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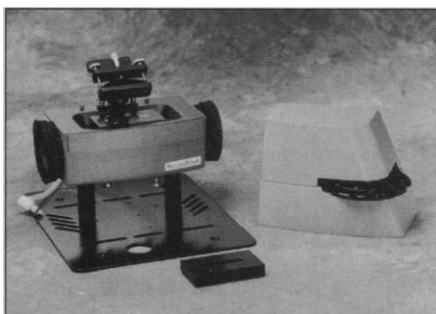
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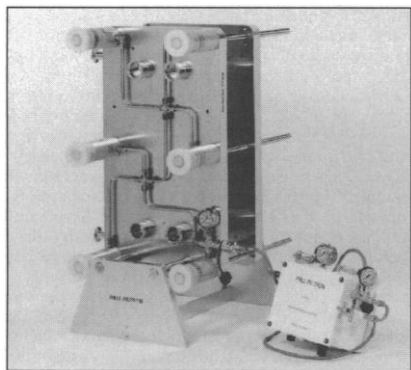
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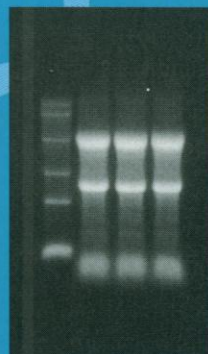
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James Madison University (website: www.jmu.edu), a nationally recognized institution with a selective student body of 14,000, invites nominations and applications for the position of Dean, College of Science and Mathematics. The College has strong undergraduate teaching and research programs that prepare students for graduate study and positions in research, industry, education, health fields, and government. The College also has a graduate program in biology. The faculty have significant involvement in grants and funded research and a sustained record of scholarly achievement and programmatic innovation.

The successful applicant must be creative and innovative in taking advantage of the opportunities presented by a College with dynamic programs and a solid reputation; evidence a strong commitment to undergraduate research; be able to collaborate effectively in a cross-disciplinary environment and to form productive relationships with external constituents; and be able to clearly articulate a vision for the future of higher education and the role that the disciplines of the sciences and mathematics will play. Applicants should have a Doctorate and previous experience in a field directly related to the programs and mission of the College. Higher education experience is required (qualifications must be commensurate with appointment as a tenured Professor in an academic unit of the College), experience in obtaining external funding is desired, and evidence of effective administrative experience in a collegial environment is required.

Interested persons should submit a letter of application or a curriculum vitae, letter of application, and the names/addresses for three references to:

Dr. A. Jerry Benson, Chair
Search Committee, MSC 1103
James Madison University
Harrisonburg, VA 22807

Review of applications will begin on January 11, 1999, and continue until the position is filled. *JMU is an Equal Employment Opportunity/Equal Access Employer and especially encourages applications from minorities, women, and persons with disability.*

FACULTY POSITIONS IN BIOENGINEERING AT GEORGIA TECH AND EMORY

Georgia Institute of Technology and Emory University School of Medicine are recruiting new tenure-track faculty in bioengineering. This expansion in faculty is supported by a Whitaker Foundation Biomedical Engineering Development Award, which focuses on tissue engineering. Areas of special interest include bioartificial organs, biomaterials, biosensors, cellular immunology, controlled release systems, cryopreservation, genetic engineering, and stem cell propagation. Interested candidates should provide a complete curriculum vitae, a description of their research interests, and the names and addresses of at least three references. Candidates should have a Ph.D. in bioengineering, chemical engineering, electrical engineering, materials science, mechanical engineering, or a related field, and/or a M.D. degree. Successful applicants will have their primary appointment in the appropriate unit either at Georgia Tech or at Emory. Applications should be sent to: Robert M. Nerem, Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA 30332-0363. *Georgia Tech and Emory University are Equal Opportunity Employers.*

ANATOMY AND PHYSIOLOGY INSTRUCTOR. M.S., September 1, 1999. Teach anatomy and physiology for health science and kinesiology majors and advise medical technology students. Preference given to individuals with teaching experience and health science background. Application deadline is February 15, 1999. Midwestern State University is a liberal arts university with an enrollment of 5,800 students. The biology department offers both the B.S. and M.S. degrees in biology. Submit curriculum vitae, a copy of transcripts, a statement of educational philosophy, and a list of three references, with their addresses and telephone numbers, who are familiar with your teaching to: Dr. Norman Horner, Director, Division of Sciences, Midwestern State University, 3410 Taft, Wichita Falls, TX 76308-2099. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

FACULTY POSITIONS GENOMICS (FOUR) AND BIOINFORMATICS (TWO)

Qualified applicants for six faculty positions are sought to participate in programmatic expansion in genomics and bioinformatics at Texas A&M University. Each successful applicant will be expected to establish a vigorous research program and to take an active role in teaching. These positions will likely be filled at the **ASSISTANT PROFESSOR** level, but exceptional candidates will be considered for appointment at higher academic ranks. As part of this expansion phase, we seek faculty with expertise in the following areas: (A) microbial genomics, to address fundamental biological questions in any area of microbiology, with some preference given to individuals studying fungi, pathogenic bacteria, or the *Archaea*, especially extremophiles (Department of Biology); (B) plant genomics/molecular genetics (two positions), to address basic and applied needs in development genetics, genomics, and functional genomics relevant to improvement of Texas agronomic crops by conventional and molecular genetic means (Department of Soil and Crop Sciences); (C) insect/plant interactions, teach and use molecular techniques in collaborative research on evolution of insect/plant interactions with emphasis on coevolution of insects and resistant cultivars (Department of Entomology); and (D) bioinformatics (two positions), one for functional or comparative genomics, focusing on an important biological problem, e.g., evolution and systematics or identifying gene regulatory networks (Department of Biology), and one for research and collaboration with other faculty conducting research in the areas of genomics, proteomics, high-resolution structure, and imaging technology (Department of Biochemistry and Biophysics). Significant opportunities exist for linkages with other faculty conducting genomics research and informatics. Applications: To apply and receive full consideration for any of these positions, please see the respective departmental instructions: Department of Biochemistry and Biophysics. Applicants should submit a curriculum vitae, statement of research and teaching, and have three letters of reference sent to: Bioinformatics Search Committee, Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX 77843-2128. Department of Biology: Send a curriculum vitae, statement of research and teaching, and reprints of significant publications, and arrange for three letters of reference, all due January 1, 1999, addressed to: Microbial Genomics or Bioinformatics Search Committee, Department of Biology, Texas A&M University, College Station, TX 77843-3258. Department of Entomology: Send letter of application, curriculum vitae, and names and addresses of four references by February 15, 1999, to: Dr. Ray Frisbie, Evolution of Insect/Plant Interactions Search Committee, Department of Entomology, Texas A&M University, College Station, TX 77843-2475 USA. Telephone: 409-845-2510; FAX: 409-845-6305; e-mail: r-frisbie@tamu.edu. Department of Soil and Crop Sciences: Send letter of application, curriculum vitae, and names and addresses of three references by February 1, 1999 (or until position is filled), to: Dr. E. C. A. Runge, Head, Department of Soil and Crop Sciences, Texas A&M University, College Station, TX 77843-2474 USA. For inquiries on Department of Soil and Crop Sciences positions, contact: Dr. David Stelly, Search Committee Chair, Telephone: 409-845-2745; e-mail: monosom@tamu.edu.

