Division, a Ph.D. degree in chemistry is desired along with experience with chemical surety materials. Likewise, for the Chief of Life Sciences Division, a Ph.D. degree in Microbiology or a related discipline is desired along with experience in biocontainment. For both positions, some experience in testing and evaluation and a knowledge of the DoD acquisition system would be pluses. These positions are both civil service career at the GS-15 level with annual salaries from \$79,162 – \$102,907. Incumbents are entitled to health and life insurance as well as paid leave and a retirement program.

Dugway Proving Ground is located approximately 80 miles from Salt Lake City, Utah. The proving ground is almost 800,000 acres in size and has a physical plant valued at over \$500 million. Dugway plays an important role in the process used by the Department of Defense to develop and field equipment and procedures for protecting U.S. service men and women from chemical or biological attack. Dugway provides similar assistance in the area of counter terrorism and consequence management for the civilian sector. This latter role is expected to rise dramatically in the next few years, offering opportunities to lead in a growth period. Dugway is physically remote, but entirely self-sufficient as regards housing and community needs. Nevertheless, many of its workforce choose to commute from outside communities. The Dugway workforce is on a four day, 40 hour workweek from Monday through Thursday. Utah is rich in outdoor recreation opportunities and Salt Lake City is cosmopolitan, with many cultural activities. Dugway prides itself on service and professionalism.

Complete text of announcements and how to apply will be available on opening dates on the Internet at <http://www.usajobs.opm.gov> or <http://www.cpoc.army.mil/DEU/jobs/DEU%20Jobs.asp> by calling (435)831-2181. The position titles are Supervisory Chemist, GS-1320-15 and Biological Science Administrator, GS-401-15. U.S. citizenship is required. Incumbents will be entitled to health and life insurance. Dugway Proving Ground is an Equal Opportunity/Affirmative Action Employer.

VICE CHAIRPERSON / DIRECTOR OF ORTHOPAEDIC RESEARCH NEW JERSEY MEDICAL SCHOOL

We are looking for an experienced scientist to coordinate and further expand the activities of our Orthopaedic Research Laboratories which are focused on biomechanics, tissue engineering, implant behavior related to the musculoskeletal system, and healing/regeneration of bone and cartilage. The current research efforts are carried out by a number of clinicians and four Ph.D. level basic scientists with backgrounds ranging from mechanical engineering to molecular biology.

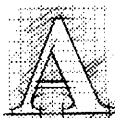
Qualified candidates should have a proven record of accomplishments in any of these research areas, administrative expertise, graduate student education, and a strong federal funding record. In addition to carrying out his/her own research program, the Research Director must display strong leadership, coordinate current and – most importantly – develop new research programs. Appointment and compensation will be commensurate with experience.

Please, send a letter of interest and a curriculum vitae to:

Fred F. Behrens, M.D., Chairman
Department of Orthopaedics
New Jersey Medical School-UMDNJ
90 Bergen Street
Doctors Office Center, Suite 5200
Newark, New Jersey 07103

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PhD Scientist – Comparative Genetics, *C. elegans*

Our Department of Comparative Genetics conducts gene-based biology in model organisms (primarily yeast and mouse) to identify and validate drug targets, to develop drug screens, and to generate animal models for human disease. We are currently expanding to create an inhouse *Caenorhabditis elegans* genetics group. The successful candidate will be the principal investigator to lead our new initiative in *C. elegans* genetics, and will exploit *C. elegans* as a model organism to identify and characterize the functions of novel genes and their human counterparts. *C. elegans* genetics will also be used to investigate the mechanisms of action of pharmaceutical agents.

To qualify, you must possess a Ph.D. in Genetics or related discipline; 2-5 years post-doctoral experience; a strong background in classical and recombinant *C. elegans* genetics; and a proven record of scientific achievement as evidenced by publications in leading scientific journals. (Job Code: H815905S)

PhD Senior Scientist-Immunology

In this position, you will be part of Discovery Biology and identify, characterize and promote novel drug targets for Autoimmune disorders, Inflammation and/or Tissue Repair. You will be expected to supervise your own laboratory, conduct novel basic research to forward proof of concept and conduct studies to characterize and progress potential therapeutic agents. Ability to orally present and write well is essential. This is an opportunity to forward novel potential therapeutic targets in a well supported and exciting research environment.

To qualify, you must have proven experience and work related training in the molecular aspects of Immunology and/or Inflammation and an understanding and hands on experience with in vivo experimentation. A PhD in Immunology or related fields with at least 4 years Immunology/Inflammation experience demonstrated by peer-reviewed scientific publications and an emerging scientific reputation, is desired. (Job Code: H80382S)

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Resumes, SF-171's (Application for Federal Employment) or OF-612s (Optional Application for Federal Employment) must be postmarked by 5 April 1999.

Apply to: HRO (Attn: Code 1810) Contact: Beverly Scott for
Naval Research Laboratory application details
4555 Overlook Avenue SW (202) 767-8315
Washington, DC 20375-5320

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College of Natural Sciences & Mathematics

The College of Natural Sciences & Mathematics has a culture of academic excellence, achieved by partnership between a vigorous faculty and students committed to maximizing their opportunities for success. We are expanding our interdisciplinary approaches in both research and teaching, and play a leadership role in technology-supported instruction. The College has strong and growing interactions with industry. The Associate Dean provides wide-ranging administrative support to the Dean. The Associate Dean will work with faculty, and with agencies and constituencies outside the University to coordinate the College's curriculum and outreach activities, and to maintain information about the College for both decision making and public relations. We seek candidates with strong communication skills, experience in managing complex activities, sufficient scientific background to understand the College's work and to present scientific information to diverse audiences, and facility in working with standard database systems. Doctoral Degree preferred, but Bachelor's or Master's Degree accepted with appropriate strong experience. College-level teaching experience is helpful. The salary is competitive, and commensurate with qualifications and experience.

The University of Massachusetts is in a scenic rural setting in the Connecticut River Valley. The Five-College community (Smith, Mount Holyoke, Amherst, and Hampshire Colleges as well as UMass) provides diverse intellectual and cultural activities.

Send a letter describing your interest in this opportunity, your resume and three letters of reference to: **Chair, Associate Dean Search Committee, c/o Office of the Dean, College of Natural Sciences & Mathematics, 715 Lederle Graduate Tower B, University of Massachusetts Amherst, Amherst, MA 01003.** Review of applications to begin February 22, 1999 and continue until position is filled.

The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.



Vitamins

Take biotechnology and your career in a new direction at Roche Vitamins Inc., an industry leader for human and animal health and nutrition. At the new home of our global Center for Excellence in Biotechnology in Nutley, NJ, we are developing new products and processes in a range of areas including vitamins, carotenoids, food ingredients, enzymes, and medicated feed additives.

SR. RESEARCH SCIENTIST Vitamin R&D

You will be responsible for developing, identifying and improving carotenoid/vitamin and protein producing microorganisms.

Position requires a relevant Ph.D. with three years of experience, or a Master's degree with eight years of experience and a strong background in molecular microbiology, bacterial physiology and pathway engineering. Working knowledge of fermentation technology is necessary, along with experience in the optimization of microorganisms using classical mutation, selection and screening approaches. The ability to apply innovative approaches to problem-solving coupled with excellent organizational, people management and communication skills are the keys to success in this senior-level research position.

At Roche Vitamins Inc., we offer our employees competitive salaries, comprehensive benefits, and a unique campus-like facility with state-of-the-art fitness center and on-site childcare.

For consideration, forward your resume with salary requirements to: Roche Vitamins Inc., Human Resources Dept-Code 98086, 45 Waterview Boulevard, Parsippany, NJ 07054-1298. Principals only. We appreciate your interest in Roche Vitamins Inc., but can only respond to qualified candidates. Roche Vitamins Inc. is an equal opportunity employer fully committed to diversity in the workplace.

SYMPOSIUM

PENN STATE



18th Summer Symposium in Molecular Biology

"Chromatin Structure and DNA Function: 25 Years of the Nucleosome"

July 21-24, 1999

University Park Campus

Session I - Replication, Integration and Recombination

Steve Bell (MIT)
Robert Craigie (Natl. Inst. of Health)
Martin Gellert (Natl. Inst. of Health)
James Haber (Brandeis University)
Mitchell Smith (Univ. of VA Sch. Med. Sci.)

Session II - Chromatin Structure and Remodeling

Beverly Emerson (Salk Institute)
James Kadonaga (UC, San Diego)
Brehon Laurent (SUNY)
Craig Peterson (Univ. of MA Med. Ctr)
Danny Reinberg (UMDNJ Med. School)

Session III - Transcription Activation and Chromatin Modification

Shelley Berger (Wistar Institute)
John Lis (Cornell University)
Yoshihiro Nakatani (Natl. Inst. of Health)
Franklin Pugh (Penn State University)
Sharon Roth (University of Texas)

Session IV - Mechanisms of Transcription Repression

Sarah C. R. Elgin (Washington Univ.)
Michael Grunstein (UCLA)
Renato Paro (ZMBH - Germany)
Kevin Struhl (Harvard Medical School)
Song Tan (Penn State University)

**Keynote Address: Dr. Timothy Richmond
Plenary Lecture: Dr. Robert Simpson**

Registration: Regular \$150, Postdocs: \$85, Graduate Students: \$45.

For more information contact Ms. Georgia Gasperich, Program Assistant,
108 Althouse Lab, University Park, PA 16802, phone - 814-863-1918,
Fax - 814-863-7024 or email - ghg2@psu.edu.

Visit our website: http://www.bmb.psu.edu/deptpage/summer_symposium.htm

REACH NEW HEIGHTS OF RESEARCH AT PARKE-DAVIS

Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, has the following challenging opportunity in a scientific environment in **ANN ARBOR, MICHIGAN** as:

INFECTIOUS DISEASES RESEARCH SCIENTIST/SENIOR SCIENTIST (RJB-98733)

A position is available in the Infectious Diseases Department to carry out a program designed to discover new antibacterial agents for human use. The successful candidate will identify and characterize molecular targets, investigate the mechanism of action of new classes of compounds and develop high-throughput screening strategies. The position requires an individual with excellent verbal and written communication skills and the ability to supervise the research of other colleagues. The individual will be expected to form productive collaborations with scientists from several other groups within the company, including Chemistry, Biochemistry, Molecular Biology and Bioinformatics.

A Ph.D. with at least 2 years of post-doctoral experience in biochemistry, microbiology, bacterial genetics or molecular biology is required. Preference will be given to those candidates that have demonstrated the ability to employ a multi-disciplinary approach to characterize a biological process in bacteria at the molecular level.

SCIENTIST/SENIOR SCIENTIST (RJB/SG)

A position is available immediately for a Senior Investigator to join the Discovery Technology group in the Infectious Diseases Department. The successful candidate will be an independent researcher who can coordinate screening activities with the high-volume screening core facility, refine data sets, develop boundary SAR through substructure testing, and perform mechanism research on targets originating from the antibacterial and antiviral therapeutic discovery laboratories. The position requires excellent verbal and written communication skills, strong interpersonal skills, experience in database management, and will have supervisory responsibility. The goal of the Discovery Technology group is to coordinate screening activities, validate hits for target specificity, and perform early mechanism research to distinguish chemical series.

A Ph.D. with 2+ years post-doctoral experience in biochemistry, molecular biology, genetics or microbiology is required. A demonstrated success in employing a combination of the above disciplines in the molecular characterization of biological and biochemical processes in bacterial or viruses is desirable.

ASSOCIATE SCIENTIST/ SENIOR ASSOCIATE SCIENTIST (RJB-98118)

We are seeking outstanding candidates with an interest in viral pathogenesis to assist a Senior Investigator in the performance of in vivo testing of novel inhibitors of herpesvirus replication and latency. The candidate will assume a leading role in animal model studies and will apply research skills in molecular virology to pursue questions of gene regulation and signal transduction mechanisms in tissue culture models of viral pathogenesis. The position requires excellent communication and managerial skills, a BS or MS degree in Virology, Microbiology or Molecular Biology and 4+ years postgraduate experience in tissue culture, animal handling techniques and molecular biology. The successful candidate will join a dynamic scientific team and participate in an exciting area of herpesvirology research.

ASSOCIATE SCIENTIST/ SENIOR ASSOCIATE SCIENTIST (RJB/SG)

You'll assist a Senior Investigator in the testing of novel inhibitors of herpesvirus replication and apply research skills in the area of molecular biology to characterize the mechanisms of action of antiviral compounds. The candidate will be part of a team examining the mechanism of action of antiviral compounds in in vitro and in vivo models of herpesvirus pathogenesis and latency. Qualified candidates will have a BS or MS degree in Microbiology, Virology or Molecular Biology, with a minimum of 2 years postgraduate training and extensive experience in molecular biology and tissue culture. The successful candidate will join a dynamic herpesvirology team dedicated to the discovery of new antivirals for human use.

We offer competitive salaries, outstanding benefits, and an environment that's conducive to professional growth. For confidential consideration, please forward resume, to: **Parke-Davis, Attention: Resume Processing Center, PO Box 92242, Los Angeles, CA 90009-2242, fax: 734-622-7617 or email: HumanResources.resume@wl.com** We are an equal opportunity employer. Smoke-free environment.

ASSOCIATE/SENIOR ASSOCIATE SCIENTIST/ SCIENTIST (RJB/SG)

You will participate in the design, execution and analysis of in vivo experiments designed to examine the modulation of bacterial or viral virulence factors by experimental compounds. Qualified candidates will possess a BS/MS or PhD in a Biological Science, Molecular Biology or Biochemistry and have a minimum of 2 years postgraduate experience in a research laboratory. A demonstrated competence in molecular biology or biochemical techniques including in situ hybridization and PCR of tissue samples and extensive in vivo experience is required.

PARKE-DAVIS POSTDOCTORAL FELLOWSHIPS

MOLECULAR BIOLOGY

A postdoctoral position is available to use molecular biological approaches to study the functional roles of chemokines and their receptors in neurological disease. The successful candidate will work with a team of molecular biologists and neuroscientists to study effects of chemokine expression in various brain inflammation models using cutting-edge technologies. Applicants should have a Ph.D. in cellular or molecular biology with experience in neurobiology, immunology, or a closely related field.

MOLECULAR BIOLOGY

A postdoctoral position is available immediately for a candidate with a background in molecular and/or cellular biology. The project will focus on the regulation of carrier-mediated transport and insulin signaling. Applicants should have demonstrated experience with standard molecular and cell biology techniques. An interest in biological transport and signal transduction is desirable.

BIOINFORMATICS

We are looking for a postdoctoral fellow to use computational techniques to identify relationships between the *C. elegans* genome and human disease. Available tools include a suite of public and proprietary sequence analysis programs, including Compugen's LEADS technology. The successful candidate will enjoy collaboration with a highly skilled team of programmers, database experts, and algorithm specialists. Experience in computational biology and knowledge of *C. elegans* are highly desirable.

UNIVERSITY OF MICHIGAN AND PARKE-DAVIS JOINT FELLOWSHIPS

Joint fellows have two mentors, a Ph.D. scientist at Parke-Davis and a member of the faculty at the University of Michigan.

PROTEOMICS

A position is available immediately to join our proteomics team and develop eukaryotic sub-cellular organelle protein profiling. The position will require isolation and characterization of sub-cellular organelle fractions using 2D gel analysis. The position will require establishing a collaborative interaction with personnel engaged in protein identification using analytical methods including mass spectroscopy. Applicants should possess a strong background in cell biology and have demonstrated skills in immunological and enzymological techniques. Experience in 2D gel electrophoresis and strong computer skills are highly desirable.

BIOFORMATICS AND PROTEOMICS

A position is available in the areas of Bioformatics/Statistics/Proteomics. This is a unique opportunity to contribute to the development of novel data visualization methods for image and numerical data being generated through proteomic analysis of cells. This challenging project requires a candidate with strong interest in applying statistical data analysis, especially multi-variate analysis and statistical graphics to real data sets in biology.

If responding to the Postdoctoral Fellowships' positions, please refer to Job Code: CJMJT.

www.parke-davis.com

 **PARKE-DAVIS**
A Warner-Lambert Division



**Agricultural
Research
Service**

**United States
Department of
Agriculture**

The USDA, Agricultural Research Service (ARS), Center for Medical, Agricultural, and Veterinary Entomology, Chemistry Research Unit, Gainesville, Florida is seeking a **RESEARCH CHEMIST**, GS-1320-11/12. Salary is commensurate with experience (GS-11: \$39,960-\$51,946 per annum; GS-12: \$47,891-\$62,260 per annum). Candidates must be U.S. citizens. The position involves planning and conducting experiments, evaluating and interpreting data, and reporting the findings of research as part of a team research program designed to develop new, effective, environmentally acceptable technologies and strategies for managing insect pests of agriculture. In addition to the basic educational requirements, applicants must demonstrate 1) Ability to isolate and identify biologically active natural compounds; 2) Knowledge of analytical chemical methods including chromatography and spectroscopy of organic and biochemical compounds; 3) Knowledge of organic chemistry associated with compounds from biological systems; 4) Knowledge of biology, entomology and/or plant physiology, and biochemistry. For more information on the research program contact: **Dr. James H. Tumlinson**, Telephone: 352-374-5730; e-mail: jtumlinson@gainesville.usda.ufl.edu. For information on application procedures/forms and a copy of the vacancy announcement, contact **Jackie Sullivan**, Telephone: 352-374-5861. Applications submitted in response to this advertisement must include announcement number ARS-D9S-9127, must be postmarked by April 1, 1999, and mailed to: USDA, ARS, AFM, Human Resources Division, 5601 Sunnyside Avenue, Beltsville, MD 20705-5105. *USDA/ARS is an Equal Opportunity Provider and Employer.*

**SCIENTISTS TO DIRECT
VECTOR PROGRAMS
INSTITUTE FOR HUMAN GENE THERAPY
University of Pennsylvania**

The Institute for Human Gene Therapy is recruiting Scientists to direct programs for preclinical & clinical studies using adenoviral, AAV, & lentiviral vectors. The Director for Process Development/Purification will be responsible for developing & implementing large-scale cell culture, high throughput virus production, purification & other down-stream processes for all vector programs. The Director of the Lentiviral Vector Program will be responsible for establishing the lentiviral vector production & concentration/purification processes using transfection and/or producer cell line methods to provide research & clinical grade vectors. The Director of the Vector Core will oversee the operations of a core lab dedicated to the design & production of vectors for use in basic science. Positions require extensive & diverse experience in molecular biology, virology, cell biology & process development. Ph.D. & postdoctoral or pharmaceutical experience required. Management experience & knowledge of GLP/GMP regulations desirable.

Interested individuals should send their resumes to:

**James M. Wilson, M.D., Ph.D.
Director, IHGT**

**3601 Spruce Street, Room 204 Wistar
Philadelphia, PA 19104-4268**

e-mail: wilsonjm@mail.med.upenn.edu

www.hr.upenn.edu (AA/EOE)

IT'S YOUR FUTURE

Staff Scientist

Minneapolis, Minnesota

Medtronic, Inc., a global leader in medical technology specializing in implantable and interventional therapies, has a challenging opportunity for a scientist to lead the research efforts on pacing for prevention of atrial fibrillation. This includes determining necessary research projects, planning and managing project budgets, and designing animal and clinical protocols in partnership with physicians. The selected candidate will conduct research studies, then analyze and present resulting data. The individual in this role will also interact with product planning and development to implement concepts into products.

Requirements include an MS in Biomedical Engineering, Physiology or Electrical Engineering; Ph.D. preferred. Familiarity with pacing concepts and animal research experience necessary. Training in electrophysiology and pacing preferred.

We offer a highly competitive compensation and benefits package. For immediate consideration, please send your skills-based, scannable resume (which must reference the appropriate Job # for the position you are interested in) to: **Medtronic, Inc., MEC, Job #14103, P.O. Box 976, Minneapolis, MN 55440-0976. Job Hotline: (612) 514-7724. Email: employment@medtronic.com** Visit our web site and apply online at www.medtronic.com Medtronic, Inc. is an equal opportunity employer committed to cultural diversity in the workplace.

Medtronic 

IT'S THE RIGHT CHOICE



Harvard University

Faculty of Arts and Sciences

Director of Administration

**FACULTY OF ARTS & SCIENCES
CENTER FOR GENOMICS AND PROTEOMICS**

This new venture will be led by faculty in two Departments, Chemistry and Chemical Biology and Molecular and Cellular Biology, and will develop new technology for the integrative analysis of biological processes. The Director of Administration will serve as chief operating officer of the Center and will oversee its financial, facilities and human resource functions.

REQUIREMENTS: The successful candidate will have a broad scientific background, preferably with a PhD in Biology or related fields. Familiarity with the fields of genomics and proteomics is essential. Other requirements are excellent written and verbal communication skills; the ability to communicate with scientific and lay audiences, strong general administrative skills; experience in financial planning and financial, human resource and grant administration; and a demonstrated ability to manage the start-up of a new program of this scope.

NOTE: Please send cover letter and resume to **Julie Hassel, Office of the Dean for Administration, 20 University Hall, Cambridge, MA 02138.**

Harvard University is an Affirmative Action/Equal Opportunity Employer.



**University of Toronto
Faculty of Arts and Science
Chair, Department of Zoology**

The Faculty of Arts and Science of the University of Toronto is seeking a highly qualified individual to serve as Chair of the Department of Zoology.

The Department of Zoology comprises 45 full-time professors on three campuses with a large and diverse set of undergraduate and graduate courses. (Visit the Departmental web site at <http://www.zoo.utoronto.ca/>.) The department exhibits strength in the areas of developmental and cell biology, physiology, ecology, and evolutionary biology. Research is directed towards understanding the function and evolution of biological systems, at the molecular, cellular, organ, individual, population, and community levels. Through cross-appointments with cognate departments and associated institutions (such as the Royal Ontario Museum) many faculty members are engaged in substantial interdisciplinary research. The Department possesses a well-equipped Zoology building with a library and a range of excellent research support services.

We seek an individual with a reputation as an outstanding scientist with a vigorous research program, demonstrated leadership and administrative abilities, and a commitment to outstanding teaching. The successful candidate will be a strong advocate for the Department within the University and on the national and international scenes.

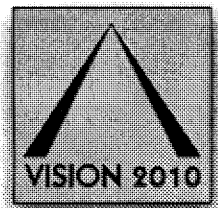
The appointment is expected to be at the rank of Full Professor and at a salary level commensurate with the successful candidate's qualifications and experience. The preferred starting date is July 1, 1999.

The Faculty welcomes applications and nominations. Applicants should include a letter indicating interest in the position, a statement describing your vision for the opportunities afforded by a large and diverse department, a current curriculum vitae and arrange for three letters of reference. Nominations should include the nominee's full address. Nominations and applications should be sent no later than March 19, 1999 to Professor Carl G. Amrhein, Dean, Faculty of Arts and Science, University of Toronto, Room 2020, 100 St. George Street, Toronto, Ontario, M5S 3G3.

The University of Toronto encourages applications from qualified women or men, members of visible minorities, aboriginal peoples and persons with disabilities. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada, but other applications will also be considered.

SCIENTISTS

THE BAYER FACTS:



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■ In the highly competitive global pharmaceutical marketplace, there are many "Bayer Facts" that distinguish us as a leader. To name a few, we are part of Bayer Corporation, a \$32 billion international diversified organization and one of the most broadly-based health-care companies in the U.S. Our Pharmaceutical Division site in **WEST HAVEN, CT** has worldwide responsibility for the research and development of treatments for osteoporosis; cancer; diabetes and other metabolic disorders.

SR. RESEARCH/STAFF SCIENTIST

■ The Protein Biosciences section within the Department of Research Technologies (DRT) has an opening for a Senior Research Scientist or Staff Scientist that will support the discovery of new pharmaceuticals. The person in this position will both carry out and supervise the development and scaled implementation of methods for the purification and characterization of natural and recombinant enzymes, receptors and ligands in support of high throughput screening, proof of concept and lead optimization. Other responsibilities will include the continual improvement of functional area capabilities through the development of new technologies, and the establishment of core discovery programs. This work will be conducted in cross functional teams that feature close collaboration with the molecular genomics and high-throughput screening sections of the DRT, the therapeutic research areas and Chemistry. The incumbent will have a Ph.D in Biochemistry, Chemistry or a related discipline and 4 or more years of postdoctoral experience in the isolation and functional characterization of 'difficult proteins' using conventional technologies. A sound understanding both of the processes governing the behavior of macromolecules in general and enzymology in particular are considered highly important. Candidate must be innovative, team-oriented and dedicated to the career development of research associates.

SR. ASSOCIATE/PRINCIPAL ASSOCIATE RESEARCH SCIENTIST

■ The Protein Biosciences section within the Department for Research Technologies has openings for Senior Associate and Principal Associate Research Scientist that will support the discovery of new pharmaceuticals. Primary responsibilities associated with these positions will include the purification and characterization of enzymes, receptors and ligands to support high throughput screening, proof of concept and lead optimization. Other responsibilities will include the continual improvement of functional area capabilities through contribution to the development and implementation of new technologies. Candidates will have a minimum of a BS with 4 years of research experience or an MS with 2 years of research experience, with the degrees being in either a biological science such as Biochemistry or Chemistry. A proven track record in protein purification using conventional technologies and HPLC is essential as is experience in a range of characterization techniques such as gel electrophoresis, western blotting and specific activity determination. Successful candidates will have strong analytical problem solving skills, creative insight, possess excellent written and verbal communication skills, and the ability to work in a team environment. Experience in enzymology, molecular cloning and expression, PCR, cell culture, or other biological techniques are a plus.

RESEARCH SCIENTIST (Instrumentation Integration Scientist/Engineer)

■ You will be responsible for the integration of diverse types of laboratory equipment in a drug discovery research environment. Other responsibilities include interacting with personnel from the high throughput screening, molecular biology, protein bioscience, and bioinformatics groups, and using creativity while contributing to the design and execution of the drug discovery process. Candidates will have demonstrated experience in mechanically integrating laboratory equipment, as well as a proven ability to write and/or alter source code which interfaces this equipment. An MS or Ph.D in Mechanical/Electrical Engineering or Computer Science/Natural Science with an engineering background is strongly preferred, as is experience in a biological setting. The successful applicant must be able to write detailed documentation and work both independently and as part of a team.

■ Please forward your resume including salary history to: **Bayer Corporation, Pharmaceutical Division, Dept LM, 400 Morgan Lane, West Haven, CT 06516**. No agencies or phone calls please. For more information on Bayer, search: <http://www.bayerpharmana.com>

■ An Equal Opportunity Employer M/F/D/V. Bayer Corp. is committed to enhancing and maintaining cultural diversity within our work environment.



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POSITIONS OPEN

TENURE-TRACK FACULTY POSITION STUDYING IMMUNOLOGY AND VIROLOGY University of California, Los Angeles

The Department of Obstetrics and Gynecology at UCLA is searching for a faculty member who will work in the area of immunology and virology, and an interest in the molecular and cellular basis of disease processes relevant to obstetrics and gynecology. We are seeking an individual who has a strong research background, and who uses molecular and cellular approaches to better understand the role of immune dysfunction in the pathogenesis of gynecologic disease, especially gynecologic malignancies. In addition to the appointment in the Department of Obstetrics and Gynecology, the position may include joint appointment in a relevant basic science department. The successful candidate is expected to have a Ph.D. in immunology and/or virology, as well as relevant postdoctoral experience, and to have established an outstanding independent research program with a strong record of research accomplishments with significant external research support. It is also expected that the successful candidate has a record of successful collaborative interactions with clinical researchers, as well as have participated in the research training of clinically qualified individuals. Rank and salary commensurate with training and experience. A curriculum vitae and a two- to four-page description of proposed research should be sent by February 28, 1999, to: Ms. Christina Flores, Academic Personnel Coordinator, Department of Obstetrics and Gynecology, University of California, Los Angeles, 10833 Le Conte Avenue, Box 951740, Los Angeles, CA 90095-1740. Applicants should also have three or more letters of reference sent to the same address, under separate cover.

UCLA is an Equal Opportunity/Affirmative Action Employer.

CHAIR OF BIOLOGY UNIVERSITY OF LOUISVILLE

The Department of Biology is seeking candidates for the position of Chair. The University of Louisville is a major metropolitan university with current enrollment of 21,000 students. The Biology Department currently has 17 full-time tenured or tenure-track faculty, 83 graduate students, 671 declared undergraduate majors, and offers an M.S. in biology and a Ph.D. in environmental biology. Candidates for the position of Chair must have a strong record of teaching and extramurally funded research. Preference will be given to candidates with administrative experience and whose research and teaching interests complement those of the department. The new Chair will have the opportunity to participate with the department in the hiring of several new junior- and senior-level faculty in the next few years. Review of applications will commence immediately and continue until a suitable candidate is chosen. Applicants should send a statement of research interests, statement of teaching philosophy, current curriculum vitae, and reprints of their five most significant publications. In addition, the names, telephone numbers, and e-mail addresses of at least five references should be included with the materials. Send application materials to: Chair Search Committee, University of Louisville, Department of Biology, Louisville, KY 40208. Further information is available at website: www.louisville.edu/a-s/biology/search.html. Women and minorities are encouraged to apply. The University of Louisville is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITIONS FUNCTIONAL GENOMICS AND DEVELOPMENT

The Department of Molecular Genetics and Biochemistry in the University of Pittsburgh School of Medicine is seeking candidates for two TENURE-TRACK JUNIOR or SENIOR faculty positions in the areas of functional genomics, development, cellular differentiation, and stem cell biology. Individuals whose research programs are focused on the application of functional genomics to the analysis of mammalian development or disease are particularly encouraged to apply. Applicants should submit a curriculum vitae, a description of future research plans, and the names and addresses of three references to: Dr. Joseph C. Glorioso, Professor and Chairman, Department of Molecular Genetics and Biochemistry, University of Pittsburgh School of Medicine, E1240 Biomedical Science Tower, Pittsburgh, PA 15261. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION IN BIOCHEMISTRY/MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology at the University of South Alabama College of Medicine seeks applicants for a tenure-track ASSISTANT up to FULL PROFESSOR to begin as early as July 1, 1999. Excellent salary, start-up funds, and laboratory space will be provided. Candidates must show strong promise of maintaining extramural funds for their research and are to train both graduate and medical students. Those whose research combines biochemistry, molecular biology, and other experimental methods to study mechanism of human disease are especially encouraged to apply. A major area of our interest is cancer biology including cell proliferation, apoptosis, gene transcription, signal transduction, development, differentiation, extracellular matrix, or cell adhesion. Excellence of the individual is more important than the research field. Send curriculum vitae, representative publications, a statement of research goals, and names of three references (by 31 March 1999) to: Dr. Nathan Aronson, Chairperson, Department of Biochemistry and Molecular Biology, MSB 21168, University of South Alabama College of Medicine, Mobile, AL 36688 USA.

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

FACULTY POSITIONS THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS Center for Immunology

The newly created Center for Immunology at The University of Texas Southwestern Medical Center at Dallas is seeking highly qualified faculty members with research interests in the area of immunology. Researchers in all areas of immunology are encouraged to apply; however, currently we are particularly interested in scientists utilizing animal models to investigate human disease processes.

The Center for Immunology will be recruiting six faculty positions during the next two to three years. Emphasis will be on identifying candidates at the ASSISTANT PROFESSOR level, although highly qualified individuals at all levels are urged to apply. Salary and start-up packages are highly competitive (for more information go to website: www.swmed.edu/home_pages/scholars/).

Please submit current curriculum vitae, two-page summary of proposed research programs and interests, and the names of three references to: Dr. Edward Wakeland, Director, Center for Immunology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9093. E-mail: edward.wakeland@email.swmed.edu. All applications must be received by March 15, 1999. Equal Opportunity Employer.

TENURE-TRACK ASSISTANT PROFESSOR VANDERBILT UNIVERSITY MEDICAL CENTER

As part of an expansion of the signal transduction program in the Department of Molecular Physiology and Biophysics at the Vanderbilt University School of Medicine, we invite applications for a tenure-track faculty position at the Assistant Professor level. Preference will be given to candidates who address fundamental questions on cell signaling in mammalian cells, and whose interests complement those of existing programs (visit our website: <http://www.mc.vanderbilt.edu/vumdept/mpb/>).

Interested applicants should forward a curriculum vitae, a short summary of research plans, and three letters of recommendation by March 1, 1999, to:

Search Committee (c/o Roland Stein, Head)
Department of Molecular Physiology and Biophysics
Vanderbilt University School of Medicine
708 Light Hall
Nashville, TN 37232

Vanderbilt University is an Affirmative Action/Equal Opportunity Employer committed to increasing the representation of women and minority groups on its faculty.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION BIOENGINEERING L. C. Smith College of Engineering and Computer Science Syracuse University

A tenure-track ASSISTANT PROFESSOR is sought for the Department of Bioengineering and Neuroscience (BEN-NEU), L. C. Smith College of Engineering and Computer Science at Syracuse University. Candidates are sought in the fields of biomechanics, biomaterials, and tissue engineering. Candidates will be expected to teach at both the graduate and undergraduate level, and develop and conduct an externally supported research program leading to national and international recognition. BEN-NEU emphasizes interdisciplinary research and teaching in sensory systems, biomaterials, and biomechanics. A recently received Whitaker Special Opportunity Award has initiated a Master's program in bioengineering with plans to develop a Ph.D. program in bioengineering. Besides the Master's program in bioengineering, the Department has a well-established undergraduate program in bioengineering, and a Master's and Ph.D. program in neuroscience. The candidate is expected to support and interact with current department strengths, expand our research efforts in biomaterials and/or biomechanics, and to excel as a teacher and mentor. Research areas include, but are not limited to, tissue engineering, cellular interaction with materials, medical devices, cell mechanics, and neural engineering. Opportunities for research collaboration exist with the Institute for Sensory Research at Syracuse University, other Departments of Syracuse University, and with Departments within the SUNY Health Science Center (Upstate Medical School) whose campus is adjacent to Syracuse University.

Information on the Department, Programs, Faculty, and the College can be accessed through our website: <http://www.ben-neu.syr.edu/>. A cover letter, curriculum vitae, statement of research interests and anticipated trajectory, with the names of three to five potential references should be sent to: Dr. Jeremy L. Gilbert, Chair, Search Committee, Department of Bioengineering and Neuroscience, Link Hall, Syracuse University, Syracuse, NY 13244. Review of candidates will begin on January 15, 1999, and continue until the position is filled, with the anticipated start date of September 1999. Syracuse University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN BIOMATERIALS THE JOHNS HOPKINS UNIVERSITY

The Department of Materials Science and Engineering at the Johns Hopkins University invites applications for a faculty position in biomaterials. Specific areas of interest include materials for use in tissue engineering, biotechnology of materials, materials in therapies for human diseases, and materials processing, characterization, and engineering at the interface between devices and biological systems. The successful candidate will be expected to develop an innovative research program and teach at both the undergraduate and graduate level. Applicants should have a Ph.D. in materials science and engineering or related field and must have demonstrated ability to undertake interdisciplinary research. Postdoctoral experience is highly desirable. It is anticipated that the appointment will be at the ASSISTANT PROFESSOR level although an appointment at the ASSOCIATE or FULL PROFESSOR level will be considered. Applicants should submit a detailed résumé, a statement of research plans, teaching interests, and the names, addresses (including e-mail), and telephone numbers of three references to: Chair, Search Committee, Department of Materials Science and Engineering, 102 Maryland Hall, The Johns Hopkins University, Baltimore, MD 21218. To ensure full consideration, applications should be received by March 26, 1999.

Women and minorities are strongly encouraged to apply. Johns Hopkins University is an Equal Employment Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR of biology. August 1999. Tenure-track position to teach vertebrate functional anatomy, evolution, and general biology. Prior teaching experience preferred; Ph.D. required. Applications, including curriculum vitae, the names of three references, and transcripts, should be submitted by 24 February 1999 to: Chairperson of Biology, Saint Peter's College, 2641 Kennedy Boulevard, Jersey City, NJ 07306. Saint Peter's College is an Equal Opportunity/Affirmative Action Employer and complies with Title IX of the Education Amendments of 1972 and with Section 504 of the Rehabilitation Act of 1973.



**SOUTHERN RESEARCH
INSTITUTE**

**SENIOR LEVEL POSITIONS
IN BASIC RESEARCH
FOR BIOLOGICAL SCIENTISTS**
Southern Research Institute
Birmingham, AL

The Drug Discovery Division of Southern Research Institute invites applications from senior level biological scientists with interests in basic research with the eventual goal of drug discovery for the treatment of cancer or infectious diseases. We are particularly interested in attracting scientists with outstanding research programs and a desire to join a dynamic organization that takes an interdisciplinary approach to converting basic research into new FDA-approved drugs.

Applicants will be expected to obtain grant-based funding for their research investigations, though transition funding and technical support will be available if appropriate. Applicants with an ongoing internationally recognized program may be considered for one of two endowed chair positions that are currently open.

Future Institute goals include establishment of a subsidiary drug discovery company committed to anticancer and anti-infectives development, with the active participation of Institute investigators. Consequently, the positions offer the opportunity to participate in this venture from an early stage, and could result in future funding derived from outside investment capital, in addition to grant-based support.

The Division performs over \$6 million of NIH-funded basic research aimed at target identification and the discovery of novel pharmaceutical agents for the treatment of cancer, viral diseases, bacterial diseases, cardiovascular diseases, and for prevention of or relief from drug addiction. Areas of specialty include: cancer biology, purine and pyrimidine and alkylating agent biochemistry and pharmacology, retinoid biochemistry, protein crystallography, organic synthesis, and mycobacteriology. Southern Research Institute has a successful record of development of FDA-approved drugs derived from its multidisciplinary research programs.

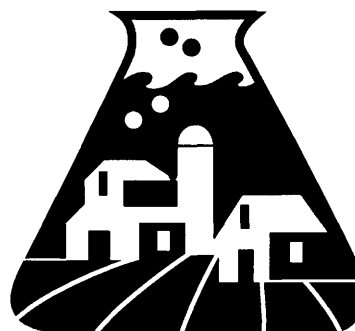
Southern Research Institute, a not-for-profit research organization, has revenues of approximately \$50 million, and employs approximately 600 professional, technical, and support personnel. As part of the large biomedical research community in Birmingham, Alabama, we are committed to providing a stimulating and rewarding work environment. Close proximity to the University of Alabama at Birmingham allows for interactions with members of the UAB basic science departments, Comprehensive Cancer Center, Cell Matrix and Adhesion Center, Center for AIDS Research, and Center for Macromolecular Crystallography. Birmingham has a high standard of living afforded by a moderate climate, beautiful, wooded terrain, outstanding residential communities and schools, world-class healthcare, below average cost of living, and a vibrant arts and entertainment scene. Southern Research Institute offers an excellent compensation and benefits package.

Application letters, accompanied by a curriculum vitae, names and addresses of three references, and a summary of current research activities and support should be sent to Dr. John A. Secrist III, Vice President, Drug Discovery Division, Southern Research Institute, P.O. Box 55305, Birmingham, AL 35255-5305.

Preliminary, informal and confidential inquiries are also welcomed and can be directed to Dr. Secrist by telephone (205-581-2442) or by e-mail (secrist@sri.org), or Dr. William Parker (parker@sri.org), Dr. Brahma Sani (sani@sri.org), Dr. Francis Kern (kern@sri.org), Dr. William Barrow (barrow@sri.org) or Dr. Robert Struck (truck@sri.org).

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WWW.ARS.USDA.GOV/AFM/HRD/RESJOBS

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POSITIONS OPEN

THE UNIVERSITY OF TOLEDO DEPARTMENT OF BIOENGINEERING

The Department of Bioengineering at The University of Toledo is currently accepting applications for **TENURED** and **TENURE-TRACK FACULTY POSITIONS** at all ranks. The particular areas of interest include medical imaging, ultrasound, tomography, neuroscience, medical informatics, biosensors, bioelectronics, biochemical engineering, site-specific therapies, artificial organs/tissue engineering, and cellular engineering. In addition, the Department has recently been awarded a Whitaker Foundation Special Opportunity Award focusing on cellular and physiologically based medical imaging that totals \$2.8 million including all contributions from the Whitaker Foundation and The University of Toledo.

Candidates must have a Ph.D. degree in a field related to biomedical engineering or science, be able to teach undergraduate and graduate courses, direct graduate student research, and establish a strong funded research program.

The College of Engineering, the University's flagship college, was recently ranked in the 1997-98 Princeton Review among the top 105 graduate schools in the nation and among the best four in the state of Ohio. The College of Engineering has a combined undergraduate and graduate enrollment of 2,700 students and 100 faculty. The University of Toledo, a state institution, has an enrollment of approximately 21,000 students and is located in a region experiencing tremendous industrial growth. **Websites:** <http://bioe.eng.utoledo.edu/>, <http://www.eng.utoledo.edu/>, and <http://www.utoledo.edu/>.

Applicants should send résumés to: Professor Ronald L. Fournier, Chairman, c/o Rochelle C. Baval, 5025 Nitschke Hall, College of Engineering, The University of Toledo, Toledo, OH 43606-3390. FAX: 419-530-6040; e-mail: rbaval@eng.utoledo.edu. The review process will begin February 15, 1999. The position will remain open and applications will be reviewed as received or until appointments are made.

The University of Toledo is an Affirmative Action Employer. Women and minorities are encouraged to apply.

GORDON W. GULLION ENDOWED CHAIR IN FOREST WILDLIFE RESEARCH AND EDUCATION University of Minnesota

Applications and nominations are invited for this exceptional opportunity to develop a research, teaching, and outreach program dealing with relationships between forest management and wildlife, including ruffed grouse. Applicants for this tenure-track or tenured **ASSOCIATE** or **FULL PROFESSORSHIP** must have a Ph.D. degree and strong record of scientific accomplishment and leadership in forest management/wildlife relationships. Research, teaching, and outreach will focus on the development of forest management practices that preserve the quality of the natural environment, protect biodiversity, and allow for a suitable use of natural resources. Also essential are an interest in and ability to provide leadership in addressing the needs of hunters, forest landowners, environmental groups, natural resource managers, and the forest industry.

Applicant screening will begin April 1, 1999. Send a statement of research, teaching, and outreach interests, a curriculum vitae, academic transcripts, and the names, addresses, and telephone numbers of five references to: Gullion Search Committee, Department of Fisheries and Wildlife, University of Minnesota, 1980 Folwell Avenue, St. Paul, MN 55108-6124. Telephone: 612-624-4222; FAX: 612-625-5299; e-mail: rz@fw.umn.edu. *The University of Minnesota is an Equal Opportunity Employer and Educator.*

The Land Resources and Environmental Sciences Department, Montana State University-Bozeman is seeking an **ASSISTANT/ASSOCIATE PROFESSOR** of restoration ecology. Tenure-track, academic-year faculty position, available August 15, 1999. Position is 60 percent research and 40 percent teaching. Required: Ph.D. in restoration ecology, plant ecology, or closely related discipline and academic and research background in rehabilitation of disturbed ecosystems. Applicants must request a complete vacancy announcement from: Peggy Humphrey, Land Resources and Environmental Sciences Department, Montana State University-Bozeman, P.O. Box 173120, Bozeman, MT 59717-3120. Telephone: 406-994-5718; e-mail: peggyh@montana.edu; FAX: 406-994-3933. Screening begins May 10, 1999. No FAX/e-mail applications. *ADA/Affirmative Action/Equal Opportunity/Veterans Preference.*

POSITIONS OPEN

AQUATIC ECOLOGIST/ FIELD STATION DIRECTOR ONE OR TWO POSITIONS Illinois Natural History Survey

The Center for Aquatic Ecology (CAE) invites applications for one or two career-track positions at the **ASSISTANT** or **ASSOCIATE** level. One successful applicant will conduct research relating to the ecology of large river systems, and direct the personnel (current staff of 12), research projects (including the Long Term Resource Monitoring Program with an annual budget of \$400,000) and facilities of the Illinois River Research Station, Havana, Illinois. A second position may be stationed at another Illinois location. Candidates must hold a Ph.D. by date of appointment in an appropriate discipline, have an outstanding record of independent research, and expect to maintain a strong, externally funded research program that complements existing strengths in CAE. Experience working on large systems (freshwater or marine) is highly desirable. The 10 CAE Senior Staff Scientists conduct self-directed research in a broad range of disciplines, taxa, and systems. The Natural History Survey (INHS) is located on the Urbana-Champaign campus of the University of Illinois. CAE scientists have full access to campus facilities and resources and may hold affiliate appointments in university departments, teach, and supervise graduate students. Please send a cover letter, curriculum vitae, a statement of research interests, reprints of up to five representative publications, and three letters of reference to: Susan Key, Center for Aquatic Ecology Search, Illinois Natural History Survey, 607 East Peabody, Champaign, IL 61820. Telephone: 217-244-7790; FAX: 217-333-4949. For full consideration, applications should be received by March 5, 1999. Position is expected to begin on or after July 1, 1999. Technical questions regarding this position should be directed to: Dr. David P. Philipp, Telephone: 217-244-5055; e-mail: philipp@uiuc.edu. *The Illinois Natural History Survey is an Equal Employment Opportunity/ADA Employer.*

ASSISTANT PROFESSOR VERTEBRATE ANATOMIST

Ph.D. in biological sciences or related field required by 31 August 1999; postdoctoral experience preferred. Must demonstrate potential to be a dynamic and effective teacher in courses on human anatomy, chordate anatomy, and in an upper-division or graduate-level course in the candidate's area of specialization. Preference will be given to broadly trained candidates capable of contributing instruction in introductory physiology. Must demonstrate, through publications and research plan, the ability to develop an externally funded research program. Must be able to communicate and interact well with health science personnel on campus. This is a tenure-track appointment beginning in the fall of 1999. Submit a letter of application, curriculum vitae, statements of teaching philosophy and research direction, and three letters of reference by February 26, 1999, to: Robert Bullock, Search Committee Chair, (Log# 021362), University of Rhode Island, P.O. Box G, Kingston, RI 02881. *The University of Rhode Island is an Affirmative Action/Equal Employment Opportunity Employer and is committed to increasing the diversity of its faculty, staff, and students. Persons from underrepresented groups are encouraged to apply.*

The Department of Electrical Engineering and Computer Science at Tufts University seeks to hire a tenure-track faculty member in biomedical engineering. The position begins in September 1999 and will be at the level of **ASSISTANT PROFESSOR**.