CHIEF OF SURGICAL ONCOLOGY ASSOCIATE OR FULL PROFESSOR University of Medicine and Dentistry of New Jersey

The University of Medicine and Dentistry of New Jersey (UMDNJ)—Robert Wood Johnson Medical School, Department of Surgery, is seeking an outstanding surgeon/scientist to be Chief of Surgical Oncology and direct the surgical oncology program at The Cancer Institute of New Jersey, an NCI-designated cancer center. Applicant must have national recognition in laboratory and/or clinical cancer research, as well as exemplary surgical skills. Applicants should submit curriculum vitae to: Michael A. Gallo, Ph.D., University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School, The Cancer Institute of New Jersey, 195 Little Albany Street, Room 2002, New Brunswick, NJ 08901. UMDNJ is an Affirmative Action/Equal Opportunity Employer, Minorities/Females/Disabled/Veterans, and is a member of the University Health System of New Jersey.

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Qualifications for both areas include a Ph.D. in Biostatistics, Statistics, or an MS with equivalent experience. An adjunct degree in biological science is preferred, while experience in Pharmacokinetics, Bioinformatics, Osteoporosis, Diabetes, or Aging Population studies is highly desirable. Interactions with the FDA and other regulators is required for senior level positions in Full Development. Excellent communication, interpersonal and consultancy skills; a successful track record collaborating with scientists; and experience supporting clinical trials are desirable. Must possess the ability to work independently and as part of a team within a global research environment. Job Code: 2963

Data Manager

You will be responsible for the establishment and maintenance of data quality standards and high quality data bases through the development and use of project data review methods. Other responsibilities include ad hoc analyses, and production of standard safety tables for clinical trials. You will also interact with Biostatisticians, Clinical Research Associates, and SAS Programmers to achieve deliverables and support the clinical project team.

Qualifications include a Bachelor's Degree or equivalent in a scientific discipline required. A Master's degree in Statistics, Computer Science or related field is preferred. Other desirable attributes include knowledge and background in medical terminology, clinical research, as well as excellent interpersonal and communication skills. Job Code: 2964

Programmer

You will be responsible for reporting software development and implementation in support of worldwide clinical data presentation requirements for efficacy and safety modules in clinical trials. You will also work with the Biostatisticians, Data Managers and Clinical Research Associates to identify specific needs in software reporting and development.

Qualifications include a Bachelor's degree in Biostatistics, Statistics, Mathematics, Computer Science, or a similar applied quantitative or computational science degree; a Master's degree in one of those fields and 2 years' experience with SAS or S+ programming in clinical trials research is desirable. Applied analytic skills, excellent communication skills, and experience in team-based problem-solving preferred. Job Code: 2965

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This advertisement is directed to Canadian citizens and permanent residents. Queen's University is committed to Employment Equity.

Please send a curriculum vitae and the names of three referees by February 1, 1999, to:

**Dr. Paul Manley, Head
Department of Pathology
Queen's University
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Fax: (613) 545-2907
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Fort Dodge Animal Hospital
P.O. Box 518
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SCIENTIST

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For more information on this position, please visit our website at
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The qualified candidate will provide leadership for a large transnational organization (80 people) engaged in analysis of biofluids from discovery support, pre-clinical, and clinical studies. You will also ensure that a common philosophy/strategy is in place so that assays, data, and technology can be transferred smoothly between analytical sites and their customers; and that analytical data generated are of sufficient quality to enable accurate decision-making and withstand scrutiny from internal GLP compliance groups and governmental regulatory agencies. Additional responsibilities include: supporting the management of the budget for bioassays at contract; maintaining a leadership position in the identification/purchase/application of new technology and instrumentation to provide rapid generation of high quality data; and initiating and maintaining strong links with academic centers of excellence and companies engaged in development of new analytical instruments.

Requires: BS in Chemistry, Biochemistry, or a closely related discipline; a MS/PhD or equivalent and at least 10 years experience in drug analysis in the pharmaceutical industry; thorough knowledge of relevant GLPs, regulatory requirements, and discovery/clinical processes; and strong customer-oriented focus. Seven years experience in managing a pharmaceutical drug analysis operation is preferred. (Job Code: K8DIRDAS)

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You will also develop and implement new methodologies to enhance instrumental capabilities toward the solution of these problems. In addition, you will report and present results to chemists and biologists, as well as publish and externally present results.

Requires: PhD and experience in the operation and application of FTMS with external ion sources for the analysis of biological samples by electrospray and/or MALDI; experience with HPLC, UNIX, other separation techniques, and computer operating systems; excellent communication skills; and the ability to work in a multi-disciplinary team environment. (Job Code: H80102S)

PhD SCIENTIST – COMPARATIVE GENETICS, *C. ELEGANS*

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The successful candidate 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.

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Pharmaceuticals

CHAIR OF COMPUTER SCIENCE AT STONY BROOK and HEAD OF A NEW CENTER AT BROOKHAVEN NATIONAL LABORATORY

The State University of New York at Stony Brook is seeking an outstanding leader and distinguished scientist to become the Chair of the Computer Science Department. The new Chair will serve as the academic leader for the Department as well as the head of the new Center for Data-intensive Computing to be established at Brookhaven National Laboratory. The Department Chair will build on the existing strength and capabilities of the Department in order to enhance its position among top tier academic programs. We seek a computer scientist with an international reputation, who is committed to excellence, demonstrates strong leadership and interpersonal skills, who would be an effective advocate for the Department and the Center.

The Computer Science Department, consistently rated among the top tier in North America, currently has 24 faculty members. The Department has a multi-million dollar grant from Computer Associates along with University matching to substantially expand the Department, which is expected to grow to about 35 faculty members in the next few years. The past growth of the Department was promoted by four NSF infrastructure awards. The primary active research strengths of the Departments are in graphics/visualization, logic programming/database, concurrency/verification, and computer systems. Detailed information on the Department and the research activities of these groups can be found on the Department home page: www.cs.sunysb.edu

Brookhaven is a multidisciplinary National Laboratory engaged in basic and applied research and is managed by Brookhaven Science Associates under contract with the US Department of Energy. The new Center for Data-intensive Computing is expected to have about 10 scientists and will emphasize data mining, visualization, parallel and distributed computing and networking, and modeling and simulation. Detailed information on Brookhaven can be found on the Laboratory home page: www.bnl.gov.

This position presents an outstanding opportunity to build, with significant resources, a unique and exciting program in computer science linked with data-intensive applications.

Applications and nominations, including curriculum vitae and the names of at least five references, should be sent to: Professor Arie Kaufman, Chair, Computer Science Chair Search Committee, Department of Computer Science, State University of New York at Stony Brook, Stony Brook, NY 11794-4400. The committee will start reviewing applications in January 1999. Applications from women and minorities are particularly sought. Stony Brook is an affirmative action/equal opportunity educator and employer. BNL is an equal opportunity employer committed to workforce diversity.

**BROOKHAVEN
NATIONAL LABORATORY**
BROOKHAVEN SCIENCE ASSOCIATES
www.bnl.gov

**SUNY AT
STONY BROOK**
WWW.CS.SUNYSB.EDU



Conveniently located in the Government Center area, we are an affiliate of the Harvard Medical School.