Candidates must have a Ph.D. in electrical engineering or a closely related field. A record of high-quality research in biomedical engineering is required. Preference will be given to candidates who can teach basic courses in EECS, as well as specialty courses in her/his field. Preference will also be given to candidates whose biomedical research connects to ongoing departmental research programs in microwave and wireless engineering, electro-optics, and/or multimedia.

Qualified applicants should send a letter of application, a résumé, and the names of three or more references to: Professor Robert A. Gonsalves, Chair, Department of Electrical Engineering and Computer Science, Tufts University, 161 College Avenue, Medford, MA 02155. *Tufts University is an Affirmative Action/Equal Opportunity Employer. We are committed to increasing the diversity of our faculty. Members of underrepresented groups, particularly women and people of color, are strongly encouraged to apply.*

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

The Department of Obstetrics and Gynecology, F. Edward Hebert School of Medicine, Uniformed Services University of the Health Sciences, is seeking applications from U.S. citizens for the position of Assistant Professor in the Research Division. For a qualified candidate, a tenure-track appointment is available.

Applicants must have a Ph.D. or equivalent with postdoctoral training in endocrinology, cell biology, physiology, and biochemistry, with extensive training in molecular biology. Applicants are expected to establish a strong, extramurally funded research program in the area of reproductive biology. Major duties of the successful applicant will also include helping the clinical faculty establish individual research projects and overseeing the successful implementation of these investigations, instructing medical students, Residents, and Fellows during rotations in the laboratory of basic immunological and molecular research techniques including the design of small projects, implementation of the studies, data analysis, preparation of the material for presentation, and presenting lectures in the field of expertise as requested.

Final appointment is subject to completion of appropriate security clearance and successfully passing the applicant drug test with negative results.

A letter describing your career goals together with a current, dated curriculum vitae and four letters of recommendation should be sent to: Department of Obstetrics and Gynecology, Attn: Ms. Linda Douglas, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.

Applications will be accepted until May 28, 1999, and the position will be filled as soon as a successful candidate is available. *The Uniformed Services University is an Equal Opportunity/Affirmative Action Employer.*

ANIMAL PHYSIOLOGY

The Department of Biology at Middlebury College invites applications for a tenure-track position, beginning September 1999, in animal physiology, with research emphasis in endocrinology and an interest in behavior. Responsibilities include teaching courses in endocrinology; either vertebrate or invertebrate biology; and animal behavior and animal physiology as required in alternate years. The successful candidate will also be expected to establish an active research program in endocrinology that includes undergraduates, and to participate in supporting a joint major in biopsychology. Appointments will be made at the rank of **ASSISTANT PROFESSOR**. Candidates should provide evidence of commitment to excellence in teaching and scholarship. Send letter of application with a statement of both teaching and research interests, curriculum vitae, copies of undergraduate and graduate transcripts, samples of scholarly work, and three current letters of recommendation, at least two of which must speak to teaching ability, to: Dr. Stephen C. Trombulak, Animal Physiology Search Committee, Department of Biology, Middlebury College, Middlebury, VT 05753. See website: www.middlebury.edu/~bio/Animal_Physiology.html for more details about the position. Applications due February 26, 1999. *Middlebury College is an Equal Opportunity Employer, and it encourages applications from women and members of minority groups.*

BIOLOGIST/PLANT BIOLOGIST. Whitworth College seeks a full-time, one-year sabbatical replacement at the **ASSISTANT PROFESSOR** level for the academic year beginning fall 1999. Requires earned Doctorate (or ABD) in an appropriate area of the biological sciences; ability to teach plant biology, advanced botany course, and three other courses to be determined; a strong commitment to teaching science in a small liberal arts setting; the ability and desire to establish positive relationships with persons regardless of race, gender, disability, or religious belief; a commitment to the educational mission of Whitworth College. Whitworth College is a residential undergraduate liberal arts institution associated with the Presbyterian Church (USA). Application process: Prior to February 22, 1999, submit a letter of interest; curriculum vitae; names, addresses, and telephone numbers or e-mail addresses of three references; graduate and undergraduate transcripts (may be unofficial); Biology Search Committee, Office of Human Resources MS 0103, Whitworth College, Spokane, WA 99251. Deadline for applications is February 22, 1999. Additional materials may be requested. *Whitworth College is an Equal Opportunity Employer.*

NINDS at the Cutting Edge of Neuroscience

This is an extraordinary time in the field of neuroscience, when fundamental discoveries are being made at a breathtaking pace, and their application to neurological disorders is proceeding at an accelerating rate. To meet the challenge of new findings and to further enhance the pace of discovery and translation of fundamental discoveries to useful therapies, the National Institute of Neurological Disorders and Stroke (NINDS) has embarked on an ambitious planning and recruitment process. We seek excellent scientists and physicians to serve as program directors in the planning, administration, and evaluation of the research supported by our Institute.

The mission of the NINDS is to reduce the burden of neurological disorders by conducting and supporting research on the normal and diseased nervous system. To achieve this mission, we seek critical, resourceful, and imaginative scientists, especially those who offer expertise in one or more of the following areas: Neurogenetics; Development, Plasticity, and Regeneration; Neurodegeneration; Channels, Synapses, and Circuits; Systems Neuroscience, including Cognition and Behavior; Non-neuronal cells of the nervous system, and Immune and Inflammatory Processes; and Experimental Therapeutics and Clinical Trials.

Successful candidates will join a highly interactive group of scientists and clinicians directing research programs in all areas of modern neuroscience and neurological disorders. Program directors will be at the cutting edge of neuroscience as they plan and implement research programs through active communication with the extramural professional and lay communities, as well as with program directors in other institutes and agencies.

Applicants should have a Ph.D. and/or M.D. in a relevant field of biomedical or behavioral science. For more information, the full announcement can be obtained by fax (call 1-800-728-5627 and request document # 5001) or from the NINDS web site (<http://www.ninds.nih.gov/hrb/Joblist.htm>). U.S. citizenship is required.

Submit a letter of career interests with your curriculum vitae, bibliography, and response to our KSAs (knowledge, skills, and abilities as described in the full announcement) to: Mr. Luis Arvelo
National Institutes of Health
NINDS Human Resources Branch
Building 31, Room 8A23
31 Center Drive, MSC 2540
Bethesda, MD 20892-2540
or you may fax your application to (301) 480-0383.

Applicants are **strongly** encouraged to obtain information concerning application procedures by contacting Mr. Arvelo at (301) 435-6033. For information on qualification requirements and clarification of duties, contact: Dr. Constance W. Atwell at (301) 496-9248 or e-mail her at ca23c@nih.gov.

This position may be filled with a career appointment or various temporary appointment mechanisms (minimum of 2 years). The normal salary range for these positions is \$48,796 to \$89,142; actual salary will be commensurate with experience. An additional salary adjustment of up to 25% may be paid as a recruitment bonus or relocation allowance. In addition, physicians may be eligible for a Physician's Comparability Allowance.

Applications must be submitted by April 30, 1999. Refer to vacancy announcement # NS 99-01.

The Institute has a strong commitment to the diversity of its workforce and a biomedical research environment that reflects the diversity of the American population (www.ninds.nih.gov/eeo/). Therefore, the Institute is keenly interested in receiving applications from women, minorities, and individuals with disabilities. The NIH is an equal employment opportunity employer.



MAYO CLINIC POSTDOCTORAL POSITION

A postdoctoral position is available at Mayo Clinic for MD or PhD fellow preferably with experience in cell/molecular biology interested in pursuing research training in the area of hepatic vascular biology/pathobiology. Interested individuals should send curriculum vitae and references to:

Vijay Shah, M.D.
GI Research Unit, Alfred 2-435
Mayo Clinic
200 1st St. SW
Rochester, MN 55905
e-mail: shah.vijay@mayo.edu
or fax: 507/255-6318

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Cargill's Biotechnology group is set on a lake in a scenic natural area in suburban Minneapolis. The Twin Cities have a high quality of life with the many cultural, recreational, and educational opportunities a large metropolitan area can offer.

Qualified candidates for our Staff Scientist positions must have a Ph.D. in life sciences, chemistry or engineering with a life sciences emphasis and 5+ yrs industrial experience. Hands-on experience with recombinant DNA technology in bacterial, yeast, or fungal systems is required. Microbial fermentation and protein purification experience is a plus. Experience with licensing, patenting, and outside contracting is desired.



We provide competitive salaries and comprehensive benefits. Please submit resume on-line by visiting our resume builder at www.cargill.com/jobs/index.htm & selecting "Research & Development" under "Experienced" or send scannable resume to Cargill, Selection Dept., MS#10, Attn DH, Minneapolis, MN 55440-5697. Must specify Job#R9798-003. Equal Opportunity Employer.

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POSITIONS OPEN

ASSISTANT PROFESSORS CEREBRAL CIRCUITS AND SYSTEMS Boston University School of Medicine

The Department of Anatomy and Neurobiology at Boston University School of Medicine plans to fill two positions at the Assistant Professor level to start in September 1999. The Department has substantial expertise and reputation in cerebral circuits and systems and we are planning to expand research efforts into molecular and cellular, and functional imaging aspects of these circuits and systems. In addition to its research activities, teaching of medical and graduate students is an integral part of Departmental activities. Teaching qualifications in the anatomical, neuroscience, or molecular biology areas, and current research funding will be viewed as advantages. Applications should be submitted prior to March 22, 1999. The application should include a statement on the attributes the successful candidate will bring to the Department to broaden its research interests in cerebral circuits and systems, three recent publications, and the names and addresses of three referees. Interviews will be held in a concentrated period in March and April 1999, which candidates should keep open. Details of the Department and current and future research directions can be found at our website: <http://www.bumc.bu.edu/anatomy>. Applications should be sent to:

Dr. Bertram Payne
Chairman, Search Committee
Department of Anatomy and Neurobiology
Boston University School of Medicine
715 Albany Street
Boston, MA 02118

ASSISTANT PROFESSOR OF BIOLOGY

Randolph-Macon Woman's College, a selective liberal arts college with historic strengths in the sciences, invites applications for a tenure-track position at the level of Assistant Professor beginning in August 1999. The position requires a Ph.D. in a biological science and a strong commitment to teaching. Teaching responsibilities include a core course in molecular cell biology, microbiology, introductory biology, and an advanced course in any area of environmental or medical microbiology, cellular biology, or genetics. Additionally, regular participation in Senior Seminar and supervision of undergraduate research are expected. Preference will be given to candidates with a broad general biology background and teaching experience. Application review will begin March 15, 1999, and continue until position is filled. Send letter of application, including a statement of teaching and research interests, a curriculum vitae, and names, mail and e-mail addresses, and telephone numbers of three references to: Dr. Ronald D. Gettinger, Department of Biology, Randolph-Macon Woman's College, Lynchburg, VA 24503. Telephone: 804-947-8490; FAX: 804-947-8138; e-mail: rgettinger@rmwc.edu. EOS/WMA.

FACULTY POSITION ANATOMY DEPARTMENT

The Department of Anatomy at Midwestern University seeks applicants for a tenure-track position at the level of ASSISTANT PROFESSOR. Applicants must have a Ph.D., or equivalent, postdoctoral training, and a commitment to excellence in teaching. Applicants are expected to establish an independent research program capable of attracting extramural funding. Preference will be given to individuals broadly trained in the anatomical disciplines, with an emphasis on neuroanatomy. Send curriculum vitae, names of references, and a statement specifying teaching interests and research plans to: T. A. Dombrowski, Ph.D., Department of Anatomy, Midwestern University, 555 31st Street, Downers Grove, IL 60515. Affirmative Action/Equal Opportunity Employer. Women/minorities/veterans/disabled are encouraged to apply.

Wittenberg University. VISITING INSTRUCTOR or ASSISTANT PROFESSOR. Vertebrate physiology for August 1999 (likelihood of a tenure-track search the following year). Ph.D. (or ABD). Principal responsibilities: teaching physiology, vertebrate zoology, a course for non-majors, and research with undergraduates. Send curriculum vitae, teaching philosophy, transcripts, and three letters of recommendation to: Dr. Timothy L. Lewis, Chair, Department of Biology, Wittenberg University, P.O. Box 720, Springfield, OH 45501. E-mail: tlewis@wittenberg.edu. Review of applications begins 5 March 1999. Wittenberg University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

The Department of Microbiology at the University of Manitoba invites applications for a full-time tenure-track position, subject to final budgetary approval, at the ASSISTANT PROFESSOR level, commencing September 1, 1999, or on a date mutually agreed upon. Minimum qualifications are a Ph.D. in microbiology or allied discipline, two years of postdoctoral experience, and evidence of a strong research potential. Expertise within the areas of physiology, biochemistry, and/or fermentation of fungi or bacteria is preferred. Duties will include undergraduate and graduate teaching and supervision, research, and service-related activities. The salary range for the position is \$42,024 to \$63,881.

The Department currently has 12 full-time tenure-track faculty members and two Instructors, and offers a full range of both undergraduate and graduate programs in biochemistry, microbiology, biotechnology, and molecular genetics. In addition the Department has a well-established research reputation. Further information about the Department can be obtained from website: <http://www.umanitoba.ca>.

Applicants should send a curriculum vitae and a summary of research interests including a brief research proposal, three letters of reference to: Dr. P. C. Loewen, Department of Microbiology, University of Manitoba, Winnipeg, Manitoba R3T 2N2 Canada. Closing date for receipt of applications is April 1, 1999. Further information about the position can be obtained from e-mail: peter_loewen@umanitoba.ca; Telephone: 204-474-8334.

The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, aboriginal peoples, and persons with disability. This advertisement is directed to Canadian citizens and permanent residents.

HUMAN GENETICIST, ENDOWED POSITION FULL OR ASSOCIATE PROFESSOR OF PATHOLOGY

The Department of Pathology and the growing Program in Human Genetics at the University of Oklahoma Health Sciences Center, Oklahoma City invite applications for a tenure-track position at the Full or Associate Professor level, endowed by the Presbyterian Health Foundation. We seek candidates in human genetics, studying the molecular basis of disease. Candidates should have a Ph.D. or equivalent, and a proven record of research excellence. The successful candidate will establish and maintain funded research and participate in training at the graduate and postdoctoral levels. The Program in human genetics, involving four departments in two colleges, has four other open positions and new contiguous laboratory space.

Applicants should submit a curriculum vitae and letter of interests, goals, and references to: Dr. John J. Mulvihill, Chairman of Search Committee, Department of Pathology—BMSB 451, P.O. Box 26901, Oklahoma City, OK 73190. The street address is: 940 Stanton L. Young, Room 451, Oklahoma City, OK 73104. Applications will be reviewed beginning March 1, 1999. The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.

The Division of Autoimmune and Molecular Diseases, Department of Pediatrics at Columbia University, seeks applications for the tenure-track position of ASSISTANT PROFESSOR, available July 1999. Applicants must hold an M.D. and be Board-certified/Board-eligible Rheumatologist with at least two years of experience with the design, execution, and interpretation of linkage and quantitative trait loci analysis in autoimmunity and tolerance in human diseases and/or animal models of these diseases, preferably collagen-induced arthritis, and have experience with breeding congenic lines. A valid temporary or permanent New York State medical license and one year or more of documented significant teaching experience on the medical school level are necessary. Applicants' credentials must include evidence of a significant bibliography in autoimmune disease research and documented grant writing skills to show they are competitive for RO1-based support. Working knowledge of immunologic and genetic laboratory techniques and software necessary to perform these analyses is expected. Send a curriculum vitae, a brief description of research experience, and names of three references to: Dr. Robert Winchester, Director, Division of Autoimmune and Molecular Diseases, Department of Pediatrics, PH 4-477, 620 West 168th Street, New York, NY 10032. Columbia University is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.

POSITIONS OPEN

University of Washington (UW) Department of Psychiatry and Behavioral Sciences is recruiting a full-time VICE-CHAIR FOR RESEARCH to join the Division of Neurosciences. We are searching for candidates with M.D., Ph.D., or M.D./Ph.D. degrees, and an established track record in clinical neuroscience or psychopharmacology and/or basic laboratory research. The successful candidate will be a leader in the field with a national reputation for his/her expertise in the pathophysiology and treatment of mental disorders or substance abuse. The Department is seeking a person at the rank of ASSOCIATE PROFESSOR or PROFESSOR. The Vice-Chair will lead an initiative to expand our department's research program and will establish his/her own research program at Harborview Medical Center's new state-of-the-art Research and Training facility. A smaller proportion of time will be spent as an attending Psychiatrist at the UW Harborview Medical Center with a growing cadre of funded researchers in several areas of biological psychiatry. The UW has a national reputation for research in psychiatric and behavioral neuroscience. Send letter and résumé to: Richard C. Veith, M.D., Professor and Chair, Psychiatry and Behavioral Sciences, University of Washington, Box 356560, Seattle, WA 98195.

Application deadline is April 15, 1999. The UW is building a culturally diverse faculty and strongly encourages applications from females and minority candidates. The UW is an Equal Employment Opportunity/Affirmative Action Employer.

MICROBIOLOGIST. The University of Tulsa is seeking a tenure-track ASSISTANT PROFESSOR to begin fall 1999. The successful candidate must have a Ph.D., postdoctoral experience, a demonstrated potential to establish an independent, externally funded research program, and a commitment to undergraduate and graduate education. Competitive salary and start-up funds will be provided. The University of Tulsa is a private, comprehensive institution dedicated to excellence in education and research. Faculty in the Department of Biological Science have externally funded research in cellular, molecular, organismic, and environmental biology, and the department has excellent research support facilities that include core laboratories for DNA sequencing, flow cytometry, and electron microscopy. The Department of Biological Science offers degrees at the B.S., M.S., and Ph.D. levels. Review of applications will begin March 1, 1999, and continue until the position is filled. Applicants should submit a curriculum vitae, a statement of research and teaching interests, recent publications, and have three letters of recommendation sent to: Microbiology Search Committee, Department of Biological Science, The University of Tulsa, 600 South College Avenue, Tulsa, OK 74104-3189. Website: <http://bio44.utulsa.edu>. The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.

COMMUNITY ECOLOGIST. The Ecology and Evolutionary Biology Department at Rice University seeks to fill a HUXLEY RESEARCH INSTRUCTORSHIP. This is a two-year appointment for a recent Ph.D. for research (75 percent) and teaching (25 percent). Preference will be given to candidates with research interests in mechanisms controlling terrestrial community diversity and dynamics and/or alien plant invasions, and who will work collaboratively with the other Community Ecologists in the department. Applications, including curriculum vitae, a summary of research interests, and three letters of reference, are to be sent to: Dr. Evan Siemann, Ecology and Evolutionary Biology Department, Rice University, P.O. Box 1892, Houston, TX 77251 by March 8, 1999. Rice University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR. The University of Alabama at Birmingham (UAB) School of Public Health is seeking candidates for a full-time tenure-track Assistant Professorship to teach in the industrial hygiene program of its nationally recognized NIOSH-supported Deep South Educational Resource Center. For further information contact: Dr. Kenneth Dillon, Search Committee Chair, University of Alabama at Birmingham, Department of Environmental Health Sciences, Birmingham, AL 35294-0022. E-mail: dillonk@uab.edu. Also visit our website: www.uab.edu/PublicHealth. Application deadline: March 1, 1999. UAB is an Equal Employment Opportunity Employer. Women, minorities, and persons with disability are encouraged to apply.