Postdoctoral Fellow

Immediate opening for a Postdoctoral Fellowship position to explore the hormonal regulation of ocular surface tissues, with a particular focus on the sex steroid control of gene expression in the lacrimal and meibomian glands. Studies will involve basic research in endocrinology, immunology and molecular biology and will utilize experimental models both *in vivo* and *in vitro*. Minimum requirements include a Ph.D. and expertise in the conduct of various molecular biological techniques such as RT-PCR, differential display, cDNA library construction, and *in situ* hybridization. Proficiency with cell culture techniques, immunoperoxidase procedures and computers (e.g. Macintosh) will be extremely helpful.

Please send resume, with cover letter and the names of 3 references, in confidence to: THE SCHEPENS EYE RESEARCH INSTITUTE, Human Resources Department, 20 Staniford Street, Boston, MA 02114. NO PHONE CALLS, PLEASE. We are an Equal Opportunity/Affirmative Action Employer, M/F/H/V.

**THE SCHEPENS EYE
RESEARCH INSTITUTE**

Faculty Position Section of Orthopaedic Surgery and Rehabilitation Medicine The University of Chicago

The Section of Orthopaedic Surgery and Rehabilitation Medicine invites applications for a faculty position at the Assistant, Associate, or Professor level in molecular oncology (tenure-track or Clinical Scholar appointment). The successful candidate will conduct independent research in the molecular analysis of bone tumors, sarcomas, or bone metastasis. Applicants should possess a Ph.D. or M.D. degree. Generous start-up funds are available. Applicants must have a demonstrated ability to develop an independently funded research program of the highest caliber. Strengths of the University community include outstanding programs in orthopaedic oncology, molecular oncology, cancer genetics, and molecular cytogenetics.

Please submit a curriculum vitae, a statement of professional goals and research interests, and the names of three references to:

**Michael A. Simon, M.D.
Section of Orthopaedic Surgery
and Rehabilitation Medicine
The University of Chicago
5841 S. Maryland Ave., MC3079
Chicago, IL 60637**

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



PURDUE UNIVERSITY

AGRICULTURAL GENOMICS INITIATIVE

The Purdue University School of Agriculture is building on its strength in the plant sciences, announcing seven tenure-track faculty positions in the areas of functional genomics and biotechnology. Successful candidates will be appointed in appropriate academic departments within the School of Agriculture. We seek creative individuals who will impact agriculture, forestry and/or the environment through the development of outstanding research and education programs related to agricultural genomics and biotechnology. Successful candidates will be expected to develop and sustain an internationally recognized and externally funded research program, contribute to the teaching of both undergraduates and graduate students, and develop strong working relations with clientele groups including government and industry. We seek individuals who are interested in fostering an atmosphere in which commercial applications of biotechnology are encouraged.

Successful candidates will join a thriving community of plant scientists; many are housed in the modern Whistler Agricultural Research Building with over 60,000 sq. ft. devoted to plant, microbial, and insect molecular biology. Recent investments by the state (\$37M) and NSF (\$500K) have brought over 50,000 sq. ft. of modern plant growth facilities to the Purdue School of Agriculture campus. Agricultural genomics research programs are supported by a new NSF Genomics Center which includes high through-put sequencing and micro-array technology. Core facilities in plant transformation, reverse genetics and microscopy and image analysis are also available. A strong interdisciplinary atmosphere is fostered at Purdue University through a number of graduate training programs including Plant Biology, Genetics, Biochemistry, and Molecular Biology.

For additional information or to apply, contact the various department heads listed for each position.

Assistant Professor of Plant Molecular Genetics

Department of Agronomy. Areas of focus might include abiotic or biotic stress, plant development or plant genome organization, structure and function. Scientists using large scale genomic approaches such as positional cloning, EST databasing, and/or gene expression profiling are encouraged to apply. Interaction with physiologists, biochemists, plant pathologists and entomologists is encouraged. Contact Dr. William W. McFee, Head, Department of Agronomy, <wmcfee@purdue.edu>, (765)494-4774.

Assistant Professor of Plant Molecular Biology

Department of Botany and Plant Pathology. Areas of focus may include the application of genomics to study factors influencing growth, development, and competitiveness of weed species. Specific research topics may involve the molecular responses to herbicides, molecular and genetic basis of plant suppression by allelopathic compounds, and other phytochemicals, and/or phylogeny or evolution of important weed species. Contact Dr. Raymond D. Martyn, Jr., Head, Department of Botany and Plant Pathology, <rmartyn@purdue.edu>, (765)494-4614.

Assistant Professor of Fungal Biology

Department of Botany and Plant Pathology. Molecular genetic, and/or biochemical approaches addressing fundamental questions in the cellular and/or developmental biology, functional genomics, or evolutionary and population biology of fungal plant pathogens, host-pathogen interactions, or model fungal systems. Contact Dr. Raymond D. Martyn Jr., Head, Department of Botany and Plant Pathology, <rmartyn@purdue.edu>, (765)494-4614.

Assistant Professor of Molecular Quantitative Genetics

Department of Forestry and Natural Resources. This position is part of the recently established center for Hardwood Tree Improvement and Regeneration and is supported by a number of colleagues from the USDA Forest Service.

We seek to develop a program in collaboration with the Forest Service that applies the tools of genomics and biotechnology to the improvement of hardwood species. Contact Dr. Dennis C. Le Master, Head, Department of Forestry and Natural Resources, <dclmstr@fnr.purdue.edu>, (765)494-3590.

Assistant Professor of Molecular Quantitative Genetics

Department of Agronomy. Focus on the regulation and genetic interactions of quantitative traits at the molecular level. The successful candidate will be expected to develop a research program in computational and statistical methodology for the analysis and interpretation of molecular genetic data (DNA sequences, mRNA expression profiles, or molecular markers). Collaboration with scientists in genomics, crop breeding, quantitative genetics, and statistics is expected. Contact Dr. William W. McFee, Head, Department of Agronomy, <wmcfee@purdue.edu>, (765)494-4774.

Assistant Professor of Molecular Entomology

Department of Entomology. This position has a focus on the molecular biology of insects as it relates to plant-pest interactions. Areas of specialization could include insect responses to resistance genes in plants, characterization of vulnerable systems in insects, resistance management, as well as other areas involving plant-insect interactions. Collaboration with a strong plant-insect interaction group is encouraged. Contact Dr. Christian Y. Oseto, Head, Department of Entomology, <chris_oseto@entm.purdue.edu>, (765)494-4554.

Assistant Professor of Plant Molecular Biology

Department of Horticulture and Landscape Architecture. Areas of focus might include engineering of metabolic pathways for value-added traits including carbohydrates, lipids, or secondary compounds. Interaction with food scientists is encouraged and is supported by a new \$22M food science building. Contact Dr. Edward N. Ashworth, Interim Head, <ashworth@hort.purdue.edu>, (765)494-1306.

Sr. Scientist

• Transgenics

Join our team to build a research effort in the development of state-of-the-art conditional transgenic mice to support our drug discovery efforts in the immunological and inflammatory disease arena. Ph.D. in Immunology, Molecular Biology or a related discipline and at least 3 years' post-doctoral experience demonstrating a proven track record in generating transgenic and gene knockout animals needed. A strong background in the control of gene expression is essential as is familiarity with techniques required for transgene engineering. Strong communication skills are essential and the ability to function in a dynamic, interactive, interdisciplinary team environment is critical. **Job Code: AD-SCI-RD0899**

Post-Doctoral Associates

• Immunologist

A post-doctoral position to dissect the mechanism(s) for the pathogenesis of chronic immune-mediated inflammatory responses. Ph.D. and/or MD and experience performing adoptive cell transfer and assays for in vivo cellular and humoral function. Will gain experience in antigen presentation, isolation and maintenance of mouse T cell clones, in vivo induction of immune deviation, and novel transgenic mouse models for GVHD. Position to start in early 1999. **Job Code: AD-SCI-PD0199**

• Leukocyte Adhesion Biology

Opening for a post-doctoral fellow to conduct basic research on molecular and cellular aspects of leukocyte adhesion. Ongoing projects include molecular analysis of L-selectin adhesion molecule function, and regulation of L-selectin expression by membrane restricted metalloproteases. Strong graduate or prior post-doctoral training in cell biology and/or membrane protein biochemistry necessary. **Job Code: AD-SCI-PD0399**

A career with Boehringer Ingelheim will present you with professional growth opportunities, a highly competitive salary and benefits package, and the opportunity to work with a team of world-class collaborators on our beautiful Connecticut campus. For immediate consideration, please send your resume and salary history to: **Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, Job Code _____, Ridgefield, CT 06877-0368 or email with job code as subject to: rd.resume@nd.boehringer-ingelheim.com.** We are a proud Equal Opportunity Employer and are committed to offering a healthy, nonsmoking work environment. M F D V.



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**THE
J. DAVID GLADSTONE
INSTITUTES**
University of California,
San Francisco

POSTDOCTORAL FELLOWSHIP

Available in the laboratory of **Dr. David Dichek**. Projects are focused on understanding the molecular pathogenesis of atherosclerosis and on developing gene-based strategies to prevent vascular disease. Experimental systems include viral vector-mediated gene transfer in adult animals and generation of transgenic mice with germ-line targeting to the artery wall. Position available immediately. Candidate should possess an M.D. or Ph.D. and have a strong background in molecular biology. Experience with molecular virology is highly desirable.

Please send CV and references to:
**#C98-047, Gladstone Institutes, P.O.
Box 419100, San Francisco, CA 94141;
or fax to (415) 431-4039.**

Email: hr@gladstone.ucsf.edu
Web: <http://gladstone.ucsf.edu>

Equal Opportunity/Affirmative Action Employer

San Diego Supercomputer Center University of California, San Diego

SDSC is seeking an experienced Programmer or Post-Doctoral Fellow for an immediate opening in the computational biology group. This group is involved in the Protein Data Bank, a NSF-funded project to provide a worldwide community of biologists with access to macromolecular structure data derived experimentally from X-ray crystallography and NMR. This position focuses on the integration of information in the three-dimensional structural database with other data resources, the development of tools to add sequence based annotation to structural data, and is a key role in a major public database for biological science. Candidates with advanced degrees or substantial experience will actively participate in the design and implementation of the database and related tools.

Appointment as Staff Programmer or Post Doctorate Fellow is based on education training and qualifications. Must be proficient in C and Perl. Experience with relational databases, Java, or CORBA is preferred; background in molecular biology is desirable.

Resume review will begin immediately and continue until the position is filled. The appointment and salary will be determined by education and experience. Please send resume, referencing Job #C3210-S, to:

UCSD Human Resources, La Jolla
CA 92093-0967; or E-mail it to:
resume@ucsd.edu For additional
information, visit the SDSC website
at: <http://www.sdsc.edu>



University of California
San Diego



UNIVERSITY OF MISSOURI - COLUMBIA
MOLECULAR MICROBIOLOGY
AND IMMUNOLOGY

POSTDOCTORAL POSITIONS

General areas of research include:

- Molecular aspects of microbial pathogenesis
- Regulation of gene expression in prokaryotic and eukaryotic pathogens including: iron regulated operons in *E. coli*, mycoplasma and yeast systems, and molecular virology
- Membrane structure and function in pathogens; mechanisms of phenotypic switching; surface antigen variation
- Pathogenic mechanisms of *Vibrio cholerae*, *Haemophilus influenzae*, *Borrelia*, *Rickettsia*, *Ehrlichia*
- Vibriophage, vibriocins, and territoriality of cholera vibrios
- Horizontal transmission of virulence gene(s)

Complete descriptions of research programs are available on our web site: <http://www.missouri.edu/~mmiwww>

Qualified applicants must be U.S. citizens or permanent residents to be supported by an NIH training grant.

Direct inquiries to: Ms. Sandy Selby, Dept. of Molecular Microbiology and Immunology, University of Missouri, M616 Medical Sciences Bldg., Columbia, Missouri 65212. Phone (573) 882-8989 Fax (573) 882-4287 The University of Missouri is an Equal Opportunity Employer and encourages applications from females and minorities.

UCB Research And You - The Right Mix

UCB Pharma is implementing a significant expansion of both the Chemistry and Pharmacology Departments at its Cambridge, MA research site. This is a unique opportunity to join a growing and dynamic pharmaceutical research and discovery organization in an entrepreneurial environment. We currently have openings for the following positions:

Principal Scientist - Pharmacology

We are seeking a self-motivated, creative scientist with an extensive background in *in vivo* animal Pharmacology. Candidate will have considerable experience in developing novel animal models of inflammatory disease, especially as they pertain to the airway. Strong interpersonal and managerial skills are required. Additional qualifications include a special aptitude in exploring and developing new therapeutic targets in the fields of asthma, rhinitis, and chronic obstructive pulmonary disease (COPD). A Ph.D. in Pharmacology and 6 - 10 years of experience is required.

Database Administrator

The Computational Chemistry group is seeking a database administrator to participate in a multidisciplinary drug discovery environment. The individual will collaborate with the Chemistry, Biology and IS departments to implement, maintain, and support the corporate chemistry and biology database. Candidates will have BS or MS in Chemistry, Biology or Computer Science and 3+ years of experience in bioinformatics, chemical information or computational chemistry. Familiarity with UNIX and Windows operating systems, ORACLE database management systems, and Silicon Graphics workstations is required. Experience in programming and MDL chemical registration software is highly desirable.

Principal Scientist - Synthetic Organic Chemist

We are looking for a highly motivated and energetic synthetic organic chemist to join our Drug Discovery Team. This position will involve leading a team of Ph.D. and associate level scientists in the identification of lead targets and the implementation of syntheses to identify optimal structures. This individual will have extensive experience in contemporary medicinal and synthetic chemistry, as well as demonstrated supervisory skills. Also required is a broad based understanding of modern multi-step organic syntheses, structure elucidation techniques, contemporary purification methods and an understanding of computational techniques employed in medicinal chemistry. The successful candidate will have a Ph.D. in Synthetic Organic Chemistry along with post-doctoral training in the same area. In addition, this scientist should have 4+ years of successful, small molecule, drug discovery experience in an industrial environment.