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The following positions are currently available:

RESEARCH SCIENTIST, VIROLOGY

Your primary focus will be on identification and characterization of membrane transport processes involved in the absorption/excretion of antimicrobial therapeutics with further development of specific modulators. In addition, you will actively participate in evaluation and characterization of novel targets for antiviral/antimicrobial therapy. You should have a PhD in Molecular/Cell Biology, Biochemistry or related field with 2+ years' postdoctoral experience and excellent knowledge of molecular biology/biochemistry techniques. SCI98-165

SR. RESEARCH SCIENTIST, BIOLOGY

Participate in drug discovery projects aimed at identifying treatments for viral/bacterial infections. Identify targets and develop high-throughput molecular/cellular assays to optimize compounds from diverse and focused compound libraries. Requires a PhD in Biochemistry, Molecular Biology, Cell Biology or Microbiology including lab experience, and 2+ years' industry experience in drug discovery programs utilizing high throughput screening technology. Experience with robotics is mandatory. Knowledge in the antiviral or antibacterial therapeutic areas is preferred. SCI98-046

RESEARCH SCIENTIST, BIOLOGY

Work with integrated drug discovery programs to identify and evaluate novel therapeutics targeting Hepatitis C and HIV. Applying molecular/cell biology and protein biochemistry techniques, you will identify and optimize lead antiviral compounds. You must have a PhD and 3+ years' postdoctoral experience in molecular/cell biology or protein biochemistry. Skills in recombinant DNA, mammalian cell culture, protein purification, and enzymology are required. Molecular virology background a plus. SCI98-184

RESEARCH SCIENTIST, DRUG DELIVERY

Design and perform in-vitro metabolism and transport studies using tissue preparations, purified enzymes, and cultured cells. You will also provide support for nonclinical and clinical pharmacokinetic studies, including management of external contracts for sample analysis of data, and generation of reports for regulatory filing. You must have a PhD in Biochemistry, Pharmaceutical Sciences or Analytical Chemistry and 2-6+ years' related experience. SCI98-125

Interested candidates may send a resume, indicating job code, via email to: careers@gilead.com (please include all information in the body of the email), or fax to: (650) 573-4800, or mail to: Human Resources, Gilead Sciences, 333 Lakeside Drive, Foster City, CA 94404. Gilead Sciences is proud to be an equal opportunity employer.

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VIRAL VACCINE RESEARCH SCIENTISTS

We are seeking highly motivated individuals in our Pharmaceutical Research and Development Department to apply pharmaceutical and biochemical principles to the characterization and stabilization of live viruses in support of human vaccine development. You will examine the physical and immunological integrity of vaccines during storage. The determination of inactivation pathways will be emphasized and will be critical to the design of stable vaccine formulations for clinical use. You will also apply biochemistry, cell culture and virology-based methodologies to the characterization, formulation and stability testing of live viral vaccines, as well as evaluation and development of lyophilization conditions.

To qualify, you must possess a Ph.D. or equivalent degree in a relevant area of biological sciences, pharmaceutical sciences or chemical engineering. Demonstrated excellent academic performance and research experience in an industrial or academic laboratory preferred.

For immediate consideration, forward your curriculum vitae, including GPA with cover letter and three reference names, to: **Merck & Co., Inc., Job Code D-170, Attn: Human Resources, P.O. Box 4, WP42-2, West Point, PA 19486-0004.** Only candidates selected for interviews will be contacted.

MOLECULAR VIROLOGIST

Merck Research Laboratories has an immediate opening for a Molecular Virologist to support gene therapy and vaccine product development.

The successful candidate should have a working knowledge of standard biochemical, immunological, molecular biological, and virological methods, as well as experience with assay development and validation. The candidate will be expected to solve problems independently, possess excellent communication skills, and work effectively in a team environment.

A BS/MS or equivalent in biochemistry, molecular biology, virology, or a related field is required. GMP/GLP experience is preferred.

Please send resume and cover letter, including salary history, to: **Merck & Co., Inc., P.O. Box 4, WP75-300, Ad# MA/A-177, West Point, PA 19486-0004.**

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POSITIONS OPEN

ROOT BIOLOGIST ASSISTANT PROFESSOR OF VITICULTURE ASSISTANT PLANT PHYSIOLOGIST in the Agricultural Experiment Station University of California, Davis

The Department of Viticulture and Enology invites applications for an Assistant Professor position. This is an academic year (nine-month) tenure-track position: Fiscal Year (11-month) employment to be offered and continued based on academic personnel review. A Ph.D. in plant biology or a related discipline is required; postdoctoral experience desirable. Will be expected to develop a vigorous externally funded research program in grape root biology, direct graduate (M.S. and Ph.D.) students, and teach at the undergraduate and graduate level.

Expertise should complement existing programs in viticulture with strong preference given to the area of root biology. Candidate finalists will be selected on the basis of the following criteria: evidence of outstanding intellectual capacity, breadth and depth in the area of root biology; potential and motivation to develop a nationally recognized research program; willingness to develop mission-orientated and team-type research; potential for effective teaching; and a strong commitment to both undergraduate and graduate education.

Send letter of interest, curriculum vitae, a statement of research and teaching goals, publication list with a reprint for each publication listed, graduate transcripts (if within five years), and names and addresses of at least three references to: **Dr. M. Andrew Walker, Search Chair, Department of Viticulture and Enology, University of California, Davis, One Shields, Davis, CA 95616-8749.** The position will remain open until filled. To ensure consideration, applications must be received by April 15, 1999. Applications by facsimile will not be accepted.

Biology. ASSISTANT PROFESSOR. University of Nebraska at Kearney (UNK). Tenure-track. Teach genetics and developmental biology with associated laboratories; advise biology/health-related programs majors; pursue promotion/tenure requirements; active membership on departmental/college committees. Required: earned Doctorate in biological sciences with genetics and developmental biology emphasis; evidence of good communication skills and successful teaching experience. Preferred: Grant writing experience. Teaching is first priority at UNK with evidence of potential to conduct reviewable research expected. Starting date August 1999. Salary and benefits are competitive. Submit applications on/before March 15, 1999, to assure consideration. Send letter of application, curriculum vitae, three professional letters of reference, and official transcripts to: **Chair, Search Committee, Dr. John Hertner, Department of Biology, University of Nebraska at Kearney, Nebraska 68849-1140.** Telephone: 308-865-8603; FAX: 308-865-8045. Website: <http://www.unk.edu>. Affirmative Action/Equal Opportunity/ADA.

NEUROPHYSIOLOGIST. The Department of Physical Medicine and Rehabilitation at Temple University School of Medicine is seeking a Neurophysiologist for a full-time, non-tenure-track faculty position at the **RESEARCH ASSOCIATE PROFESSOR** level. Applicants must hold the Ph.D. degree, be skilled in motor control research, and have sufficient experience to establish a motor control laboratory. Must be willing to collaborate with the many ongoing motor control programs active in other university departments and schools. Candidate will be expected to obtain extramural funding to support his/her salary and research activities.

Please send curriculum vitae to: **John J. Nicholas, M.D., Professor and Chairperson, Department of Physical Medicine and Rehabilitation, Temple University School of Medicine, 3401 North Broad Street, Philadelphia, PA 19140.** Temple University is an Affirmative Action/Equal Opportunity Employer and strongly encourages applications from women and minorities.

ASSISTANT PROFESSOR of tree physiology, School of Forest Resources and Conservation, University of Florida. 12-month, tenure-track to do research, and teach and advise students. For information, contact: **Dr. John M. Davis, Chair, Search Committee, University of Florida, P.O. Box 110410, Gainesville, FL 32611-0410.** Telephone: 352-846-0879; FAX: 352-846-1277; e-mail: jmdavis@ufl.edu; website: www.sfric.ufl.edu (What's new!) prior to March 30, 1999. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



CORTEX

ELECTROPHYSIOLOGIST

Cortex Pharmaceuticals, Inc., an Irvine-based neuroscience company focused on novel drug therapies for the treatment of neurological and psychiatric disorders, is currently seeking a scientist with the demonstrated ability to prepare primary neuronal cultures and to perform electrophysiology experiments on excised patches. This position will support the discovery and development of new drug entities for central nervous system disorders. The desired candidate will possess a B.S./M.S. in chemistry and 2-plus years of experience in an industrial setting.

Cortex Pharmaceuticals, Inc. offers a competitive compensation and benefits package to include medical, dental, vision, and life insurance, 401(k) retirement plan, and stock options.

Interested applicants will mail a résumé (no telephone calls please) to: **Jan Ingram-Mello, Human Resources, Cortex Pharmaceuticals, Inc., 15231 Barranca Parkway, Irvine, CA 92618.** E-mail: jmello@cortexpharm.com.

GIS/REMOTE SENSING

THE UNIVERSITY OF TEXAS-PAN AMERICAN

The Department of Biology invites applications for an entry-level, tenure-track **ASSISTANT PROFESSOR** position beginning 1 September 1999. Candidates may have research interests in any area of GIS/Remote Sensing, but those with strong interests in ecological and conservation applications using the Department's UNIX-based Sun workstation are especially encouraged to apply. Strong commitments to teaching and research involving undergraduate and M.S.-level graduate students are expected. Teaching responsibilities will include assisting with the department's general biology courses and developing courses in GIS or remote sensing and/or the candidate's specialty. Applicants should submit a curriculum vitae, a statement of teaching and research goals, representative publications, and arrange for three letters of reference to be sent to: **Dr. Robert J. Edwards, Search Committee Chair, Department of Biology, The University of Texas-Pan American, 1201 West University Drive, Edinburg, TX 78539-2999.** E-mail: redwards@panam.edu; FAX: 956-381-3657. Application deadline: 1 March 1999. Women and minorities are encouraged to apply. The University of Texas-Pan American is an Equal Opportunity/Affirmative Action Employer.

ACADEMIC INVESTIGATORS TWO POSITIONS

The Division of Endocrinology and Metabolism, University of Virginia, School of Medicine, is seeking two tenure-track Academic Investigators—Ph.D., M.D. at the rank of **ASSISTANT** or **ASSOCIATE PROFESSOR**. The successful candidates should have a strong research interest in the cardiovascular complications of diabetes and demonstrate a strong potential to develop and maintain an independent laboratory-based research program. Excellent laboratory space and start-up packages are available. Please send updated curriculum vitae and names of three references to: **Jerry L. Nadler, M.D., Search Committee Chair, Department of Internal Medicine, Box 466, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION

The Department of Cell Biology and Neuroscience at the University of South Carolina School of Medicine invites applications for a tenure-track 12-month position probably at the level of **ASSISTANT PROFESSOR** beginning summer 1999. Candidates must have the capacity to maintain an active research program in the general area of reproductive biology fundable at the national level. Teaching responsibilities will eventually involve participation in two team-taught courses—one for graduate students in reproductive biology and one for medical students in microanatomy. Submit a statement of career and research interests, a curriculum vitae, and names and contact information for three potential references to: **Charles A. Blake, Ph.D., Department of Cell Biology and Neuroscience, University of South Carolina, School of Medicine, Columbia, SC 29208.**

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

POSITIONS OPEN

HEAD, DNA ARRAY FACILITY GENE EXPRESSION NATIONAL CANCER INSTITUTE

A position is available immediately at the National Cancer Institute (NCI) in Frederick, Maryland to direct a facility devoted to cDNA microarray analysis of gene expression, focusing on problems related to the induction, prevention, or treatment of cancer. The position provides an opportunity to develop all aspects of this exciting technology, including creating and using the microarrays, scanning, and bioinformatics approaches to analyzing gene expression data. The Frederick Array Facility Head will interface with counterparts at the NCI Advanced Technology Center in Gaithersburg and at NIH, Bethesda, as well as with NCI Principle Investigators. The Array Facility will also be closely associated with a DNA sequencing laboratory located at the NCI-Frederick campus.

A strong background in molecular biology and an interest in technology development are essential. Experience with analysis of differential gene expression, especially using array technology, is preferred. Candidates must have an advanced degree and be U.S. citizens or permanent residents with at least two years of previous postdoctoral experience. Applications must include curriculum vitae and bibliography, letter of interest stating research goals and related experience, and three letters of reference. The completed application should be received by February 28, 1999, to: **Dr. David J. Goldstein, P.O. Box B, Building 427, Room 7, Frederick, MD 21702-1201.** NIH is an Equal Opportunity Employer.

Kendro Laboratory Products is a newly formed company with sales of more than \$170 million and over 1,000 employees worldwide. With manufacturing sites in Newtown, Connecticut, Hanau and Osterode, Germany, we manufacture Sorvall and Heraeus brand laboratory products including centrifuges, incubators, ovens, clear air equipment, and freezers. We are seeking a **PRODUCT SUPPORT SPECIALIST** located in the Northern New Jersey area covering the Eastern region.

In this position you will work in conjunction with field sales representatives to provide technical and demonstration support of our products in the field of customer situations. You will assist sales in overcoming technical objections and provide on-site start-up of our equipment. You will provide telephone application support of customers in concert with our application laboratory personnel.

You will have a B.S. degree in life science and hands-on laboratory experience. In addition you will have three to five years of experience in tissue cell culture work (large-scale production) and blood separations/bacterial culture work. This job will require travel 50 percent or greater. Knowledge of life science capital goods desired.

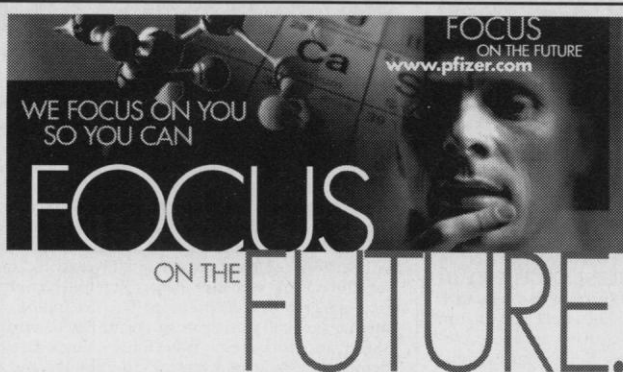
We offer a comprehensive salary and benefits package. Please mail or FAX your résumé to: **Human Resources (CE), Kendro Laboratory Products, 31 Pecks Lane, Newtown, CT 06470.** FAX: 203-270-2505. An Equal Opportunity Employer.

STAFF ASSOCIATE

The applicant will perform research projects on mast cells in the central nervous system. A Master's degree in a biological science, preferably in neuroscience and/or cell biology; skills in electron microscopy and one other microscopic approach (e.g., confocal microscopy). The person will interact directly with the Principal Investigator and should need minimum supervision; must be able to work effectively within a team framework. Submit cover letter and curriculum vitae to: **Dr. Ann Silverman, Columbia University, 630 West 168 Street, New York, NY 10032.** An Affirmative Action/Equal Opportunity Employer.

FUNGAL MOLECULAR GENETICIST/ MICROBIOLOGIST—Ph.D.

Archer Daniels Midland (ADM) Fermentation Research is currently seeking a group leader with five to ten years of proven experience in cloning, characterizing, and overexpressing eukaryotic genes for primary/secondary metabolites in yeasts and molds. Communication skills and the ability to work in an interactive environment are important. ADM is a leading manufacturer of food and feed additives. For consideration forward résumé and names of three references to: **Paul Hanke, Ph.D., Archer Daniels Midland Randall Research Center, 1001 Brush College Road, Decatur, IL 62526.**



As a pharmaceutical professional, you know Pfizer for our commitment to developing life-enhancing medicines for the global market. What may surprise you is the strength of our commitment to helping you realize your own potential. At Pfizer, you'll discover the most comprehensive resources and state-of-the-art facilities in the industry, as well as a scale of opportunity that only a \$2 billion R&D budget can make possible. You can do more than just envision a better future: you can achieve it - with Pfizer.

SENIOR RESEARCH SCIENTISTS

We have immediate opportunities for 2 creative scientists on our New Leads Biology team. You will develop and run a variety of high-throughput and directed assays and pursue leads in selectivity and functional systems. You will supervise 2-3 assistants and work closely with chemists and biologists throughout Pfizer Discovery as well as outside collaborators. Ph.D. and postdoctoral training is required in Enzymology, Molecular Pharmacology, or Cell Biology. Some background in chemistry, statistics or informatics and experience with high throughput assays desirable, but not essential. Job Code: 00361GP

BS/MS BIOLOGISTS

We have 2 openings for scientists to conduct experiments to identify new agents for the treatment of cancer. Characterize the in vitro and in vivo pharmacology of lead molecules, by developing and implementing biochemical assays. Significant research experience with protein biochemistry (cloning, expression, purification of target proteins) and protein analysis (ELISA, western blot) is required. The ability to work productively in a team setting with minimal supervision is essential. Experience with in vivo tumor models and pharmacology highly desired. Strong written and verbal communication skills are expected. Job Code: 20142SC

SR. ANALYTICAL CHEMIST

A new opportunity exists for a highly motivated scientist in our Chemical Technologies Group within the Exploratory Medicinal Sciences Department. As a lab leader, you will be responsible for developing technologies and methodologies in analytical and preparative chromatography for the quality assurance of chemical libraries produced through combinatorial and parallel synthetic methods. In addition to theoretical and experimental background in separation science and quantitative analysis, you must be a practicing scientist in LC-MS and familiar with other LC detector technologies, including ELSD. A Ph.D. with postdoctoral and/or 2-5 years' experience or equivalent are required. An understanding of automation strategies, data integration, data management and the ability to build and maintain internal/external collaborations with a technology transfer component are essential. Knowledge of software tools such as Visual Basic, C++, and Oracle is helpful. Must be a team-oriented problem solver with the ability to creatively apply theory and practical experimentation. Proven supervisory ability, with strong interpersonal and communication skills also required. Job Code: 00362GP

Pfizer offers competitive salaries; tremendous growth potential; flexible, comprehensive benefits; and easy access to both the beautiful Connecticut seashore and the major cities of the Northeast. Please send your resume in confidence to: Employee Resources, Pfizer Inc., Job Code #____, Central Research Division, P.O. Box 8012, Groton, CT 06340. Pfizer is focused on building a diverse workforce - an Equal Opportunity Employer.



LIFE IS OUR LIFE'S WORK.

NATIONAL INSTITUTES OF HEALTH NATIONAL EYE INSTITUTE Division of Extramural Research

The National Institutes of Health (NIH) invites applications for the position of Director, Division of Extramural Research, National Eye Institute (NEI). This is a civil service position in the Senior Executive Service (SES) with a salary ranging from ES-1 to ES-6 (currently \$110,351 to \$125,900 per annum including a locality allowance). A recruitment bonus of up to 25% of base pay may be available to a non-Federal candidate selected for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. The individual selected, if not currently in the career SES, must serve a one-year probationary period.

The incumbent of this position serves as Director, Division of Extramural Research, and keeps the Director and Deputy Director, National Eye Institute, abreast of research developments and needs of the programs as they relate to the overall mission of the NEI. The incumbent maintains liaison with other government research programs, private foundations, universities and private research institutions, scientific societies, voluntary health agencies, and international health and research organizations with interest in the National Eye Institute. The position manages extramural and collaborative research programs that provide a national focus for the fight against eye disease and blindness. More than 1500 grants, cooperative agreements, research and development contracts, research training, and construction awards are currently administered, and more than 1000 competing applications are received and processed each year. The incumbent plans, directs, and evaluates this research, and supervises a staff of 27 with an FY99 appropriation of \$346 million. The Institute has a staff of approximately 250 employees with an FY99 appropriation of \$395.9 million.

The vacancy announcement with mandatory and technical/professional qualifications can be obtained via Fax by calling 1-800-728-JOBS (Fax ID#4609). Applicants are required to submit an Application for Federal Employment (SF-171), Optional Application for Federal Employment (OF-612), resume, or any other written format which addresses the requirements indicated in this announcement, to the following address:

NIH, National Eye Institute

Attention: Cheryl Wild

Building 31, Room 6A18

31 Center Drive - MSC 2510

Bethesda, Maryland 20892-2510

Applications must be postmarked no later than **April 1, 1999**.

Applicants with access to E-mail may transmit their materials to the following E-mail address: CWild@nei.nih.gov

Applicants with access to the Internet's World Wide Web may wish to browse the NIH/NEI Home Page (www.nei.nih.gov) and may apply through the Web at the following: [URL:http://www.nih.gov/news/](http://www.nih.gov/news/)

Application materials may be Faxed to (301) 496-3958 (Please limit Faxed materials to no more than 10 pages).

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, POLITICAL AFFILIATION, MARITAL STATUS, DISABILITY, AGE, SEXUAL ORIENTATION, OR MEMBERSHIP OR NONMEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

POSITIONS OPEN

Five Scientist positions: **MICROBIOLOGISTS, RESEARCH CHEMIST, RESEARCH GENETICIST** (plants). USDA, Agricultural Research Service, WRR, Albany, California.

For more information about these opportunities see website: <http://www.ars.usda.gov/afm/hrd/resjobs/> (search for jobs in Albany, California). Closing date for all jobs: March 1, 1999. For further information regarding scientific issues only, e-mail: mandrell@pw.usda.gov. For application information or copies of the announcements, Telephone: 510-559-6014.

(1) Microbiologist GS-12/13. Permanent Scientist needed to isolate and characterize multiple types of food pathogens (pathogenic *E. coli*, *Salmonella*, *Campylobacter*, *Listeria*) from complex sources (e.g., plants, manure) and to test the effects of different processing and packaging conditions on pathogen and non-pathogen viability. (2) Microbiologist GS-11/12. Permanent Scientist needed to characterize the biology of bacterial biofilms by molecular biology, biochemistry, and microscopy techniques. (3) Microbiologist GS-11/12. Permanent Scientist needed to characterize plant-microbe interactions by molecular biology and biochemistry techniques. Applicant must be able to isolate and characterize endophytic and pathogenic bacteria from plants. (4) Research Chemist GS-11/12. Permanent Scientist needed to address the biology and chemistry of human and plant pathogens in fruits and vegetables. Required knowledge: synthesis of combinatorial libraries, robotic high-throughput screening methods, molecular modeling of new small molecules based on ligand-receptor structures. (5) Research Geneticist (plants) GS-11/12. Permanent Scientist needed to address the biology of human and plant pathogens in fruits and vegetables. Knowledge required: ability to clone genes into plants, construct plant mutants, characterization of the biochemistry of plant cells, development of relevant plant tissue culture methods for screening plant-microbe interactions.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital and family status. (Not all prohibited bases apply to all programs.) Persons with disability who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact: **USDA's TARGET Center, Telephone: 202-720-2600 (voice or TDD).**

To file a complaint of discrimination, write: **USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue S.W., Washington, DC 20250-9410. Telephone: 202-720-5964 (voice or TDD).** USDA is an Equal Opportunity Provider and Employer.