Senior Synthetic Organic Chemists

The medicinal chemistry department of UCB Research has several positions open for Ph.D. synthetic organic chemists with postdoctoral experience. The successful candidate will join a team of synthetic organic chemists in the design and synthesis of small, organic molecules relevant to biological targets. Training in the design and implementation of multi-step organic syntheses, contemporary purification techniques, modern structure elucidation techniques and the ability to work in a multi-disciplinary team environment consisting of biologists and chemists is required. Experience in an industrial pharmaceutical setting would be a plus. A strong publication record (patents or journals) is required for this position as well as the ability to communicate clearly and effectively.

Synthetic Organic Chemists

The successful candidate will join a team of synthetic organic chemists involved in the synthesis of biologically relevant molecules. Candidates must be proficient in multi-step organic syntheses, modern purification techniques and contemporary structure elucidation methods. A BS or MS in Chemistry is required for these positions. Positions are also available for associate level, synthetic organic chemists.

UCB Research Inc. offers an entrepreneurial culture, comprehensive benefits package and a competitive salary. If qualified, please forward your resume indicating position of interest and salary requirements to: **Human Resources, UCB Research Inc., 840 Memorial Drive Cambridge, MA 02139. You may fax us at 617-547-8481 or e-mail your resume to sally.miller@ucb-group.com** No phone calls please. For more information about our company, visit our website at <http://www.ucb-group.com> EOE.





McAlister Chair In Advanced Engineering Materials Clemson University

The College of Engineering and Science at Clemson University invites nominations and applications for the McAlister Trustee's Chair in Advanced Engineering Materials. The Chair holder will assume a tenured professorship in the Gilbert C. Robinson Department of Ceramic and Materials Engineering or another Department as may be appropriate, and he/she will provide senior leadership in the Center For Advanced Engineering Fibers and Films, Clemson University's NSF Engineering Research Center.

Strong preference will be given applicants with demonstrated research accomplishments in advanced materials and to applicants who will assume a leadership role in the expansion of advanced materials research on our campus. Advanced materials include areas as ceramic, electronic/optical, metallic, polymeric, structural, high-temperature, and biological materials.

The successful candidate must have earned a doctorate in engineering or a physical science with a materials emphasis or orientation. Additional considerations will include experience as a faculty member, strong evidence of scholarly activity, and a national reputation in research of advanced materials.

Send application materials, including a full résumé and the names, addresses, and telephone numbers of three references to:

Dr. Denis A. Brosnan
McAlister Search Committee Chair
Center For Engineering Ceramic Manufacturing
100 Clemson Research Blvd.
Anderson, SC 29625

Applications will be reviewed starting on February 1, 1999,
and the position will be filled after that date.

Clemson University is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR

Kansas Mental Retardation and Developmental Disabilities Research Center University of Kansas

Full-time tenure track position beginning July 1, 1999. Direct one of 15 major NICHD-funded MRDD research centers in the U.S. Sustain and enhance research and development within the Schiefelbusch Institute for Life Span Studies, the largest research center at KU. Applicants with an expressed interest and appropriate credentials could also be considered for the position of Director of the Kansas University Affiliated Program and the Institute for Life Span Studies.

Required qualifications: Ph.D. or M.D.; demonstrated achievement in interdisciplinary research and development in mental retardation and developmental disabilities.

Review of applications begins February 1, 1999, and will continue until the position is filled. Application materials include a letter of application, résumé or curriculum vitae, and three letters of reference. Contact:

James Sherman
Chair, MRDDRC Search Committee
1052 Dole, University of Kansas
Lawrence, KS 66045. (785) 864-4840.

EO / AA Employer

Postdoctoral Positions

Mount Sinai School of Medicine prides itself on the strides that it makes in research. We owe our successes to the union of true talent and remarkable resources. In the midst of substantial growth in all of our research and core facilities, we have unique opportunities for dedicated professionals in the following areas:

**Mount
Sinai**

Investigators Diabetes and Aging

Experimental protein chemists, cellular and molecular biologists and immunologists to study the molecular basis of pathology in diabetes and aging. Competitive salary and stimulating research environment. Positions available immediately. **Reply to: Division of Experimental Diabetes and Aging, Box 1640. Fax: 212-849-2652.**

Prostate Cancer Progression

A position is available to study the biology and molecular mechanisms of prostate cancer progression using an in vitro model and human samples. Candidates must have background knowledge of cancer biology. Documented experience in tissue culture, molecular and cell biology techniques is essential. **Reply to: Dr. Anna C. Ferrari, Division of Neoplastic Diseases, Box 1129. Fax: 212-423-9458.**

We offer a salary commensurate with experience and excellent benefits. For consideration, please mail/fax your resume, indicating "Reply to" information for your position of interest, to: **Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574.** Visit our website at: www.careermosaic.com/mountsinai We are an equal opportunity employer fostering diversity in the workplace.

Mount Sinai School of Medicine



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

The USDA, Agricultural Research Service, Beltsville Agricultural Research Center, Plant Sciences Institute, Horticultural Crops Quality Laboratory, in Beltsville, Maryland is seeking a **MICROBIOLOGIST/RESEARCH PLANT PATHOLOGIST, GS-403/434-12/13.** Salary is commensurate with experience (GS-12: \$47,066 – \$61,190 per year, GS-13: \$55,969 – \$72,758 per year). **CANDIDATES MUST BE U.S. CITIZENS.** The position conducts high-priority basic and applied microbiology-oriented plant pathology research on food safety and quality of fresh and fresh-cut fruits and vegetables. In addition to the basic education requirements, applicants must demonstrate 1) knowledge of the principles, techniques, and procedures of microbiology and plant pathology; 2) ability to design, plan, conduct, and publish research in the area of microbiology and plant pathology; and 3) skill in the research of plant host-microbe interactions. For information on the research program, contact **Dr. Ken Gross** on (301) 504-6128. *This position has specific education and experience requirements, and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the vacancy announcement by calling (301) 504-1484 or by printing it from the Internet at <http://www.ars.usda.gov>. The vacancy announcement number for this position is ARS-D9E-9061. This announcement closes 1/18/99. USDA/ARS is an Equal Opportunity Employer and Provider.*

ASSISTANT UNIT LEADER FISHERIES

Washington Cooperative Fish and Wildlife Research Unit

The Washington Cooperative Fish and Wildlife Research Unit, School of Fisheries (SOF), University of Washington will soon welcome applications for the position of Assistant Unit Leader-Fisheries (AUL-F) from candidates with demonstrated ability in research, teaching, and graduate student supervision to develop and manage an active research program supporting the conservation and sustainable use of shellfish or resident and anadromous freshwater fish.

Preference will be given to candidates early in their career, but with demonstrated expertise in commercial or recreational fisheries, management of populations of harvested species and their associated freshwater and estuarine habitats, interactions between resident freshwater fish and anadromous species, or the conservation of depleted populations of shellfish or resident and anadromous freshwater fish. The Endangered Species Act and the recent nomination to the Endangered List of several strains of salmonids are of special interest to us, particularly in the context of freshwater and estuarine environments.

The successful applicant will also be expected to contribute to studies of the pertinent interactions between aquatic (freshwater and estuarine) and terrestrial systems; supervise graduate students; and teach a class and provide technical assistance in his/her area(s) of expertise.

The AUL-F is a federally funded position (Fisheries Biologist [Research; GS-0482]; Ecologist [Research; GS-0408]; or Oceanographer [Research; GS-1360]), and the successful candidate will be an employee of the Cooperative Research Unit Program, Biological Resources Division, U.S. Geological Survey; will be selected via federal hiring procedures; and will hold a faculty appointment of Assistant Professor without tenure in SOF at the University of Washington. A Ph.D. in fisheries or related science is required. Candidates with exceptional qualifications will be considered for appointment at the Associate Professor level, without tenure. Initial salary will be at the GS-12 level.

Candidates should visit the OPM Job Site @ <http://www.usajobs.opm.gov/> to view the formal federal job announcement (once it is advertised) and obtain application dates and instructions. Information on the Unit may be obtained @ <http://www.fish.washington.edu/wacfwru/>. In addition to formal OPM application procedures, a **copy** of the application should be sent to: AUL-F Search Committee c/o Director, School of Fisheries, Box 357980, University of Washington, Seattle, WA 98195. Questions or expressions of interest may be directed to Dr. Christian Grue at (206) 543-6475 or cgrue@fish.washington.edu. The USGS and the University of Washington are Equal Opportunity Employers and strongly encourage applications from female and minority applicants.



EXCELLENCE
WHERE IT MATTERS MOST.



At Johnson & Johnson, we value life. That's why we're committed to meeting our customers' needs by providing the highest quality products and services. We've achieved these goals with advanced technological resources and the dedicated individuals that make up our work force. The result is a company which has revolutionized the health care industry - and will continue to do so throughout the next century and beyond.



Ortho-Clinical Diagnostics

a Johnson & Johnson company

Raritan, NJ

Senior Scientist

Utilize your medical knowledge as you work on new product development and product/process improvement. Key responsibilities will include preparing data summaries, reports and documents, and participating in/leading team projects.

Qualified candidates must possess a Ph.D, preferably in biomedical/medical sciences, plus 5+ years' experience in the medical device industry. A background in hemostasis, knowledge of quality systems regulations, and experience with reagent instrument systems are also required. Successful candidates will be independent workers with strong communication and team-building skills. **Dept. 2658.**

Johnson & Johnson

Wound Healing Technology Resource Center

Skillman, NJ

Post-Doctoral Scientist

In this position, you will be involved in the *in vitro* evaluation of materials for potential use as replacements for bone or cartilage. This unique opportunity includes the study of tissue engineering involving the use of 3-D culturing techniques and the evaluation of cell differentiation by molecular and biochemical methods.

To qualify, you must be a Ph.D. or MD with experience in molecular and cellular biology. Excellent communication and computer skills are essential. Research experience in bone or cartilage is highly desired. **Dept. 2662.**

Ranked consistently by *FORTUNE* as one of "America's Most Admired Companies" and by *Working Mother* as one of the "100 Best Companies for Working Mothers", Johnson & Johnson offers competitive salaries and a full array of benefits including medical/dental, 401(k) and pension plan and a comprehensive wellness program.

For consideration, we strongly encourage individuals to apply on-line at:

www.jnj.com

If you do not have Internet access, please forward a scannable resume, noting the appropriate department code and salary requirement, to: **Dept. # of position of interest, Johnson & Johnson Recruiting, PO Box 16597, New Brunswick, NJ 08906-6597.** An equal opportunity employer, m/f/d/v, committed to diversity in the workplace.

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POSITIONS OPEN

DIRECTOR OF MAGNETIC RESONANCE RESEARCH AT UNIVERSITY OF ILLINOIS AT CHICAGO

The Department of Radiology, College of Medicine, University of Illinois at Chicago (UIC) seeks applications from MR Scientists with outstanding scientific and leadership credentials to serve as Director of the Magnetic Resonance (MR) Research Program. The Director will be responsible for recruiting a team of Physicists and/or Engineers, and leading an MR research program involving human subjects and animal models at high magnetic fields.

The research program should be aimed at developing novel techniques and applications for functional imaging of the brain and heart exploiting MR, multinuclear spectroscopy studies of metabolic and hemodynamic correlates of tissue function, and devising integrated approaches for the acquisition of spatiotemporal imaging using data from MRI, EEG, and MEG.

The successful candidate must be committed to close-working interactions with departmental colleagues specializing in clinical MR, fostering collaborative interactions with faculty on the Chicago and Urbana/Champaign campuses of the University of Illinois, and leading multidisciplinary collaborative projects involving faculty at UIC and/or UIUC.

Members of the MR research group would teach selected courses within formal and informal environments, and sponsor training programs for medical students, residents, and Pre- or Postdoctoral Fellows.

UIC's clinical MRI facility will be housed in a new outpatient center scheduled to open in September 1999, with two state-of-the-art clinical 1.5 T scanners and one whole-body 3.0 T unit. In addition, two 1.5 T scanners are dedicated for human research, and a 2.1 T CSI unit is available for small animals. Applicants must have a M.D. or Ph.D. degree, a record of training in MR imaging, a background of productive interactions with faculty colleagues in basic and/or clinical science departments, and a history of independent funding from NIH, NSF, or equivalent agencies. Rank and salary are dependent on experience. Secondary appointments are available in the Department of Bioengineering and/or the Beckman Institute at UIUC. Forward a letter of interest and curriculum vitae to: **Mahmood Mafee, M.D., Department of Radiology (M/C 931), University of Illinois Medical Center at Chicago, 1740 West Taylor Street, Chicago, IL 60612.**

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

TWO FACULTY POSITIONS NORTHERN MICHIGAN UNIVERSITY DEPARTMENT OF BIOLOGY Fall 1999

Northern Michigan University invites applications to fill two faculty positions in biology beginning August 1999. Probable teaching assignments are indicated. Both positions require the Ph.D. and are tenure-track.

Mammalian physiology (ASSISTANT PROFESSOR). Physiologist with research interests involving the function of mammals at the organismal level. Preference given to individuals whose research emphasizes some aspect of animal or human health in keeping with our department's preprofessional health-related programs. Teaching responsibilities include human physiology, human anatomy, and courses in area of specialization.

Aquatic biology (ASSISTANT PROFESSOR). Aquatic Biologist with expertise in fisheries management and limnology. Preference given to individuals whose research provides an ecosystem perspective. Some background related to aquatic plants is also desirable. Primary teaching responsibilities include ecology, ichthyology, fisheries management, and limnology.

For information visit website: <http://www.nmu.edu/www-edgar/biology/web/>.

Application review begins January 25, 1999, and continues until positions are filled. Send curriculum vitae, statement of teaching and research philosophy, and names, addresses, telephone numbers, and e-mail addresses of three references to: **Chair, Faculty Search Committee, Department of Biology, 1401 Presque Isle Avenue, Marquette, MI 49855-5341. Telephone: 906-227-2310; FAX: 906-227-1062; e-mail: biology@nmu.edu.**

Northern Michigan University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR, INSTITUTE FOR BIOMATERIALS AND BIOMEDICAL ENGINEERING UNIVERSITY OF TORONTO

The University of Toronto invites nominations and applications for the position of Director of the Institute for Biomaterials and Biomedical Engineering (IBBME).