BIOLOGIST

Takasago Institute for Interdisciplinary Science, Inc. is a research and development company involved in the study of aromachemicals, fragrance, flavor, and natural products. We are currently seeking creative, well-rounded scientists of all levels of experience with hands-on laboratory experience for the following positions. The **BIOLOGIST** (Ph.D./M.S.) will study the effects of fragrance and flavor materials upon a variety of biological systems as they pertain to personal care products, household products, and food products. All levels of relevant experience in microbiology, cell biology, molecular biology, or biochemistry will be considered. Strong interpersonal and presentation skills are required. The **PSYCHOPHYSIOLOGIST** (Ph.D./M.S.) with one to five-plus years of relevant experience will study the influence of odors on human psychophysiology and odor perception. Interested candidates should send their résumés to: **Personnel Manager, Takasago Institute for Interdisciplinary Science, Inc., P.O. Box 932, Rockleigh, NJ 07647-0932.**

NEUROIMMUNOLOGY FELLOWSHIP

One-year, renewable position for a Ph.D. to study mechanisms of central nervous system inflammatory demyelination in multiple sclerosis. To include studies on T cell costimulation, antigen presentation, production of recombinant proteins, the role of lipids in inflammation, and/or identification of antigenic epitopes and T cell receptor usage. Techniques include cell culture, flow cytometry, Eli-spot, RT-PCR, SSCP, and cloning. Multiple collaborations available. Interested persons should contact: **Dr. John Trotter, The Barnes-Jewish MS Center and the Washington University Medical Center, Box 8111, 660 South Euclid Avenue, St. Louis, MO 63110. Telephone: 314-362-3293; FAX: 314-747-1345; e-mail: trotterj@neuro.wustl.edu.**

POSITIONS OPEN



UNITED STATES DEPARTMENT OF AGRICULTURE Research, Education, and Economics Agricultural Research Service

The Germplasm and Gamete Physiology Laboratory in Beltsville, Maryland is seeking a **RESEARCH PHYSIOLOGIST** to work in the area of sperm physiology with primary emphasis on swine semen. Focus will be on sperm storage and cryopreservation of ejaculated and sexed semen and sperm/oocyte interaction. Candidates must have experience in sperm physiology, general animal physiology, have skills in current laboratory technology, and be able to conduct and report scientific research investigations. Ph.D. is preferred. *Must be a U.S. citizen.* Salary is commensurate with experience (\$48,796 to \$89,142 per annum). For more information on the research program, contact: **Lawrence Johnson, Research Leader, Telephone: 301-504-8545.** For vacancy announcement and application forms: **Telephone: 301-504-1484.** Internet information, website: www.ars.usda.gov/afm/hrd/resjobs/. Applications in response to this advertisement should be marked D9E-9129 and must be postmarked by March 15, 1999.

USDA is an Equal Opportunity Employer.

ASSOCIATE DIRECTOR FOR PROFESSIONAL DEVELOPMENT K-12 Institute Ref: 98-833

Develop, organize, and arrange the delivery of a broad spectrum of courses and programs for regional K-12 teachers that provide fundamental scientific, mathematical, and technological concepts and content; foster inquiry and critical thinking skills, and model best practice in pedagogy. Direct development of an accessible, integrated, coherent, systemic offering of courses and programs. Requires Ph.D. (or equivalent) in science or science education with broad science, mathematics, and/or technology background. At least two years of working in science education, preferably involving systemic reform of urban school systems. Experience in designing, developing, implementing, and evaluating content-rich, inquiry-based SMT professional development programs. Experience in carrying out scientific research strongly preferred. Equivalent education/experience may substitute for stated requirements. Salary Range: \$3,300 to \$4,000 per month. Please send a résumé by February 19, 1999, to:

**Vivian Dias
Office of Educational Partnerships
University of Washington
Box 353080
Seattle, WA 98195**

Nutrition. The University of Georgia seeks **HEAD** for the Department of Foods and Nutrition. The Head is expected to build, sustain, and enhance the national and international reputation of the department. Responsibilities include teaching and research. Qualifications include a Ph.D. in nutrition or closely related area; appointment as Professor; record of competitive extramural funding; commitment to excellence in instruction; strong communication skills; interest in international programs; interest/experience in land-grant philosophy, service, and outreach. Deadline: Applications received by March 1, 1999, are assured of consideration. Candidate should submit a letter of interest and a complete curriculum vitae to: **Dr. Jan Hathcote, Chair, Search Committee, Dawson Hall, The University of Georgia, Athens, GA 30602-3622. Telephone: 706-542-4907; FAX: 706-542-4862; e-mail: jhathcote@fcs.uga.edu.** The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

Fully-funded faculty position at the rank of **ASSISTANT/ASSOCIATE RESEARCH SCIENTIST** (non-tenured Professor). Project involves the development of unique antimicrobial agents. Requires experience in bacteriology, virology, pharmaceutical testing, and animal models.

Contact: **Internal Medicine-Allergy, University of Michigan Medical Center, 9220 MSRB III, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0648. FAX: 734-936-2990; e-mail: cverweij@umich.edu.** A nondiscriminatory Affirmative Action Employer.

POSITIONS OPEN

TECHNOLOGY LICENSING MANAGER UNIVERSITY OF PITTSBURGH

The University of Pittsburgh is seeking two experienced Technology Licensing Managers to join its growing Office of Technology Management (OTM). We are seeking candidates for each of the principal segments of our technology portfolio: health/life sciences and engineering/physical sciences/information technologies. The University has a sponsored research budget of over \$250 million annually. The OTM is proactively involved with start-up companies based on University technologies. See the OTM website: <http://techlink.tt.pitt.edu/> for annual report. The position: The Technology Licensing Manager will participate in a team-based management system, and will be responsible for working with faculty to identify and evaluate inventions; developing and executing licensing and spin-off strategies; actively marketing discoveries to industry; and negotiating options, licenses, and industry-sponsored research agreements. Qualifications: Candidates should have an advanced degree in a scientific field appropriate for the market segment and, preferably, an MBA. Five years of experience in technology development and technology transfer is necessary. Industrial experience is preferred. An ability to understand the clinical and/or industrial relevance of early-stage inventions is necessary, as is the ability to communicate effectively with scientists and executives. There is a strong preference that candidates will have demonstrated the ability to formulate and close corporate deals. Salary is commensurate with qualifications and experience.

Please respond with letter of interest and résumé to:

**MK
JOB# B-19054 and B-19055
University of Pittsburgh
100 Craig Hall
Pittsburgh, PA 15260**

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

COLLECTION SCIENTIST MOLECULAR BIOLOGY

The American Type Culture Collection (ATCC), serving as one of the world's largest and most diverse repositories of biological materials, is seeking a highly qualified scientist to assume the leadership for its molecular biology collection and to create a new vision for its future growth. In addition to managing the collections acquisition, characterization, authentication, preservation, and distribution activities, the successful candidate will develop research opportunities and use creativity to promote ATCC's large clone collection. Ph.D. in a biological science with a minimum of five years of experience in gene mapping, recombinant DNA, PCR, and other molecular biology techniques required. Proven management skills and a demonstrated record of obtaining external grants required.

Qualified candidates should submit résumé, with salary history, to:

**American Type Culture Collection
Attn: Human Resources/CSMB
10801 University Boulevard
Manassas, VA 20110
FAX: 703-365-2735**

Visit our website at www.atcc.org.

Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.

ANIMAL RESEARCH TECHNICIAN

Memorial Sloan-Kettering Cancer Center, ranked by *U.S. News & World Report* as number one in the nation for the sixth consecutive year, seeks an applicant for an Animal Research Technician position. Join our progressive team where excellence and extraordinary service are crucial to providing the best cancer care anywhere.

The Technician's responsibilities include maintenance of transgenic and knockout mouse colonies, genotyping of the mice, and basic husbandry. Successful applicants will have a Bachelor's degree and three to five years of research experience in genetics, embryology, and molecular biology.

We offer a competitive salary and comprehensive benefits, including 100 percent tuition reimbursement. Please submit curriculum vitae and two letters of recommendation to: **Employment Department, #99039.1R, Memorial Sloan-Kettering Cancer Center, 633 Third Avenue, 5th Floor, New York, NY 10017. Equal Opportunity Employer/Affirmative Action.**

DIRECTOR OF THE CHEMICAL CARCINOGENESIS PROGRAM

CIIT seeks an individual with extensive experience investigating mechanisms of chemical carcinogenesis. The successful applicant should have an international reputation for their contributions to understanding the molecular mechanisms of carcinogenesis and have broad knowledge of the field of cancer biology. A demonstrated record of obtaining competitively awarded research funds and managing multiple investigator, multi-year projects is highly desirable. Strong consideration will be given to individuals with existing research funding that is transferable. This position provides leadership for a multi-investigator research program that spans from studies at the molecular and cellular level to whole animal investigations using transgenic and conventional animals onto the use of human material. The major focus is on understanding the mechanisms by which chemicals induce cancer and is supported with chemical industry funding. It is expected that complementary research will be conducted with additional funding secured from other sources. The individual should have well-developed skills for communicating with scientific peers, technical individuals trained in other fields, and industry managers and executives.

CIIT offers an excellent salary and benefits package. Interested candidates should complete an application for employment that can be obtained from CIIT's web site at "ciit.org" or by calling CIIT's Job Line at (919) 558-1401. Refer to the Cancer Director position. Applications and curriculum vitae should be directed to the **HR Manager, 6 Davis Drive, P.O. Box 12137, RTP, NC 27709-2137**. The deadline for applications is March 15, 1999. *CIIT is an EEOC employer.*



CHAIR AND PROFESSOR DEPARTMENT OF HORTICULTURE AND CROP SCIENCE THE OHIO STATE UNIVERSITY

Responsibility: Lead and administer a comprehensive program of research, teaching, and extension in horticulture and crop science. The chair provides leadership for the professional development of faculty, staff, and graduate and undergraduate students; reports and serves liaison to the Vice President for Agricultural Administration; updates and administers a faculty-approved Pattern of Administration document; fosters highly productive interaction with commodity and industry groups; prepares annual budget recommendation in consultation with department; oversees management of budget; allocates resources to departmental members; evaluates programs and personnel of department.

Qualifications:

- Earned doctoral degree in field related to horticulture or crop science
- Distinguished record of research, teaching, extension, or administration consistent with an appointment as a tenured full professor in the Department of Horticulture and Crop Science
- Leadership abilities and ability to communicate effectively with faculty, staff, students, industry, and commodity groups.

Closing date: April 30, 1999 or until a suitable candidate is identified.


Further Information: Visit departmental web site, <<http://www.hcs.ohio-state.edu/hcs/hcs.html>>.

Contact: Nominations, inquiries, and applications can be directed to the Chair of the Search Committee:

Dr. Steven K. St. Martin
Dept. of Horticulture and Crop Science
The Ohio State University
202 Kottman Hall
2021 Coffey Road
Columbus, OH 43210-1086
Phone: 614-292-8499
Fax: 614-292-7162
e-mail: stmartin+@osu.edu

Application should include: (1) cover letter addressing interest, qualifications and administrative philosophy, (2) a complete vita, and (3) names, addresses, and telephone numbers of four references. Confidential inquiries are welcome.

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.



GENETIC THERAPY, INC.


Toxicologist/ Lab Head II

Genetic Therapy, Inc. (GTI), a Novartis company, is a leader in the research and development of human gene therapy products and technologies for the treatment of genetic and acquired diseases.

Successful candidate will prepare and implement Preclinical Safety development plans. Responsibilities include participation on project teams, designing and conducting GLP studies, and preparing final reports. Individual must be highly organized, have excellent written and oral communication skills, and Study Director experience. Minimum qualifications are Ph.D/DVM in toxicology, pathology or related field, 8-10 years of direct experience and DABT or equivalent. Experience in a biotechnology setting preferred.


All of our positions encourage creative thinking! GTI offers a stimulating and innovative environment with competitive salaries and benefits. Please specify job code 293-036-8 when applying. Fax or send curriculum vitae to:

Genetic Therapy, Inc.
938 Clopper Road
Gaithersburg, MD 20878
Fax: (301) 208-2481
Email: gti.jobs@pharma.novartis.com



NOVARTIS

Genetic Therapy is an Equal Opportunity Employer.



BLOOD RESEARCH

A chance to make a difference


At the New York Blood Center, we find new ways to make a difference every day. As the nation's pre-eminent independent blood research, collection and distribution organization, we're committed to using our ground-breaking research to develop life-saving products. As we prepare to undertake new research grants, and facilitate findings in existing studies, we are seeking candidates for the following openings in **Dr. Jan W. M. Visser's Laboratory of Stem Cell Biology:**

2 Post-Doctoral Fellows

The first one will conduct scientific research on the adhesion and homing of transplanted hemopoietic stem cells in a newly awarded 3-year project. Position requires an M.D. or Ph.D Degree in Biology, Medicine or other related discipline, along with a background in molecular biology procedures. Prior experience in stem cell studies and knowledge of the following special procedures are preferred: flow cytometry, in situ hybridization, gene expression analysis.

The second Fellow will join a team conducting research on the role of newly discovered genes in the regulation of hemopoiesis. This appointment is for 2 years. Candidates must have an M.D. or Ph.D Degree in Biology, Medicine or other related discipline, as well as experience in molecular and/or structural biology, ideally with hemopoietic cells.

In addition to a marked chance to make a difference, you will enjoy a competitive salary and comprehensive benefits package. For consideration, please fax (212)468-2082, email: careers@ccmail.nybc.org, or send your CV with a list of publications and 3 names of references, to: **Human Resources Dept-MK, New York Blood Center, 150 Amsterdam Avenue, NY, NY 10023, U.S.A.** For additional information visit our website or email: jvisser@nybc.org. EOE M/F/D/V



New York Blood Center

Where concern for the community comes first.

www.nybloodcenter.org

POSITIONS OPEN

FELLOW IN ENVIRONMENTAL SCIENCE NATIONAL SCIENCE FOUNDATION

Colby College invites applications for a 21-month NSF AIRE Fellowship in environmental science. As one of ten NSF AIRE award recipients, Colby College has been recognized as a leader and innovator in creating synergy between its research and educational missions. This position is one of four AIRE Fellowships in the natural sciences at Colby. The successful candidate will be expected to work with senior faculty mentors to make contributions to our student research courses in environmental science and science, technology, and society. The Fellow should have experience with GIS systems and will help enhance our GIS capabilities. Responsibilities will also include developing materials for several student research projects based on local issues that cut across several disciplines. In the second year, the Fellow will teach a January course on GIS and a distribution course in the person's area of expertise. AIRE Fellows will receive some travel and research funds. Applicants should arrange for a curriculum vitae, statement of teaching and research interests, transcripts, and three letters of recommendation to be sent to: **David Firmage, Director, Environmental Studies, Colby College, Waterville, ME 04901. E-mail: dhfirmag@colby.edu.** Applicant screening will begin March 15, 1999, and will continue until the position is filled. For more information about the College and the AIRE Fellowship, please see the Colby website: <http://www.colby.edu/NSF-AIRE/>. Colby is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minority candidates.

Neurobiology RESEARCH-TRACK POSITIONS available immediately for an Integrative and/or Cellular Neurophysiologist to study membrane properties, synaptic integration, and plasticity in mammalian olfactory bulb and piriform cortex. Demonstrated experience and publications in intracellular or patch-clamp recording in slices, or infrared voltage/Ca-sensitive dye imaging required. Competitive salary and fringe benefits. Opportunity to interact with neuroscientists in the department (**website: <http://neurobiology.umaryland.edu/>**) and the interdisciplinary Neuroscience Program (**website: <http://neuroscience.umaryland.edu/>**). Applicants should have a Ph.D. and/or M.D. Excellent oral and written communication skills are required. Send curriculum vitae and names, addresses, and telephone numbers of three references to: **Dr. M. Ennis/M. Shipley, Department of Anatomy and Neurobiology, University of Maryland School of Medicine, 685 West Baltimore Street, Baltimore, MD 21201. E-mail: mennis@umaryland.edu.** The University of Maryland is an Affirmative Action/Equal Employment Opportunity/ADA Employer. Minorities and women are encouraged to apply.

Applications are invited for a **FULL-TIME POSITION** (nine months; rank open) to begin fall 1999. Ph.D. and postdoctoral research experience in invertebrate biology or marine ecology required. The successful candidate is expected to develop a strong, funded research program; to direct graduate students at the M.S. and Ph.D. levels; to teach two undergraduate courses (invertebrate zoology, marine ecology) and other courses related to the candidate's research interests; and to supervise, maintain, and develop the department's computer-based instructional facility. Submit a curriculum vitae, a concise statement of research and teaching interests, selected reprints, and the names, addresses, telephone numbers, and e-mail addresses of three references to: **Dr. Richard L. Turner, Chair, Marine Biology Search Committee, Department of Biological Sciences, Florida Institute of Technology, 150 West University Boulevard, Melbourne, FL 32901-6975. Telephone: 407-674-8196; FAX: 407-674-7238; e-mail: rturner@fit.edu; website: <http://www.fit.edu/AcadRes/csla/>.** An Equal Opportunity Employer.

ASSOCIATE SPECIALIST. Position available immediately to conduct independent research in cellular differentiation and tissue-specific cell death in the maize leaf using molecular and genetic approaches. Applicants must have Ph.D. in genetics or related field and at least four years of directly applicable, postdoctoral laboratory experience. Initial appointment is for 12 months; salary commensurate with experience. Please send curriculum vitae, list of publications and research experience description to: **Mike Freeling, Department of Plant and Microbial Biology, University of California Berkeley, Berkeley, CA 94720. E-mail: freeling@nature.berkeley.edu.** Deadline is March 12, 1999. UC Berkeley is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

BIOLOGY/STATISTICS RESEARCH AND TEACHING POSTDOCTORAL POSITION

Grinnell College is seeking a Postdoctoral-level Biologist or Statistician with significant experience in both disciplines who has a strong interest in undergraduate liberal arts education. The two-year position is funded through an AIRE grant from NSF and requires U.S. citizenship. The successful candidate will be expected, in collaboration with one or more Grinnell faculty members, to participate in an ongoing research program involving undergraduates. Possible research areas include methods of statistics pedagogy and the evolution and ecology of plants, fungi, and insects. The successful candidate will also contribute to the integration of statistical concepts into new introductory biology courses and to the development of various statistics courses. Questions may be addressed to: **Tom Moore, Department of Mathematics, e-mail: mooret@ac.grinnell.edu or Jackie Brown, Department of Biology, e-mail: brownj@ac.grinnell.edu.** Information about Grinnell College and faculty research programs is available at **website: <http://www.grinnell.edu>**.

Applicants should submit a curriculum vitae, a brief description of past, current, and planned research interests, and a statement describing their philosophy of undergraduate education and long-range career plans, along with a list of references and copies of transcripts to: **Biology/Statistics Search, Grinnell College, P.O. Box 805, Grinnell, IA 50112.** To be assured of consideration, materials should be submitted by March 15, 1999. Grinnell College is an Equal Opportunity/Affirmative Action Employer committed to employing a highly qualified staff which reflects the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender, sexual orientation, marital status, religion, creed, or disability.

CLINICIAN INVESTIGATOR

The Division of Endocrinology and Metabolism, University of Virginia, School of Medicine, is seeking a full-time, Clinician Investigator at the rank of **ASSISTANT or ASSOCIATE PROFESSOR**, tenure-track to complement its established research, teaching, and clinical programs. The faculty rank and salary will be consistent with previous accomplishments. Applicants should show strong potential to develop and maintain an independent research program related to the causes or complications of diabetes mellitus. The candidate should also demonstrate good clinical skills in endocrinology and metabolism. Board certification/eligibility in endocrinology and metabolism is required. Excellent laboratory space and start-up packages are available. Please send updated curriculum vitae and names of three references to: **Jerry L. Nadler, M.D., Search Committee, Chair, Department of Internal Medicine, Box 466, University of Virginia Health Sciences Center, Charlottesville, VA 22908.** The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

Oceanography. RESEARCH SCIENTIST. Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, Maine, invites applications for a new **PRINCIPAL INVESTIGATOR** position to conduct basic research on processes affecting biological productivity of the oceans and coastal seas. A full description of opportunities and the work of Bigelow Laboratory is available at **website: <http://www.bigelow.org>**. To apply, please send a letter expressing your research interests, a curriculum vitae, and the names of three references to: **Chair, Principle Investigator Search Committee, Bigelow Laboratory for Ocean Sciences, P.O. Box 475, West Boothbay Harbor, ME 04575. Telephone: 207-633-9600.**

POSTDOCTORAL POSITION available immediately to investigate the molecular mechanism of protein import into chloroplasts. The project will involve the characterization of protein import components using combined biochemical and molecular genetic approaches in *Arabidopsis*. Qualified applicants should have a strong background in biochemistry and molecular biology. Send curriculum vitae with references and cover letter to: **Dr. D. Schnell, Rutgers University, Department of Biological Sciences, 101 Warren Street, Newark, NJ 07102. E-mail: schnell@andromeda.rutgers.edu.**

Seeking **POSTDOCTORAL FELLOW** to join productive research team in the exciting area of molecular reproductive endocrinology. Please send your résumé and names of three references to: **Dr. O. K. Park-Sarge, Department of Physiology, University of Kentucky, 800 Rose Street, Lexington, KY 40536-0084. E-mail: okps@pop.uky.edu.**

POSITIONS OPEN

COORDINATOR GENERAL BIOLOGY PROGRAM

The College of Sciences and Mathematics at Auburn University seeks nominations and applications for an individual to coordinate its general biology program (4,500 undergraduate students per year). A Ph.D. in some area of the biological sciences is required, with a demonstrated commitment to excellence and scholarship in university biology teaching. This is a tenure-track position; rank, salary, and academic appointment will depend on the qualifications and background of the selected individual. The candidate will teach within the general biology program and provide leadership for the biology teaching faculty to insure that the lecture and laboratory curricula are contemporary and consistently implemented. Candidates with scholarly activities in one or more of the following areas are preferred: peer-reviewed grant support in biology education; publication of peer-reviewed manuscripts on biology instruction; and papers presented at professional meetings, leading to the establishment of a nationally recognized instructional program in general biology. Evaluation of applicants will begin March 1, 1999, with a projected start date of June 1, 1999. Applications should include a curriculum vitae, a visionary statement for instruction in general biology in the next century, and the names, addresses (including e-mail), and telephone numbers of three individuals who can serve as references. This material should be sent to: **Dr. Robert D. Locy, Chair, General Biology Search Committee, College of Sciences and Mathematics, Extension Cottage, Auburn University, Auburn, AL 36849-5319.**

NEUROSCIENCE RESEARCH AND TEACHING POSTDOCTORAL POSITION

Grinnell College is seeking a Postdoctoral-level Neuroscientist who has a strong interest in undergraduate liberal arts education. The two-year position is funded through an AIRE grant from NSF and requires U.S. citizenship. The successful candidate will be expected, in collaboration with one or more Grinnell faculty members, to participate in an ongoing research program involving undergraduates. The successful candidate will also work with faculty in the Biology and Psychology Departments to develop and teach a new laboratory course (or courses) in neuroscience. Questions may be addressed to: **Clark Lindgren, Department of Biology, e-mail: lindgren@ac.grinnell.edu or Ken Short, Department of Psychology, e-mail: shortk@ac.grinnell.edu.** Information about Grinnell College and faculty research programs is available at **website: <http://www.grinnell.edu/neuroscience/>**.