The IBBME, a joint subsidiary of the Faculty of Applied Science and Engineering, the Faculty of Dentistry, and the Faculty of Medicine, is an Institute of the University of Toronto. The IBBME is being created through the coalescence of the former Institute for Biomedical Engineering, the Centre for Biomaterials, and the Tissue Engineering Group in the Department of Chemical Engineering and Applied Chemistry. The new Institute has been formed in order to create a center for world-leading research and education in biomedical engineering, biomaterials, and tissue engineering at the University of Toronto. The IBBME offers a collaborative graduate program to students in a variety of disciplines of engineering, medicine, and dentistry, and an undergraduate biomedical engineering option in the Engineering Science Program. Faculty members cross-appointed to the IBBME are drawn from departments within the Faculties of Applied Science and Engineering, Dentistry, and Medicine, including members of the eight major teaching hospitals in the Toronto academic health sciences complex.

The IBBME is committed to gaining a leadership role for the University of Toronto in the creation and development of the next generation of medical devices, implants, and advanced drug and gene delivery systems. Consistent with this mission, the successful candidate will be a distinguished educator and researcher, with demonstrated leadership abilities and significant administrative experience. Vision, initiative, and the drive to build the Institute's national and international reputation for research, teaching, and technological innovation, combined with proven skills in communication and consensus-building, will help identify the successful candidate.

The appointment will be at an appropriate academic rank and at a salary level commensurate with experience. The preferred starting date is July 1, 1999. Nominations and applications should be sent in writing by February 15, 1999, to:

**Professor Michael E. Charles, Dean
Faculty of Applied Science and Engineering
University of Toronto
Galbraith Building, Room 170
35 St. George Street
Toronto, Ontario M5S 1A4 Canada**

The University of Toronto is an Equity Employer. In accordance with Canadian immigration requirements, priority will be given to qualified Canadian citizens and permanent residents.

FACULTY POSITION DEPARTMENT OF ENVIRONMENTAL HEALTH University of Cincinnati

The department is continuing its expansion and is looking for an outstanding, highly motivated, and accomplished individual for a **TENURED or TENURE-TRACK FACULTY POSITION** (rank commensurate with experience). Candidates should have an established record or demonstrated potential for original research in areas that complement existing strengths of the department in the study of gene-environment interactions. Preference will be given to individuals with an interest in respiratory, immunologic, developmental, genetic, cancer, or metal toxicology, with a solid background in functional genomics, molecular and cellular biology, regulation of gene expression, or signal transduction mechanisms. The successful candidate will be expected to establish an active program of extramurally supported research, focused on the study of environmental diseases and to become an active member of the NIH-funded Center for Environmental Genetics, establishing collaborative relationships with other center members. Successful candidates can anticipate a start-up package and involvement in Doctoral and postdoctoral training programs.

Please send complete curriculum vitae, a brief outline of research plans, copies of three recent publications, and the names, addresses, and telephone numbers of three potential references to: **Roy Albert, M.D., Chair, Search Committee, Department of Environmental Health, University of Cincinnati, P.O. Box 670056, Cincinnati, OH 45267-0056. E-mail: roy.albert@uc.edu.**

The University of Cincinnati is an Equal Opportunity Employer and Educator.

POSITIONS OPEN

DIRECTOR, CENTER OF EXCELLENCE IN MATH AND SCIENCE EDUCATION BLACK HILLS STATE UNIVERSITY

Applications for the Director of the Center are invited. The position will begin July 1999 with salary, rank, and tenure status depending on qualifications and experience. Responsibilities include developing models for science/math education and research, teaching undergraduate and graduate courses in math or science education, writing and administering grants, being a catalyst for scholarly research presentations and publications from the Center, and promoting effective use of technology for science/math education. Science/math educators with a Doctorate and strong credentials in collaborative work with a College of Education and undergraduate research are encouraged to apply. Familiarity with the K-12 setting is desired. Send a letter of application, curriculum vitae, vision statement with regard to creating a nationally recognized Center, statement of research interests, and three letters of reference to: **c/o Dr. Dan O. Farrington, Search Committee Center of Excellence, Black Hills State University, 1200 University Avenue, Spearfish, SD 57799-9504.** Screening will begin January 15, 1999. Applications will be accepted until the position is filled. Location: BHSU is a comprehensive, regional institution located in Spearfish, South Dakota with a current enrollment of 2,800 students at the main campus and another 1,000 students at a Rapid City, South Dakota branch campus. The University's northern Black Hills location provides the ideal environment for combining outdoor recreational and collegiate educational opportunities in a small-town setting.

TWO FACULTY POSITIONS IN ORGANISMAL BIOLOGY

Tenure-track positions. One at **ASSISTANT PROFESSOR** level, one at **ASSISTANT/ASSOCIATE** level. Joint applications from professional couples will be considered. Teaching for one position is in human anatomy. The second position will support genetics. We also expect advanced courses in the applicants' area of expertise. Research areas for the first position might include functional or comparative anatomy, evolution, behavior, or ecology. Research interests for the second position might include genetic approaches to systematics, conservation biology, or any of the areas mentioned above; may focus on plants or animals; and should utilize molecular or other modern techniques. The Ph.D. and significant research accomplishments are required; postdoctoral experience is preferred. We expect continuing excellence in both teaching and funded research with M.S./M.A. and Ph.D. students.

Candidates should submit a curriculum vitae, concise statements of teaching and research interests, up to three publications, and the names and addresses of at least four references (include e-mail addresses and FAX numbers) to: **Dr. G. S. Bakken, Search Committee, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809.** Duties begin August 20, 1999. Screening begins January 15, 1999, continuing until the positions are filled. For more information, e-mail: lgsb@scifac.indstate.edu with "positions" as the subject, and visit website: <http://biology.indstate.edu/dls/>. *ISU is an Affirmative Action/Equal Opportunity Employer and encourages women and minority candidates to apply.*

FACULTY POSITION IN THE DEPARTMENT OF APPLIED PHYSICS STANFORD UNIVERSITY

The Department of Applied Physics at Stanford University intends to make a faculty appointment in the general area of quantum electronics, lasers, and optics. We are primarily seeking candidates for a tenure-track **ASSISTANT PROFESSORSHIP**; however, outstanding candidates for **ASSOCIATE** and, possibly, **FULL PROFESSORSHIP** will be considered. Applicants will be expected to teach courses at both the graduate and undergraduate levels.

Applicants should send curriculum vitae, bibliography, a brief statement of research interests, and names of three references to: **Professor Aharon Kapitulnik, Chair, Department of Applied Physics, 316 Via Pueblo Mall, Stanford University, Stanford, CA 94305-4090.** To receive full consideration, materials should be received by February 15, 1999. The term of appointment would begin September 1, 1999. *Stanford University is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are encouraged to apply.*

ANNOUNCEMENT

VISIT OUR INTERNET SITE FOR
ON-LINE APPLICATIONS

NIH Undergraduate Scholarship Program (UGSP)

If you would like to be trained and mentored at the cutting edge of biomedical research while receiving scholarship support, the UGSP may be for you!

The UGSP is sponsored by the National Institutes of Health (NIH), the Federal Government's lead biomedical research and research training agency, offering scholarships to qualified individuals to pursue undergraduate life sciences degrees.