Applicants should submit a curriculum vitae, a brief description of past, current, and planned research interests, and a statement describing their philosophy of undergraduate education and long-range career plans, along with a list of references and copies of transcripts to: **Neuroscience Search, Grinnell College, P.O. Box 805, Grinnell, IA 50112.** To be assured of consideration, materials should be submitted by March 15. Grinnell College is an Equal Opportunity/Affirmative Action Employer committed to employing a highly qualified staff which reflects the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender, sexual orientation, marital status, religion, creed, or disability.

POSTDOCTORAL POSITION IN ELECTROPHYSIOLOGY

Starting immediately for one year. Renewal possible with pending grant. To study the role of K⁺ currents in brain slices of normal vestibular nuclei neurons and after vestibular nerve lesion. Experience desirable in patch-clamp recording and pharmacological testing, with a strong background in biophysics.

Send curriculum vitae and names of three references to: **Dr. K. Peusner, Department of Anatomy and Cell Biology, George Washington University Medical College Center, 2300 I Street N.W., Washington, DC 20037. E-mail: anakdp@gwumc.edu.**

POSTDOCTORAL POSITION funded by ACS available immediately to study protein DNA: recognition and engineering of new DNA binding function using phage display, structural modeling, and rationale design, for the purposes of developing anticancer protein therapeutics (see: *NAR* 27:4, 1999). Strong background in molecular biology and protein:DNA interactions desirable. Send curriculum vitae and names of three references to: **Dr. Christopher Francklyn, Department of Biochemistry, University of Vermont College of Medicine, Burlington, VT 05405. FAX: 802-862-8229; e-mail: franck@emba.uvm.edu.**



**HOLLAND LABORATORY
VASCULAR BIOLOGY
AMERICAN RED CROSS**

Applications are invited for a faculty position in the Department of Vascular Biology. The successful candidate will be expected to (1) establish an independent basic research program that complements existing department programs. These include identifying and characterizing growth factor-regulated genes, studying the molecular basis for the angiogenic response, investigating the structure and biology of LDL receptor family members and characterizing the role of integrins in facilitating the response of leukocytes to inflammation; (2) serve as a mentor to graduate students through a program with nearby George Washington University; and (3) obtain extramural funding after an initial period of support. The exact area of research is less important than the caliber of the individual and the prospects for synergy with members of the department and other members of the Holland Laboratory. Applicants should send a curriculum vitae, a brief statement of research interests, and three letters of reference to: Vascular Biology Search Committee, Dept. of Vascular Biology, Jerome Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. Review of applications will begin immediately and continue until the position is filled. EOE, M/F/D/V.



Postdoc/Scientist Positions

4 positions are available in the Laboratory of Genetics, National Institute on Aging (NIA), Intramural Research Program, Baltimore, MD, <http://www.grc.nia.nih.gov/branches/lg/lg.htm>.

1) One postdoc position is available in Dr. Weidong Wang's group (Transcription Regulation and Remodeling Unit) for studies of their newly-identified ATP-dependent chromatin-remodeling complexes (G&D 10:2117; Cell 95:625; Mol. Cell 2:851) and helicase complexes involved in gene expression, replication and repair. Approaches include purification of complexes, microsequencing and cloning of new subunits, analysis of the roles of subunits during development, differentiation and human diseases.

2) Dr. Wang is also looking for a protein biochemist to run a Mass Spectrometry Facility for proteomics studies, including mapping proteins by HPLC, analyzing peptides by MS, and computer-assisted data processing. Candidates should have BS or MS degree in Biochemistry or Chemistry, with protein expertise.

Two postdoc positions are in Dr. Minoru S. H. Ko's group (Developmental Genomics and Aging Section):

1) To study global changes of gene expression during pre-implantation mouse development (HMG 7: 1967), utilizing state-of-the-art microarray technology with a set of more than 10,000 unique genes from mouse embryos. Molecular biology and mouse developmental biology required, preferably with microinjection and nuclear transfer experience.

2) Analyze sequences from large-scale cDNA and genomic DNA sequencing projects, with particular focus on the mouse t-complex and cDNAs derived from pre- and peri-implantation mouse embryos and germ line cells, including primordial germ cells. Candidates should be conversant with current sequence analysis programs, and with Unix and Windows NT and MAC platforms. Experience in promoter and gene structure analysis desirable; knowledge of mouse genetics and embryology an advantage.

The NIA is an equal opportunity employer. Send CV with 3 reference letters to A. Michaelis, NIH-NIA-IRP-LG, 333 Cassell Drive, Suite 4000, Baltimore, MD 21224, or email to: MichaelisA@grc.nia.nih.gov, by February 25, 1999.



Scientist - Writer I

Science's Next Wave (www.nextwave.org) is looking for a Ph.D. level scientist who received his or her training in the life or biomedical sciences to cover postdoctoral and junior faculty stages of scientific career development. Successful candidate will write articles and features on scientific training and career development; develop original ideas for full-length articles and features on the academic job market; build an online network of scientists; work with freelance writers to develop online grants writing seminar series. This is a full-time regular position for an initial period of one year. Excellent writing and verbal communication skills required; non-technical writing experience preferred; previous involvement with online projects a plus. Apply with cover letter/ resume/ examples of non-technical writing/ and a 500-word essay on 1-2 professional issues that academic scientists face. For immediate consideration send above materials to: AAAS, Human Resources Department, 1200 New York Ave., NW, #101-029, Washington, DC 20005. EOE. Nonsmoking work environment.

National Institutes of Health

National Institute of Allergy and Infectious Diseases Confocal Microscopist

The National Institute of Allergy and Infectious Diseases (NIAID) seeks a dynamic individual to run its newly established Advanced Microscopy/Imaging Facility. The individual will manage a centralized Leica TCS SP Scanning Confocal Microscope with 4 lasers and an imaging spectrophotometer. The facility will also include non-confocal microscopy image capture and analysis technologies. The facility manager must be able to interact closely with a diverse research staff within NIAID, provide microscopy services, consultations, training, and technical user support, as well as be able to select, operate, and maintain equipment. Preference will be given to qualified candidates with extensive microscopy/imaging experience and demonstrated expertise in confocal microscopy. Salary will depend upon experience and qualifications. Interested candidates must submit a curriculum vitae, bibliography, three letters of reference, and a statement of their vision of the components and mode of operation of a multiuser, advanced light microscope facility by **March 19, 1999**, to Dr. Jonathan Yewdell, Search Committee Chair, 4 Center Drive, MSC 440, Bethesda, MD 20892-0440.

NIH is an Equal Opportunity Employer

POSITIONS OPEN

MOLECULAR BIOLOGIST/BIOCHEMIST RESEARCH AND TEACHING POSTDOCTORAL POSITION

Grinnell College is seeking a Postdoctoral-level Molecular Biologist/Biochemist who has a strong interest in undergraduate liberal arts education. The two-year position is funded through an AIRE grant from NSF and requires U.S. citizenship. The successful candidate will be expected, in collaboration with one or more Grinnell faculty members, to participate in an ongoing research program involving undergraduates. Research areas include starvation and DNA repair genes in prokaryotes and lens development in chicks. The successful candidate will also work with faculty in the biology and chemistry departments to develop new sophomore-level courses in cellular/molecular biology and an introduction to biochemistry. Questions may be addressed to biology faculty members **Bruce Voyles** (e-mail: voyles@ac.grinn.edu), **Leslie Gregg-Jolly** (e-mail: greggj@ac.grinn.edu), or **Charles Sullivan** (e-mail: sullivan@ac.grinn.edu). Information about Grinnell College and faculty research programs is available at website: <http://www.grinnell.edu>.

Applicants should submit a curriculum vitae, a brief description of past, current, and planned research interests, and a statement describing their philosophy of undergraduate education and long-range career plans, along with a list of references and copies of transcripts to: **Molecular Biologist/Biochemist Search, Grinnell College, P.O. Box 805, Grinnell, IA 50112**. To be assured of consideration, materials should be submitted by March 15. Grinnell College is an Equal Opportunity/Affirmative Action Employer committed to employing a highly qualified staff that reflects the diversity of the nation. No applicant shall be discriminated against on the basis of race, national or ethnic origin, age, gender, sexual orientation, marital status, religion, creed, or disability.

POSTDOCTORAL or RESEARCH ASSISTANT positions available starting April 1, 1999, in the general area of cell and molecular biology. Several molecular areas of research are available to the successful applicants such as P-type pump mechanisms and site-directed mutagenesis; trafficking of plasma membranes and vesicles; means of generation of membrane topology; yeast two hybrid analysis of interacting proteins; bacterial bioenergetics and bile acid transport. Cells of interest involve transfected cells in culture; parietal cells; endocrine cells; integrated cell populations and the isolated bacteria. Methods of study involve modern molecular and state-of-the-art cell techniques such as video imaging, confocal microscopy of superfused preparations, electron microscopy, cell injection methods, kinase activity measurements. Experience in one or more of these areas during training or previous postdoctoral research desirable.

Applicants should apply to, along with three references to:

George Sachs, M.D. D.Sc.
Building 113, Room 324
West Los Angeles Medical Centre
Los Angeles, CA 90073

GRADUATE AND POSTDOCTORAL FELLOWSHIPS IN CANCER BIOLOGY University of Wisconsin-Madison

The Department of Human Oncology and the University of Wisconsin Comprehensive Cancer Center invite applications for several competitive NIH-funded Predoctoral and Postdoctoral Fellowships. Postdoctoral positions beginning before April 30, 1999, are open to Ph.D.'s (or equivalent) who have a strong background in biochemistry, cell biology, molecular biology, genetics, immunology, or related fields, and who wish to apply their skills to cancer-related problems. Fellowship applications for graduate study leading to a Ph.D. in cancer biology, beginning September 1999, are due no later than March 15, 1999, but early applications are strongly encouraged. All positions are open to U.S. citizens or permanent residents, only. For information see website: <http://www.medsch.wisc.edu/cancerbiology/> or contact:

The Director, Program in Cancer Biology
K4/548 CSC
University of Wisconsin
600 Highland Avenue
Madison, WI 53792
E-mail: humcabio@mac.wisc.edu

POSITIONS OPEN

SAVANNAH STATE UNIVERSITY UNIVERSITY OF SYSTEM OF GEORGIA SAVANNAH, GEORGIA 31404 Announces an Employment Opportunity

Title: **POSTDOCTORAL RESEARCH ASSOCIATE** in marine, environmental science, biotechnology (two positions, temporary, full time).

Position description: Responsible for gaining experience and skills needed for establishing an externally funded research program in marine sciences, environmental sciences, and/or biotechnology; establishing an externally funded research program in marine sciences, environmental sciences, and/or biotechnology; assisting with curricular development in one or more of these areas; and contributing to the mission and goals of the Title III Center for Marine, Environmental Science, and Biotechnology Research. The Department of Biology and Life Sciences, College of Sciences and Technology, and University. Funded by the Savannah State University Title III Program.

Qualifications: Candidates must hold or be nearing completion of an earned Ph.D. in marine sciences, environmental sciences, or biotechnology. Cross-disciplinary expertise among these areas will be useful. Date available: Open until filled. Application deadline: Open until filled. How to apply: Send applications and nominations including a current curriculum vitae or résumé, names, addresses, e-mail addresses, and telephone numbers of three references; and a letter summarizing research/teaching experience and career goals to:

Office of Human Resources
Savannah State University
P.O. Box 20601
Colston Administration Building, Room 120
Savannah, GA 31404

Savannah State University is an accredited senior unit of the University System of Georgia with an enrollment of approximately 2,000 students located in the historic port city of Savannah. The University is close to beaches and resorts of the Atlantic coast. Historically, a predominantly Black institution, it is committed to developing and implementing curricula and public service activities that address the issues and problems of urban and coastal communities.

Savannah State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097. Telephone: 404-679-4501) to award Associate and Baccalaureate degrees and is a candidate for accreditation to award the Master's degree.

POSTDOCTORAL FELLOW

The University of Medicine and Dentistry of New Jersey-Cancer Institute of New Jersey has the following Postdoctoral Fellow position available.

CaM K III. Position available immediately to study the role of the novel protein kinase elongation factor-2 kinase (CaM kinase III) (*PNAS* 94:4884, 1997) in cellular proliferation and in the growth of cancer cells. Recent Ph.D. and/or M.D. with training in biochemistry, genetics, or comparable field of study is required. Experience in transgenic and gene knockout technologies, cell culture, and animal experimentation is essential. Expertise in molecular biology or cell signaling techniques would be an advantage.

Please submit curriculum vitae to: **William N. Hait, M.D., Ph.D., The Cancer Institute of New Jersey, 195 Little Albany Street, New Brunswick, NJ 08901**. Regrettably, we can only respond to those candidates chosen for an interview. Visit our website: <http://www.umdj.edu/hrweb/>. UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans, and a member of the University Health System of New Jersey.

POSTDOCTORAL POSITION IN NEUROSCIENCE

Available immediately in the Department of Neuroscience to study structure and function of channels formed of connexins. Studies will focus on channel formation and will combine mutagenesis with patch clamping and fluorescence imaging. Successful candidates should have a Ph.D. and a strong background in molecular biology. Send curriculum vitae and the names of three references to: **Dr. V. K. Verselis or Dr. F. F. Bukauskas, Department of Neuroscience, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461**. Telephone: 718-430-3680; e-mail: verselis@aecom.yu.edu. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS MOLECULAR GENETICS, BIOCHEMISTRY, MICROBIOLOGY University of Cincinnati College of Medicine

Positions are available with the following faculty: **John Monaco**. Immunogenetics, antigen-processing, proteasome biochemistry. **Joanna Groden**. Identification and characterization of genes and proteins that predispose to cancer. **Jim Stringer**. Genetic instability during mammalian cell differentiation and cancer development. **Tony Capobianco**. Molecular mechanisms of Notch signaling in neoplasia. **David Robbins**. Hedgehog signal transduction pathway in development and cancer. **Shelly Barton**. Gene regulatory mechanisms, chromatin, and synthetic nuclei. **David Wiczorek**. Alternate mRNA splicing and regulation of muscle gene expression. **Mark Rance**. NMR studies, structure and dynamics of proteins and RNA, solution-state NMR spectroscopy. **Paul Rosevear**. Structure-function, calcium regulation of cardiac muscle contraction; RNA-protein interactions. **Jerry Lingrel**. Na,K-ATPase gene regulation, structure-function studies, transcription factors, development. **Gary Shull**. Ion-transport proteins in cardiac function and control of arterial blood pressure, gene targeting. **Dan Hassett**. Reactive oxygen intermediates, iron limitation, and mucoidy in *Pseudomonas aeruginosa*.

Select one or more faculty to receive your curriculum vitae and send to:

Jim Stringer
Department of Molecular Genetics, Biochemistry,
and Microbiology
University of Cincinnati College of Medicine
231 Bethesda Avenue
Cincinnati, OH 45267-0524
E-mail: stringjr@ucmail.uc.edu
Website: <http://www.molgen.uc.edu>

POSTDOCTORAL POSITION. Massachusetts General Hospital, signal transduction and diabetes. A Postdoctoral position is available immediately to study the role of the SAPKs/JNKs, p38s, and Rho family GTPases in diabetic renal and cardiac hypertrophy. The project is a collaboration between **Dr. Thomas Force**, **Dr. Joseph Bonventre**, and **Dr. John Kyriakis**. Applicants should have less than two years of postdoctoral training. Experience with biochemistry and either cell or molecular biology are required; experience in signal transduction is preferred but not required. Send curriculum vitae, statement of research interests, and three reference letters to: **John Kyriakis, Diabetes Research Laboratory, Massachusetts General Hospital, East 149th Street, Charlestown, MA 02129**. E-mail: kyriakis@helix.mgh.harvard.edu.

The Wellman Laboratories of Photomedicine has an opening for a **POSTDOCTORAL RESEARCH FELLOW**. The Fellow will join a team of Investigators developing methods for drug delivery. Candidates should have demonstrated the ability to work independently and have experience working with cell culture, *ex vivo* tissue, and animals. Salary commensurate with experience and qualifications. Send curriculum vitae to: **Shun Lee, Ph.D., Massachusetts General Hospital, WEL 224, 50 Blossom Street, Boston, MA 02114**. E-mail: lee@helix.mgh.harvard.edu. Massachusetts General Hospital is an Equal Opportunity/Affirmative Action Employer. Applications from women, minorities, disabled, and veterans are encouraged.

A **POSTDOCTORAL POSITION** is available immediately for a Ph.D. or M.D. to study the pathogenesis of human and murine insulin-dependent diabetes and potential immunotherapeutics.

Experience in cellular immunology preferred. Send curriculum vitae, reprints, and names and telephone numbers of references to:

Daniel L. Kaufman
Department of Molecular and Medical Pharmacology
University of California, Los Angeles
Los Angeles, CA 90095-1735

POSTDOCTORAL POSITION available immediately to study oligosaccharide transport and metabolism in Gram-positive bacteria. Experience in microbial physiology, biochemistry, and molecular biology is required. Send curriculum vitae and names and addresses of three references to: **Bob Hutkins, University of Nebraska, Department of Food Science and Technology, 338 FIC, Lincoln, NE 68583-0919**. Telephone: 402-472-2820; e-mail: bhutkins@foodsci.unl.edu.



POSITION ANNOUNCEMENTS

LIVESTOCK GENETICIST – PROJECT COORDINATOR DEVELOPMENT OF DISEASE RESISTANT LIVESTOCK — REF:PCDL/01/99

DIRECTOR OF BIOSCIENCES RESEARCH, ILRI-KENYA — REF:DBR/01/99

The International Livestock Research Institute (ILRI) is a non-profit international research organisation, serving a global mandate to improve productivity of small-holder livestock systems and to protect the natural resources that support these systems. ILRI has staff and activities in Latin America, Asia and Africa, headquarters in Nairobi and principal facilities in Kenya and Ethiopia. ILRI is one of the 16 research centres supported by the Consultative Group of International Agricultural Research (CGIAR), which comprises over 55 member countries, international organisation and foundations. The co-sponsors for the CGIAR are the World Bank, the Food and Agriculture Organization (FAO), the United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP).

ILRI has strong programmes of research in the areas of animal genetics and health improvement and of ways to effectively apply the results of this research to enhance livestock productivity.

LIVESTOCK GENETICIST — Project Coordinator, Development of Disease Resistant Livestock

The successful candidate will join a multi-disciplinary team in the Biosciences Programme, reporting to the Programme Director. The incumbent is responsible for scientific leadership and the management of the centre project area, which currently includes operational projects, based in Africa and Asia conducting research on the genetics of resistance to trypanosomosis in cattle and laboratory animals, and the genetics of resistance to helminths in small ruminants and laboratory animals. He/she is required to manage project funds and to play a major role in identifying and obtaining new sources of funding. Development and coordination of collaborative projects with other laboratories is an important component of the work.

Qualifications:

A PhD degree or equivalent, with appropriate specialisation in animal molecular and/or quantitative genetics, 10 or more years relevant research and management experience, and an extensive publication record are required. The successful candidate will also have experience in QTL technology and its application in breeding programmes and a good understanding of the patterns of genetics of disease resistance, preferably with appropriate developing country experience. In addition, good communication and interpersonal skills, an ability to perform in a multi-disciplinary and multi-cultural research environment and fluency in spoken and written English are essential.

DIRECTOR OF BIOSCIENCES RESEARCH

The Director of the Biosciences Programme has responsibility for the planning, management and execution of the Programme with special emphasis on fund-raising, donor interactions, liaison with ARIs and NARSs, and public awareness.

ILRI's Biosciences Programme conducts research aimed at identifying and reducing constraints that limit livestock productivity in developing countries, particularly in the small-holder farming sector. While the major focus is in sub-Saharan Africa, the Programme is also developing new initiatives in association with scientific groups in Asia, Latin America and in West Asia and North Africa.

The Programme comprises 10 projects (each led by a Project Coordinator) covering animal genetics, animal health and animal feed resources. Application of modern technologies in: molecular biology, molecular genetics, immunology, phytochemistry, microbiology, epidemiology, livestock nutrition and veterinary medicine underpin the research programmes that contribute to:

- Identification, characterisation and development of disease-resistant breeds of livestock
- Development of new vaccines and improved diagnostics for control of blood-borne and other parasitic infections of livestock
- Improved feeding strategies and better livestock forages for enhancing livestock nutrition.

Linkages with Advanced Research Institutes (ARIs) in developed countries provide essential expertise to support the Biosciences research, and links with ILRI's Sustainable Production Systems Programme and with National Agricultural Research Systems (NARSs) provide the delivery pathways for testing, validation and delivery of the research products from the Biosciences Programme.

Qualifications and Experience:

A PhD or equivalent is required. In addition the successful candidate will have a strong research background in one of the 3 major disciplines (animal genetics, health or nutrition), supported by a significant publication record, and at least 10 years experience of working in developing countries (preferably in more than one continent). He/she will also be conversant with the issues facing the livestock sector in developing countries and of the constraints to improving livestock productivity. In addition he/she will have leadership experience at the senior level and be able to demonstrate the vision needed to develop this complex programme, capitalising on new funding opportunities and potential linkages, for example with human medicine and genetics. Preference will be given to candidates with experience in fund raising and donor relations.

Location for both Positions: Nairobi, Kenya

Conditions of appointment:

The initial contract for these positions will be for a three-year term with the possibility of extension. Salary, dependent on experience, will be denominated in US dollars. ILRI provides internationally competitive compensation and benefits. On-site, furnished accommodation is provided, subject to availability, or in the absence of same, a house allowance.

Applications:

Applicants should send a cover letter, curriculum vitae and the names and addresses (including telephone, fax and email) of three referees to the **Human Resources Manager, ILRI, P.O. Box 30709, Nairobi, Kenya; Telephone: 254-2-630743; Fax: 254-2 631499; email: ILRI-KENYA@cgiar.org**. Screening of applications for both positions will begin on 22nd March 1999 and will continue until the post is filled.

To find more about ILRI, visit our Website at <http://www.cgiar.org/ilri>.

ILRI is an equal opportunity employer. Qualified women and professionals from developing countries are particularly encouraged to apply.

POSITIONS OPEN

POSITIONS IN PHYSIOLOGY

The University of Alberta, Department of Physiology, invites applications from highly qualified individuals for positions as **RESEARCH SCHOLAR** at the level of **ASSISTANT PROFESSOR** in the fields of endocrinology and cardiovascular physiology. The salary range is \$40,638 to \$57,510. These positions will be funded through an external agency for an initial period of five years, but the incumbent will enjoy the privileges of the University academic rank of Assistant Professor. The granting of these awards is by competition and is made on the basis of excellence, and applicants will need an academic record commensurate with the expectations of these agencies. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered.* Applications, including a curriculum vitae, a statement of research interests and objectives, and the names of three referees, should be sent to: **Dr. E. J. Sanders, Professor and Chair, Department of Physiology, University of Alberta, Edmonton, Alberta T6G 2H7 Canada.** Closing date is March 15, 1999. *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 disability, and members of visible minorities.*

NatureMark Potatoes. Monsanto Company invites applicants for a **POSTDOCTORAL ASSOCIATE** position opening in the vector construction team. This position involves design and evaluation of various molecular approaches to stacking of multiple transgenic traits, and optimization of transgene expression in potato. Applicants should have a strong background in plant molecular biology and gene expression, and in-depth knowledge of plant transformation techniques. The position is based in St. Louis, Missouri, and offers a creative research and communication environment.

Please send a letter of application, curriculum vitae, and three letters of reference by March 31, 1999, to: **Dr. Alex Borovkov, AA31, Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO 63198.** *Monsanto is an Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS PROTEIN CRYSTALLOGRAPHY

To study macromolecular complexes and the role of protein-protein interactions in apoptosis, integrin signal transduction, and cancer. Protein Crystallographers who are highly motivated with a strong background in protein characterization and/or molecular biology are preferred. Send curriculum vitae and the names of three references to: **Dr. Kathryn Ely, Director, Molecular Anatomy of the Cell Program, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS available at the National Institutes of Health in Phoenix, Arizona to study the molecular basis of susceptibility to type 2 diabetes, obesity, and related phenotypes. This includes gene identification and mapping, mutation screening, and analysis of gene expression. Experience in molecular biology, genetics, and cell culture preferred. Send curriculum vitae and the names of three references to: **Dr. Michal Prochazka, CDNS/NIH, 4212 North 16th Street, Phoenix, AZ 85016.** FAX: 602-200-5335.

POSTDOCTORAL POSITION available immediately to study the expression and function of genes involved in blood pressure regulation. Studies will involve characterization of transcription factors and use of transgenic mouse models of hypertension. Molecular biology or cell biology experience is preferable. Please send curriculum vitae and names of three references to: **Diane Handy, Ph.D., Department of Medicine W508, Boston University School of Medicine, 715 Albany Street, Boston, MA 02118.**

Two **POSTDOCTORAL POSITIONS** available to study molecular mechanisms underlying long-lasting neuronal plasticity. Experience in molecular biology or biochemistry is required. Send curriculum vitae and names of three references to: **P. Dash, University of Texas Medical School, Neurobiology and Anatomy, P.O. Box 20708, Houston, TX 77225.** Telephone: 713-500-5575; e-mail: pdash@nba19.med.utmc.edu. *Equal Opportunity Employer/Affirmative Action/Smoke-free.*

POSITIONS OPEN



MAYTAG POSTDOCTORAL RESEARCH ASSOCIATE ARIZONA STATE UNIVERSITY

One-year (with the possibility of a one-year extension) Postdoctoral Research appointment emphasizing collaborative research with a faculty member in the Department of Biology. Applicants must send the following to the faculty member with whom they propose to collaborate: (1) curriculum vitae, (2) three letters of recommendation, (3) reprints of publications, (4) description of previous research, and (5) description of the collaborative research plan.

Applicants must have received a Doctoral degree in biology or related area prior to appointment, and must not currently hold a permanent faculty position. Desired qualification is an innovative research proposal in cell and developmental biology, physiology, ecology, evolution and behavior, history and philosophy of biology, and/or genetics. Application deadline: March 31, 1999. Starting date: August 1, 1999. Applications from two individuals wishing to share this position will be considered.

A list of faculty members, their research interests, and an application checklist may be obtained either from: **The Maytag Search Committee, Department of Biology, P.O. Box 871501, Arizona State University, Tempe, AZ 85287-1501.** FAX: 602-965-2519. Or via the Department website: <http://ls.la.asu.edu/biology/index.html>. *Arizona State University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL SCIENTISTS WATERSHED BIOGEOCHEMIST OR HYDROLOGIST FULL-TIME, EXEMPT

The Marine Biological Laboratory (MBL) has Postdoctoral Scientist positions available to work with a team of Ecological-Economists, Biogeochemists, Hydrologists, and Modelers that is integrating socioeconomic models with spatially explicit models of land use, biogeochemistry, and watershed hydrology to provide comprehensive assessments of human activities on nutrient, sediment, and water fluxes in coastal watersheds of the Plum Island Sound LTER. This position will be at the MBL Ecosystems Center in Woods Hole, Massachusetts.

Education: We seek individuals with a Ph.D. and expertise in one or more of the following areas: GIS, hydrology, watershed/river/stream biogeochemistry, or mathematical modeling.

Application deadline: Until a suitable candidate is identified.

Send cover letter with position desired, curriculum vitae, statement of research interests, and names and addresses of references to: **Marine Biological Laboratory, Attn: Human Resources, 7 MBL Street, Woods Hole, MA 02543 (reference: PDS-Plum Island).**

Equal Opportunity/Affirmative Action/Non-smoking workplace.

POSTDOCTORAL POSITIONS INSTITUTE FOR HUMAN GENE THERAPY Department of Molecular and Cellular Engineering University of Pennsylvania Health System

Positions available for Postdoctoral Fellows in the laboratory of **Dr. James M. Wilson** to study pathogenesis of cystic fibrosis, molecular virology of adenovirus and adenovirus-associated virus, immunology of gene therapy, and regulated gene expression. Please forward curriculum vitae and the names of three references to:

James M. Wilson, M.D., Ph.D.
Director, Institute for Human Gene Therapy
University of Pennsylvania Health System
Room 204 Wistar Institute
3601 Spruce Street
Philadelphia, PA 19104-4268
E-mail: wilsonjm@mail.med.upenn.edu

POSTDOCTORAL POSITION available immediately studying mechanisms governing insulin signaling using molecular biology and physiological approaches. Ideal candidate should have a Ph.D. or M.D. degree within five years, and background in signal transduction and molecular biology. Application and reference letters to: **Neil Ruderman, M.D., D.Phil., and Zhijun Luo, M.D., Ph.D., c/o Tomoko, Diabetes Unit, Boston Medical Center, 88 East Newton Street, E211, Boston, MA 02118.**

POSITIONS OPEN

NIH POSTDOCTORAL POSITION available for joint work in the Nuclear Magnetic Resonance Unit (**Richard Spencer**, Chief) and in the Laboratory of Cardiovascular Sciences (**Edward Lakatta**, Chief) of the National Institute on Aging of the NIH in Baltimore, Maryland. Initial work will center on spectroscopic studies of myocardial metabolism related to (i) congestive heart failure and (ii) β -adrenergic stimulation of the heart. Other research opportunities may be available depending on the interests and background of the successful candidate.

NMR instrumentation consists of a double-resonance Bruker ABX 1.9T/31 cm Biospec with shielded gradients, and a triple-resonance wide-bore Bruker DMX 400 Avance system with microimaging and solids capability.

A background in NMR spectroscopy or imaging is preferred, although applicants with experience in muscle and cardiac physiology and a strong desire to learn NMR techniques are also encouraged to apply. Applicants must have fewer than five years of postdoctoral experience.

Interested individuals should send or e-mail their curriculum vitae and the telephone numbers and e-mail addresses of three references to: **Dr. Richard Spencer, NMR Unit, NIH/NIA, GRC 4D-08, 5600 Nathan Shock Drive, Baltimore, MD 21224.** Telephone: 410-558-8226; e-mail: spencer@helix.nih.gov; website: <http://www.grc.nia.nih.gov/branches/lcmb/nmr/nmr.htm>.

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION is currently available to investigate the molecular structure of domains from the cystic fibrosis transmembrane conductance regulator (CFTR). The position involves bacterial overexpression of protein, protein purification, limited proteolysis, CD, and NMR. The applicant must have a Ph.D. or M.D. and a strong background in biochemistry and molecular biology; experience with biophysical methods is desirable. Applicants should send a curriculum vitae and three letters of recommendation to: **Dr. Andrew D. Robertson, Department of Biochemistry, University of Iowa, Iowa City, IA 52242.** FAX: 319-335-9570; e-mail: andy-robertson@uiowa.edu. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION

Postdoctoral position available June 1999 to study the importance of mRNA targeting in actin polymerization dynamics and cell polarity. Ph.D. with training in molecular and cell biology to work jointly between two laboratories with complementary approaches. Send curriculum vitae and three letters of recommendation to: **Dr. J. Condeelis and Dr. R. Singer, Institute of Molecular Medicine, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Jack and Pearl Resnick Campus, Bronx, NY 10461.** FAX: 718-430-8996. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available immediately to study the regulation of ribonucleotide reductase (a dinuclear iron protein), using kinetic, spectroscopic, and electrochemical methods. A Ph.D. in biochemistry or chemistry is required; experience in protein purification, kinetics, or electron transfer properties is desirable. Send a curriculum vitae and the names of three professional references to: **Marian Stankovich, Chemistry Department, University of Minnesota, 207 Pleasant Street S.E., Minneapolis, MN 55455** by March 31, 1999. E-mail: stankovi@chem.umn.edu. *The University of Minnesota is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available in the Pulmonary and Critical Care Unit at the Massachusetts General Hospital. Scientist will participate in research involving isolation, fractionation, and characterization of proteoglycans in normal and hypoxic lungs. *U.S. citizenship or permanent residence required.*

Send curriculum vitae to: **Charles A. Hales, M.D., Pulmonary and Critical Care Unit, Massachusetts General Hospital, Bulfinch 148, 55 Fruit Street, Boston, MA 02114-2696.** FAX: 617-726-6878.

POSTDOCTORAL FELLOWSHIP opening in molecular biology/biochemistry. Project includes protein purification, molecular cloning of the gene of the purified protein, and functional studies of the protein. Candidates should have experience in both protein purification and molecular biology. Possibility of long-term position exists. Salary, benefits competitive. Send cover letter, résumé, and names of three references to: **Dr. Lau, Loma Linda University, P.O. Box 7210, Loma Linda, CA 92354.**



Marine Biotechnology Institute POSTDOCTORAL POSITIONS

Molecular Biology/Microbiology/Genetics of Microalgae/Microsensor Analysis

Postdoctoral positions tenable for two to three years are available immediately to study the following subjects:

Kamaishi Institute (3-75-1 Heita, Kamaishi, Iwate 026, Japan)

- (1) Genetics, molecular biology and physiology of green algae, *Chlamydomonas reinhardtii* and *Chlorococcum littorale*.
- (2) Population and functional analysis of microbial consortia which degrade petroleum or phenol.
- (3) Molecular taxonomy of prokaryotic and eukaryotic microorganisms.

Shimizu Institute (1900 Sodeshi, Shimizu, Shizuoka 424, Japan)

- (1) Molecular biology of bacterial intercellular communication.
- (2) Population and functional analysis of naturally occurring biofilms.
- (3) Physiological and microsensor analysis of marine samples.

Candidates should send their curriculum vitae, a statement of research interests and two or more letters of reference by February 28, 1999 to Dr. Shigeaki Harayama (for Kamaishi Institute: phone: +81-193-26-6544, FAX: +81-193-26-6592, e-mail: harayama@kamaishi.mbio.co.jp) or to Dr. Yoshikazu Shizuri (for Shimizu Institute: phone: +81-543-66-9211, FAX: +81-543-66-9255, e-mail: yshizuri@shimizu.mbio.co.jp)

Diversity in the Scientific Workplace

Issue Date: 26 March 1999

Space Res. Deadline: 9 March 1999

Feature your recruitment message in this full-color supplement that acknowledges the benefits of diversity in the scientific workplace.

This issue will be distributed to the attendees of the 5-10 April NOBCChE meeting, San Diego, CA, and the members of several Minority Scientific Organizations.

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Associate Director Partners Healthcare System Center for Minimally Invasive Therapy (CIMIT) Brigham and Women's Hospital



Brigham and Women's Hospital, Massachusetts General Hospital, The Draper Laboratory and Massachusetts Institute of Technology, under the auspices of Partners Healthcare System, have launched a major initiative related to minimally invasive therapy. CIMIT was created to seek new and less invasive ways to perform traditional surgical procedures and endeavors to invent entire new approaches to diagnosis and therapy focusing on interdisciplinary and collaborative research to accomplish this goal.

We are currently recruiting an individual who will lead the program as Director of the Brigham and Women's Hospital CIMIT and who serves as one of the two overall Associate Directors for Partners CIMIT. This position is a critical member of the center's senior management group. The appointment will be at the Associate or Full Professor level at Harvard Medical School.

The successful candidate will have a proven track record of excellence as an innovator in clinical laboratory investigation and experience leading a research program. Because of the interdisciplinary nature of the Center, candidates with clinical and/or research backgrounds in radiology, surgery or medicine or who possess an industrial background are invited to apply.

A letter of interest and CV should be forwarded to:

CIMIT Associate Director
Dr. Steven Seltzer & Dr. Victor Dzau
Brigham & Women's Hospital, PBB3 - Room 339
75 Francis Street, Boston, MA 02115

Brigham and Women's Hospital is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIP IN CELLULAR IMMUNOLOGY NATIONAL CANCER INSTITUTE

Immediate openings exist for full-time Postdoctoral Training Fellowships in the Tumor Immunology Section, Surgery Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland to study the immune response to tumors in humans and in mice.

We seek candidates with experience in cellular immunology. Ongoing projects include the identification of new tumor-associated antigens, the study of immune tolerance to tumor-associated differentiation antigens, and the development of synthetic and recombinant anticancer vaccines.

Send cover letter, curriculum vitae, and statement of research interests to:

Steven A. Rosenberg, M.D., Ph.D.
Chief of Surgery
National Cancer Institute
Building 10, Room 2B42
Bethesda, MD 20892-1502
Telephone: 301-496-4164
E-mail: sar@nih.gov

Selections for these positions will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, gender, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or nonmembership in an employee organization. The NIH is an Equal Opportunity/Affirmative Action Employer.

A two-year **POSTDOCTORAL POSITION** is available immediately to support ongoing research in studies of mouse models of cardiovascular diseases at Albert Einstein College of Medicine. Applicants should have technical experience in NMR and MRI (pulse sequence programming and surface coil/probe design would be a plus) and an interest in cardiovascular function (in particular an interest in diabetes and/or myocardial hypertrophy) or experience in isolated small mammal heart perfusions. Our NMR instrumentation includes a GE Omega 400 WB spectrometer with microimaging accessories designed for studies of mice and a Varian VXR 500 available for perfusion studies. Access is also available to a Bruker DRX 300 and a Bruker DRX 600 for solution NMR studies. A state-of-the-art Ponemah physiology suite and inhalation anesthesia accessories are interfaced to the 400 MHz spectrometer. Salary is competitive and commensurate with experience. Applicants should send a curriculum vitae, three letters of reference, and a statement regarding their NMR/MRI experience and date of availability to: **Dr. Linda A. Jelicks, Department of Physiology and Biophysics, Jack and Pearl Resnick Campus, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: 718-430-8819; e-mail: jelicks@acom.yu.edu. Equal Opportunity Employer.**

POSTDOCTORAL POSITION AT NIH Matrix Metalloproteinases and Extracellular Matrix Remodeling: Genetic and Cell Biologic Approaches

Two positions, for up to five years, available immediately. The laboratory studies the enzymatic and cellular function of matrix metalloproteinases (MMP) and their natural inhibitors (TIMPs). Currently the laboratory focuses on application of genetic approaches to determining MMP and TIMP function and on cell biologic/biochemical approaches to understanding the regulation, extracellular control, and catalytic activation of MMPs. Applicants should have a Ph.D., D.D.S./D.M.D., M.D., or equivalent with strong background in either molecular biology, cell biology, and/or protein biochemistry. Previous postdoctoral research experience desirable. Send curriculum vitae and names of three references to: **Dr. Henning Birkedal-Hansen, Scientific Director, NIDCR, National Institutes of Health, Building 30, Room 132, 30 Convent Drive MSC4326, Bethesda, MD 20892-4326. Telephone: 301-496-1483; FAX: 301-402-1512; e-mail: hbhansen@dir.nidcr.nih.gov. NIH is an Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS are available to study cell cycle regulation, apoptosis, and molecular mechanism of cancer. Candidates should have a background and experience in molecular biology and transgenic and knockout mice experiments. Please send curriculum vitae and a list of three references to: **Dr. F. H. Sarkar, Department of Pathology, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201. FAX: 313-577-0057; e-mail: fsarkar@med.wayne.edu.**

POSITIONS OPEN



The USDA, Agricultural Research Service, Gene Evaluation and Mapping Laboratory, Beltsville, Maryland is seeking a **MOLECULAR BIOLOGIST** to participate in transgenic livestock projects. The **POSTDOCTORAL FELLOW** will have the opportunity to design and construct inducible genetic regulatory elements for the precise temporal control of transgenes. Constructs will be tested in transgenic mice, then in pigs and cattle. Initial focus of the project will be to enhance a tetracycline responsive transactivator currently under investigation. The Fellow will be encouraged to develop novel approaches and new strategies. A Ph.D. is required. The position requires a working knowledge of transcription factors, transcription factor-binding domains, and their interactions; theoretical understanding of cell physiology; and an appreciation for eukaryotic expression vectors. Experience with standard molecular biology techniques is required. Knowledge of transgenic animal technology and previous involvement in a transgenic animal project is desirable but not required. Demonstrated ability to plan, conduct, and complete research projects by the publication of a number of first author papers in peer-review journals will serve as a selection criteria. The appointment is for a period of two years, and may be extended another year. Starting salary will be \$40,714 per year. *Citizens from the United States and other countries (e.g., NATO, SEATO, RIO treaty member nations) will be considered.* Please send a curriculum vitae by e-mail and a list of references (with telephone numbers) to: **Dr. Robert Wall, e-mail: bobwall@lpsi.barc.usda.gov. USDA/ARS is an Equal Opportunity Employer.**

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

A **POSTDOCTORAL POSITION**, available immediately, is available to join a group studying a transgenic mouse model of multistep mammary tumorigenesis (*Oncogene* 17:2711-2118, 1998). The project involves subtractive hybridization/differential display analysis of genes in mammary adenocarcinomas versus hyperplasia in MMTV-FGF8b transgenic mice. Identified genes will be analyzed in both transgenic and knockout approaches. Applicants must have M.D. and/or Ph.D. in biological sciences, molecular biology experience, and record of productivity. Send curriculum vitae and names of two references to: **Craig A. MacArthur, M.D., Ph.D., Department of Pediatrics and Pathology, Washington University School of Medicine, Box 8116, One Children's Place, St. Louis, MO 63110. E-mail: macarthur@kids.wustl.edu.**

An Equal Opportunity/Affirmative Action Employer. Minorities/Females/Disabled/Veterans.

POSTDOCTORAL POSITIONS are available in the Section on Molecular Structure and Function of the National Eye Institute, National Institutes of Health. Topics include the molecular evolution, structure, and function of lens crystallins, macrophage migration inhibitory factor, EST analysis of human ocular genes, human and mouse models of cataract, and tissue-specific control of alternative splicing. Experience in areas including molecular and cellular biology, expression of recombinant proteins, analysis of transgenic and knockout mice, and familiarity with bioinformatics methods would be advantageous. Applicants should have less than five years of postdoctoral experience and should be U.S. citizens or permanent residents. Résumés should be sent to: **Dr. Graeme Wistow, Chief, Section on Molecular Structure and Function, National Eye Institute, Building 6, Room 331, National Institutes of Health, Bethesda, MD 20892-2740. E-mail: graeme@helix.nih.gov.**

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION (Postgraduate Researcher) available immediately to study gender and hormonal influences on vascular reactivity. Advanced degree in pharmacology or physiology is required and experience with *in vitro* techniques for studying smooth muscle contraction is highly desirable. Send curriculum vitae and names of three references to: **Dr. S. P. Duckles, Department of Pharmacology, College of Medicine, University of California, Irvine, CA 92697-4625. UCI is an Equal Opportunity Employer committed to excellence through diversity.**

POSITIONS OPEN

POSTDOCTORAL ASSOCIATE MIT

The Center for Space Research is searching for an individual to work with the Laser Interferometer Gravitational-Wave Observatory (LIGO project), led by Caltech/MIT to establish observatory consisting of two facilities with interferometric detectors located in Washington and Louisiana and sponsored by NSF. Positions are at Caltech, MIT, and at two sites. Includes commissioning and operation of LIGO and vigorous research and development programs for future detector improvements. Electronics, modeling, data analysis, optics, vibration isolation, and control systems expertise useful. Should be a broadly trained Physicist willing to learn new experimental and analytical techniques. Appointments will be one year initial and perhaps two subsequent one-year appointments at same rank. Initial term of three years or indefinite term may be considered. Appointment contingent upon completion of all requirements for Ph.D. Send applications to: **Prof. Barry C. Barish, California Institute of Technology, LIGO MS18-34, Pasadena, CA 91125. Or Prof. Rainer Weiss, Massachusetts Institute of Technology, LIGO Project, NW17-161, 175 Albany Street, Cambridge, MA 02139 with curriculum vitae, list of publications, and three-plus references. Send letters of recommendation to Prof. Barish or Prof. Weiss. Consideration begins December 1, 1998. Further information on LIGO project on website: <http://www.ligo.caltech.edu>.**

POSTDOCTORAL POSITION TRANSGENIC MICE/ SIGNAL TRANSDUCTION Baylor College of Medicine

A Postdoctoral position is available to study mammalian development and the TGF- β signal transduction cascade using transgenic mice (see: *Nature* 374:354-363, 1995; *Nature* 383:531-535, 1996; *Nature Genetics* 15: 201-204, 1997; *Nature* 391:489-492, 1998). Applicants should hold a Ph.D. or an M.D.-Ph.D. by the time the position begins. The position requires strong training in biochemistry and/or molecular biology. Please send a curriculum vitae to:

**Chester W. Brown, M.D., Ph.D., Assistant Professor
Department of Molecular and Human Genetics
Baylor College of Medicine
One Baylor Plaza
Houston, TX 77030
E-mail: cbrown@bcm.tmc.edu**

Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.

POSTDOCTORAL POSITIONS IN NEUROBIOLOGY AND NEUROTOXICOLOGY

Three positions are available for Fellows to join an established research program that focuses on the site and mechanism of action of biological toxins that act on the nervous system, such as botulinum toxin and tetanus toxin. Potential areas for research include (a) molecular biology studies such as expression of toxin mutants to help analyze structure-function relationships, (b) cell biology studies to characterize mechanisms for toxin binding to receptors, (c) anatomical studies to visualize and characterize mechanisms for toxin entry into cells, and (d) immunology research to develop vaccines against biological toxins. Applicants should send curriculum vitae to: **Dr. Lance Simpson, Professor of Medicine and Chief of the Division, Room 314-JAH, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107. Thomas Jefferson University is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION IN HEPATITIS C VIRUS RESEARCH

A Postdoctoral position is available immediately to study immune responses against the hepatitis C virus. HCV frequently causes a persistent, life-long infection in humans. We are investigating how HCV-specific CF8+ and CD4+ T cells govern the outcome of infection and new vaccine technologies to prevent chronic hepatitis C. Our laboratory is located in the Wexner Institute for Pediatric Research, a state-of-the-art facility affiliated with the Department of Pediatrics at the Ohio State University. To apply, send your curriculum vitae and the names of three references to: **Dr. Christopher M. Walker, Department of Pediatrics, Children's Hospital, W503, 700 Children's Drive, Columbus, OH 43205.**



5 Tenure track positions at Umeå Center for Molecular Medicine

Umeå Center for Molecular Medicine, UCMM, is a new interdisciplinary research center integrating basic molecular biology and clinical research. The center is located at Umeå University close to both basic biomedical and clinical research departments.

UCMM will focus on identification of the genetic background to disease, disease modeling and identification of disease mechanisms. The availability of large population-based blood banks, the unique occurrence of well-characterized families with genetic diseases in northern Sweden and high local competence in modeling in mice and other organisms creates an unique research base for UCMM.

UCMM seeks candidates for 5 initial tenure track positions with 5 year contracts at the Assistant Professor level. Successful candidates will be offered the opportunity to establish independent research groups in a newly formed institute located in a stimulating and interactive environment. Generous start-up funds will be available including salary support for two postdoctoral fellows or graduate students and money for equipment and running costs. Candidates must have a Ph.D. or M.D. degree and at least one or more periods of postdoctoral experience in the fields of disease gene identification, bioinformatics or animal modeling of human disease.

For further information about the center please contact Maria Westling telephone +46-90-7856781 (maria.westling@ucmp.umu.se), and read our home page: <http://www.umu.se/UCMM>.

Applicants should submit a CV and bibliography, a short description of current and planned research, and names and addresses (include also fax and e-mail address) of 3 references **by March 5, 1999** to Umeå University, Umeå Center for Molecular Pathogenesis, SE-901 87 Umeå, Sweden.

Applicants will finally be evaluated by the scientific advisory board, which comprises Prof. Lennart Philipson, Karolinska Inst., Stockholm (chairman); Prof. Thomas Jessell, Columbia University, New York; Prof. Eric S. Lander, MIT, Cambridge; Prof. Klaus Rajewsky, Inst. Genetics, Cologne, and Prof. Steven G. Young, Gladstone Inst., San Francisco.

GLOBAL OPPORTUNITIES

國立清華大學 生命科學院

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專長領域：

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應徵資格：具博士學位，且有兩年以上博士後教學研究經驗。

意者請提供以上資料：

- 一、個人履歷及著作目錄
- 二、著作抽印本
- 三、研究及教學計畫書
- 四、推薦函三封

請在 88 年 2 月 28 日前寄

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<http://life.nthu.edu.tw/>

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EUROPEAN OPPORTUNITIES



THE UNIVERSITY of LIVERPOOL

Department of Human Anatomy & Cell Biology Chair of Cardiac Biology

The Faculty of Medicine seeks to appoint a distinguished scientist to this new Chair in the Department of Human Anatomy and Cell Biology. The Chair-holder will join 'LUCI' - Liverpool University Cardiovascular Institute, comprising groups from the Departments of Medicine, Pharmacology and Therapeutics, Physiology, HACB and Veterinary Preclinical Sciences, including those of Professors Hart, Eisner, Cobbold, Wray and Salmons. It is expected that the appointee's research will complement those in LUCI. Proven ability to fund and to direct a dynamic research programme is essential. The Department of Human Anatomy and Cell Biology occupies space contiguous with 'LUCI' and has a strong research ethos: its current research groupings (Cellular and Molecular Pathophysiology, Cell Signalling, Molecular Mechanisms of Cell Growth and Differentiation, Evolutionary Biology) scored 5 in the 1996 Research Assessment Exercise. The salary will be negotiable.

Interested parties are invited to contact Professor P H Cobbold, Head of the Department of Human Anatomy and Cell Biology on 0151 794 5494, email: pcobbold@email.msn.com or the Dean of the Faculty of Medicine, Professor P M Johnson on 0151 706 4261.

Quote Ref: A/454/S

Closing Date: 26 February 1999

Further particulars and details of the application procedure may be requested from the Director of Personnel, The University of Liverpool, Liverpool L69 3BX on 0151 794 2210 (24 hr answerphone) or via email: jobs@liv.ac.uk

Web site at <http://www.liv.ac.uk>

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POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION AVAILABLE

National Institute of Allergy and Infectious Diseases

The Laboratory of Molecular Microbiology seeks a Postdoctoral Fellow with a strong background in protein biochemistry, cell biology, or molecular virology who is interested in the investigation of protein-protein or protein-nucleic acid interactions relevant to HIV infection. Our current focus is the investigation of posttranslational processes controlled by HIV accessory proteins and the identification and investigation of cellular factors involved in early and late events of virus replication. The successful candidate will study virus-cell interactions using a broad spectrum of biochemical, cell-biological, and immunocytochemical techniques. Part of the project will involve tissue culture studies using replication competent, full-length molecular clones of HIV. The position is available immediately for a duration of two to five years full-time. Starting salary depends on qualifications.

Applicants are requested to submit a curriculum vitae and three letters of reference to: **Dr. Klaus Strebel, Laboratory of Molecular Microbiology, NIAID, NIH, 4 Center Drive MSC 0460, Bethesda, MD 20892-0460 USA. Telephone: 301-496-3132.**

NIH is an Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH REGULATION OF NITRIC OXIDE SYNTHASE BY INSULIN

POSTDOCTORAL POSITION available to study regulation of nitric oxide synthase by insulin. Molecular mechanisms of insulin-stimulated production of nitric oxide in vascular endothelial cells are being elucidated. Insights from these studies will be used to investigate the relationship between insulin resistance and hypertension at a molecular level. Strong background in molecular biology and/or cell biology preferred. Applicants must have less than five years of postdoctoral experience. Send curriculum vitae and names of three references to: **Michael J. Quon, M.D., Ph.D., Hypertension Endocrine Branch, NHLBI, Building 10, Room 8C-103, 10 Center Drive, MSC 1754, Bethesda, MD 20892-1754.**

POSTDOCTORAL POSITIONS KIDNEY BIOLOGY AND PATHOBIOLOGY CASE WESTERN RESERVE UNIVERSITY

Positions funded by NIH Institutional Training Grant beginning July 1999. Interactive training faculty investigate mechanisms of kidney disease. Specific interests include inflammatory tissue injury, fibrogenesis, transcription regulation, protein trafficking, kidney development, and ion channel physiology. M.D. or Ph.D. candidates with experience in molecular biology, cell biology, or biochemistry will be considered. *Must be permanent resident.* Send curriculum vitae and three reference letters to: **Dr. Jeff Schelling, Rammelkamp Center for Research, MetroHealth Medical Center, 2500 MetroHealth Drive, G531, Cleveland, OH 44109. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available immediately to study airway innervation and neural mechanisms of asthma. NIH-funded projects focused on morphological, cellular, and molecular changes of airway neurons after exposure to inhaled irritants. Candidates with experience in cellular and molecular neurobiology of peripheral sensory and autonomic systems are most desirable. *Applicants must be legally eligible to work in the United States.* Send curriculum vitae and names of at least three references to: **Richard D. Dey, Ph.D., Department of Anatomy, P.O. Box 9128, West Virginia University, Morgantown, WV 26506. FAX: 304-293-8159; e-mail: rdey@wvu.edu. West Virginia University is an Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION

Postdoctoral position to study mechanism of RSV infection and asthma genetics. Background of molecular biology essential. Desire experience in signal transduction and protein-protein interaction. Two-year appointment subject to extension. Salary negotiable dependent on qualifications.

Send curriculum vitae and three references to: **S. Mohapatra, USF COM, VA Hospital (111D), 13000 Bruce B. Downs Boulevard, Tampa, FL 33612. FAX: 813-910-4041.**

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POSITIONS OPEN

POSTDOCTORAL POSITIONS

Two Postdoctoral positions are immediately available in the Department of Periodontology and Oral Biology at the Boston University Goldman School of Dental Medicine. We are looking for a Protein Chemist/Biochemist with experience in microanalytical protein separation techniques (HPLC and CE). Applicants must have skills and experience in the field of protein isolation and characterization. The project comprises structure and function studies of proteins specifically interacting with mineralized substrates. The characterization of such protein structures at the molecular level is important for the understanding of both de- and remineralization mechanisms and gaining knowledge on the early events in the generation of biofilms. Another opportunity is open for a Microbiologist experienced in anaerobic cultivation techniques to determine how salivary components affect the kinetics of growth and viability of oral pathogens including *Candida albicans*, *Streptococcus mutans*, *Actinobacillus actinomycetemcomitans*, and *Porphyromonas gingivalis*. Interested candidates with a recent Ph.D. degree are invited to send their résumé to: **Dr. Frank Oppenheim, Boston University School of Dental Medicine, Department of Periodontology and Oral Biology, 700 Albany Street, W201, Boston, MA 02118.**

POSTDOCTORAL POSITIONS IN IMMUNOPATHOGENESIS

Available immediately to study three areas of cellular immunity: pathogenesis of central nervous system (CNS) infections; autoimmune CNS disease; and vaccine development. Successful candidates will study T cell effector function during viral infection and autoimmune disease, T cell regulation during persistent infection, and processing/presentation of CTL epitopes. Experience in cellular immunology and animal models essential. Send curriculum vitae and names of three references to: **Dr. Stephen Stohlman or Dr. Cornelia Bergmann, Departments of Neurology and Molecular Microbiology and Immunology, University of Southern California School of Medicine, MCH 142, 1333 San Pablo Street, Los Angeles, CA 90033. FAX: 323-225-2369; e-mail: stohlman@hsc.usc.edu or cbergman@hsc.usc.edu.**

POSTDOCTORAL FELLOWSHIP available in a molecular cell dynamics group to study the inductive roles of basement membrane laminins and related molecules in the differentiation and phenotypic maintenance in muscle nerve and other tissues. Applicants should have a Ph.D. and/or M.D. with experience in cell and molecular biology. Contact website: <http://www.orion.umdj.edu> for additional information. Send curriculum vitae and references to: **Peter D. Yurchenco, M.D., Ph.D., Professor, Department of Pathology and Laboratory Medicine, University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854. E-mail: yurchenco@umdj.edu; FAX: 732-235-4825. UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans, and a member of the University Health System of New Jersey.**

POSTDOCTORAL POSITION UNIVERSITY OF TOLEDO CADHERINS/CATENINS

A Postdoctoral position is immediately available to study the role of cadherins in tumorigenesis. The applicant should have a Ph.D. in cell or molecular biology and experience in mammalian tissue culture, molecular biology, and biochemistry. Send curriculum vitae and names of three references to: **Dr. Margaret Wheelock or Dr. Keith Johnson, University of Toledo, 2801 West Bancroft, Toledo, OH 43606. E-mail: kjohnso@uoft02.toledo.edu. The University of Toledo is an Equal Opportunity/Affirmative Action Employer.**

Engineering and Public Policy at Carnegie Mellon seeks **DOCTORAL STUDENTS** with technical backgrounds to work on problems in energy and environmental systems (such as regional air pollution, clean energy, green design, global change, improved regulation); information technology policy (vulnerability, Internet telephony, spectral privatization, wireless); technology and economic development; risk analysis, communication, and ranking; and problems in technology and research and development policy. See website: <http://www.epp.cmu.edu>. Contact: **Victoria Massimino, EPP, 129 Baker Hall, Carnegie Mellon, Pittsburgh, PA 15213 USA.**

POSITIONS OPEN

Two **POSTDOCTORAL POSITIONS** are available: (1) to study activity- and neurotrophin-dependent gene expression in muscle (*PNAS* 95:1289); and (2) to identify molecular mechanisms mediating neurite outgrowth during central nervous system development and regeneration (*J. Neurobiol.* 37:429). Candidates must have received their Ph.D. within the past two years and have demonstrated expertise in molecular biology. Send résumé and references to: **Dr. Daniel Goldman, University of Michigan, Mental Health Research Institute, 205 Zina Pitcher Place, Ann Arbor, MI 48109. FAX: 734-647-4130.**

COURSES & TRAINING

SHORT COURSE ON TIME-RESOLVED FLUORESCENCE SPECTROSCOPY. The Center for Fluorescence Spectroscopy, at the University of Maryland School of Medicine, is offering a Short Course on "Principles and Applications of Time-Resolved Fluorescence Spectroscopy" in Baltimore, March 22–26, 1999. The course will cover basic and advanced topics in fluorescence, including time- and frequency-domain measurements, and Förster energy transfer. Advanced topics include chemical sensing, imaging, fiber optics, infrared fluorimetry, two-photon excitation, instrumentation, and fluorescence microscopy, protein fluorescence, DNA technology, immunoassays, and high-throughput screening. Textbook, course materials, lunches, and refreshments will be provided. The Instructors include: **Dr. J. R. Lakowicz, Dr. I. Gryczynski, and Dr. R. B. Thompson.** For further information, a schedule, and fees, please contact: **Ms. Mary Rosenfeld or Prof. J. R. Lakowicz, Center for Fluorescence Spectroscopy, Department of Biochemistry and Molecular Biology, 725 West Lombard Street, Baltimore, MD 21201. Telephone: 410-706-8409; FAX: 410-706-8408; e-mail: cfs@cfs.umbi.umd.edu. Or visit our website: <http://cfs.umbi.umd.edu>. Deadline for enrollment is February 14, 1999, with later enrollment if space permits.**

MOLECULAR TECHNIQUES WORKSHOP University of Wisconsin–Milwaukee/NIEHS June 21–July 10, 1999

Designed for faculty, graduate students, postdoctorates, and other professionals interested in applying molecular biological approaches to their research. Techniques include cloning, sequencing, PCR, methods for analysis of gene expression, and more. Tuition: \$1,650; housing/meals: \$575. Contact: **Barb Wimpee, Great Lakes WATER Institute, 600 East Greenfield Avenue, Milwaukee, WI 53204. Telephone: 414-382-1746; FAX: 414-382-1705; e-mail: bwimpee@uwm.edu.**

MEETINGS

Fourth International Weber Symposium on Innovative Fluorescence Methodologies in Biochemistry and Medicine. June 23–27, 1999, Maui, Hawaii. This symposium will provide a current overview of modern fluorescence methodologies and applications in the biological and medical sciences. Morning and afternoon sessions are provided for visiting the exhibits and posters. Deadline for abstract submission is April 30, 1999. For further information, contact: **Maui Fluorescence Meeting, LFD/Physics, University of Illinois at Urbana-Champaign, 1110 West Green, Urbana, IL 61801-3080. Telephone: 217-244-5620; FAX: 217-244-7187; e-mail: julie@physics.uiuc.edu; website: www.physics.uiuc.edu/groups/fluorescence/Maui99.**

EUROPEAN OPPORTUNITIES

POSTDOCTORAL FELLOW. University of Bristol. Funded for three years to undertake a Cre-LoxP tissue-specific KO of the galanin gene. A replacement KO of galanin has been generated (Wynick et al, *PNAS* 1998) and demonstrates development deficits in the number of cholinergic forebrain and sensory DRG neurons. These deficits are associated with changes in cognition, LTP, nociception, and regeneration. A good working knowledge of molecular biology is essential. Experience in ES cell culture and the generation of knockouts are highly preferable. Salary range: £19,197 to £23,651. For enquiries and application contact: **Dr. David Wynick, Division of Medicine, Marlborough Street, Bristol BS2 8HW UK. Telephone: 44-(0)-117-9283396; e-mail: d.wynick@bris.ac.uk. Please submit curriculum vitae quoting reference 5302. The closing date for applications is 26 February 1999.**

The Wellcome Trust

Overseas Senior Research Fellowships in Biomedical Science

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The Trust wishes to invite applications for five year senior research fellowships in biomedical science to be held in Australia, New Zealand, South Africa and India, to commence in 2000/2001.

Eligibility: The fellowships are for outstanding researchers, either medically qualified or science graduates, who wish to establish a research career in an Australian, New Zealand, South African or Indian academic institution. It is expected that candidates would have between **five and ten years'** research experience at a postdoctoral level or equivalent and have a substantial record of publications in their chosen area of research in leading international journals. Applicants need not be nationals of the country where they wish to hold their fellowships, however, it is expected that candidates will have spent a minimum period of three years of their postdoctoral (or equivalent) research career working outside their chosen country. Applications will be accepted from those who are currently overseas or who have returned to their home country. However, those who wish to work in Australia or New Zealand should not have been resident in those countries for more than two years (at the closing date for applications).

The salary offered will be according to age and experience and on appropriate academic scales. The essential costs of the research

programmes will also be provided, including research expenses, equipment and a research assistant if appropriate.

Application Procedure

- Candidates are required to complete a preliminary application form which can be obtained from the Wellcome Trust Office or the Wellcome Trust Web site. The form should be returned to the Wellcome Trust by **26 April 1999**. Late submissions will not be accepted.
- Short-listed candidates will be notified in writing and invited to submit a full application in early July. These must be returned to the Wellcome Trust by **1 September 1999**.
- Those selected for interview will be informed in writing in January 2000 and the interviews will take place in March 2000 in London.

Enquiries and requests for preliminary application forms may be directed to: **Dr Mary Phillips, International Programme Manager, The Wellcome Trust, 193 Euston Road, London, NW1 2BE, United Kingdom. Tel: +44 171 611 8410/8764. Fax: +44 171 611 8373. E-mail: international@wellcome.ac.uk URL: <http://www.wellcome.ac.uk>**



The Wellcome Trust is a Registered Charity, No. 210183, and seeks to support research in biomedical sciences and the history of medicine by means of grants and other activities

Am Institut für Botanik und Pharmazeutische Biologie, Naturwissenschaftliche Fakultät II (Biologie, Chemie und Pharmazie), ist zum 1. 10. 2000 eine

C 3-Professur für Botanik

wiederzubesetzen.

Zu den Aufgaben gehört, das Fachgebiet in Forschung und Lehre angemessen zu vertreten. Das Forschungsgebiet soll die vorhandenen Forschungseinrichtungen in der Biologie sinnvoll ergänzen und insbesondere die Zell- und Entwicklungsbiologie der Pflanzen abdecken. Mitarbeit am SFB 473 „Schaltvorgänge der Transkription“ ist erwünscht.

Einstellungsvoraussetzungen sind ein abgeschlossenes Hochschulstudium, pädagogische Eignung, Promotion und Habilitation oder der Nachweis gleichwertiger wissenschaftlicher Leistungen.

Zum Zeitpunkt der Ernennung dürfen Bewerberinnen/Bewerber das 52. Lebensjahr noch nicht vollendet haben.

Die Universität Erlangen-Nürnberg strebt eine Erhöhung des Anteils von Frauen in Forschung und Lehre an und bittet deshalb Wissenschaftlerinnen nachdrücklich um ihre Bewerbung.

Bewerbungen von Schwerbehinderten werden bei gleicher Eignung bevorzugt berücksichtigt.

Bewerbungen mit den üblichen Unterlagen (Lebenslauf, Verzeichnis der Schriften und Lehrveranstaltungen, beglaubigte Kopien von Zeugnissen und Urkunden) werden bis zum **30. April 1999** an den Dekan der Naturwissenschaftlichen Fakultät II (Biologie, Chemie und Pharmazie) der Universität Erlangen-Nürnberg, Universitätsstraße 40, D-91054 Erlangen, erbeten.

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dkfz



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Krebsforschungszentrum**
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**Universität
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Professorship (C4) for Molecular Genetic Epidemiology (No. 9/99)

The Deutsches Krebsforschungszentrum (German Cancer Research—DKFZ) and the Faculty of Medicine at the University of Heidelberg will jointly appoint a scientist as head of the Division of Molecular Genetic Epidemiology within the Research Program "Cancer Risk Factors and Prevention".

Applications should have outstanding scientific records in molecular genetic epidemiology of human tumors and a sound knowledge of molecular genetics and epidemiology. "Habilitation" or equivalent scientific achievements are required. Applications from female scientists are encouraged.

Please send your application with a curriculum vitae, a list of publications, and references by April 01, 1999 to:

Deutsches Krebsforschungszentrum, Wissenschaftlicher Stiftungsvorstand, Im Neuenheimer Feld 280, D-69120 Heidelberg.

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