Scholarships up to \$20,000 per year support tuition, educational, and qualified living expenses (room, board, transportation) while students pursue an undergraduate degree.

During each year of the award, scholars train for 10 weeks as paid employees in NIH research laboratories. They are assigned to mentors, participate in research seminars and developmental programs. Housing and transportation is provided. After graduation, 1 year of full-time research employment at NIH is required for each year of scholarship support.

You Should Apply If You:

- Can demonstrate a deep interest in pursuing a career in biomedical research;
- Can demonstrate being from a disadvantaged background;
- Have a GPA of 3.5 or better or are in the top 5 percent of your class;
- Are a U.S. citizen, national, or permanent resident;
- Are enrolled or accepted for enrollment as a full-time student at a qualified accredited institution.

**This is a special opportunity for
special students.**



For more information, contact:

UGSP

<http://ugsp.info.nih.gov>

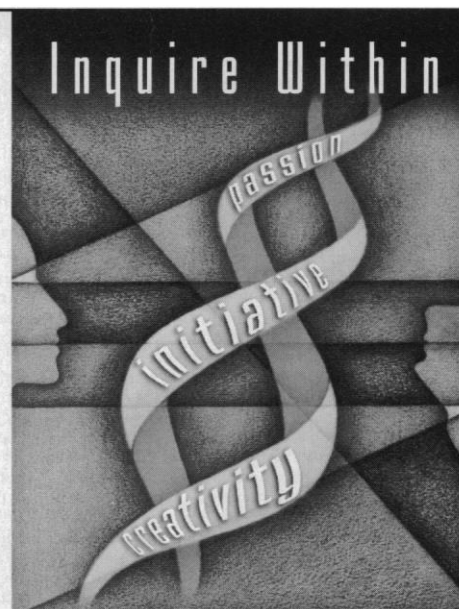
e-mail: ugsp@nih.gov

Phone: 800-528-7689

TTY: 1-888-352-3001

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Scientist/Senior Scientist, Cardiovascular Research

You will be responsible for developing in vivo models of human pathophysiology and efficacy testing of therapeutic candidates. As part of a multidisciplinary team, you will design and execute experiments, and interact with a variety of groups in collaborative efforts aimed at drug discovery. Specific areas of investigation include, but are not limited to, stroke research, therapeutic angiogenesis and models of heart failure. You should have a PhD or MD with a demonstrated record of accomplishment in cardiovascular pharmacology, physiology and in vivo model development. Expertise in models of heart or limb ischemia is desirable. Job Code SCI1037

Senior Scientist, Molecular Biology

Join our Molecular Biology Department as a group leader in our Human Genomics program. You will be responsible for the discovery, cloning, expression, and evaluation of novel human genes. You must have a PhD and 3-5+ years as a postdoc in molecular biology or a related field. At least 3-10 years as a group leader is highly desirable. You should have demonstrated experience in a broad range of molecular biology techniques such as gene cloning and expression, and genomic approaches to new gene discovery. Job Code SCI1240

Scientist/Associate Scientist, Analytical Chemistry

In this position, you will be involved with method development for protein analysis. You will be determining the sources and mechanisms of variant production. A PhD in Chemistry or Biochemistry and up to 8 years' experience with an emphasis in protein are required. The candidate should have extensive background in chromatography, electrophoresis and/or mass spectrometry. Experience with E coli or mammalian cell culture is desirable. Job Code SCI1785

Our progressive benefits package includes full medical/dental/vision, 3 weeks vacation, sabbatical program, stock purchase plan and health club membership. Send your resume, indicating Job Code to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Please use plain typefaces. You may e-mail your resume to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

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extraordinary science

POSITIONS OPEN

TWO FACULTY POSITIONS LIFE SCIENCES/RADIOISOTOPES MOLECULAR BIOLOGY OF MINERALS

The University of Missouri is seeking two tenure-track **ASSISTANT PROFESSORS** in nutritional sciences. Preference will be given to individuals studying in-born errors of metal metabolism, metal ion transport proteins, metal-related regulation of gene expression, or metallo-protein biochemistry. Life sciences/radioisotopes: The successful candidate will be expected to develop a nationally funded research program using radioisotopes to study problems of broad nutritional importance in model systems at any phylogenetic level. It is anticipated that this person will utilize the unique facilities at the University of Missouri Research Reactor, and will have an adjunct appointment and some laboratory space at the Reactor. Applications will be accepted until January 22, 1999, or until the position is filled. Molecular biology of minerals: Applications will also be considered for this position (see: *Science* 282:804 for more details).

Competitive salary and start-up funds are included in both positions and each has some teaching responsibilities. Applicants require a Ph.D. in biochemistry, molecular biology, chemistry, nutritional sciences, or related area, and postdoctoral experience. Send a curriculum vitae, representative publications, a summary of past research and teaching accomplishments, a statement of future research plans, and arrange for three letters of reference to be sent to: **Dr. David J. Eide, Search Committee Chair, Nutritional Sciences Program, 217 Gwynn Hall, University of Missouri, Columbia, MO 65211.** See website: <http://www.missouri.edu/~nutsci/> for further information.

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

NORTHWESTERN UNIVERSITY DEPARTMENT OF PHYSIOLOGY

The Department of Physiology at Northwestern University Medical School announces a search for a new **TENURE-TRACK FACULTY MEMBER**. The appointment may be made at any level. Outstanding candidates employing innovative cellular or molecular approaches to understanding brain function that expand the existing departmental strengths are encouraged to apply. Successful candidates holding a Ph.D. or M.D. degree are expected to establish an independently funded research program as well as interact with members of the neuroscience community. In addition, participation in graduate and medical student teaching is expected.

This recruitment is part of a growing commitment to neurosciences at Northwestern University Medical School. Additional information about the Department of Physiology and the Northwestern University Institute for Neurosciences can be found on our websites: <http://dept-www.physio.nwu.edu/physiology/physiofr.htm> or <http://nuinfo.nwu.edu/nuinfo/>.

Please send a curriculum vitae, a description of research interests, and three letters of reference by March 1, 1999, to:

D. James Surmeier, Ph.D.
Chair, Search Committee
Department of Physiology
Northwestern University Medical School
320 East Superior Street
Chicago, IL 60611

We hope to fill this position by September 1, 1999.

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

FACULTY POSITION IN BOTANY SPOKANE FALLS COMMUNITY COLLEGE

The Life Sciences Department invites applications for a full-time tenure-track botany **INSTRUCTOR**. Candidates must possess at least an earned Master's degree in botany or a closely related field and two years of college teaching experience. The department seeks a broadly educated candidate with academic background and teaching experience in plant taxonomy, plant ecology, and Northwest natural history. Anticipated date of employment is September 15, 1999. Position is dependent upon State of Washington funding. Applications accepted until 15 January 1999. To request official materials contact: **Human Resources Office, Community Colleges of Spokane, 2000 North Greene Street, Spokane, WA 99207-5499.** Telephone: 509-533-7429; website: <http://ccs.spokane.cc.wa.us>.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS

The Virginia-Maryland College of Veterinary Medicine invites applications for two calendar-year tenure-track faculty positions available July 1, 1999.

Tissue reconstruction/engineering. The appointee will develop an independent and extramurally funded research program in the fields of tissue reconstruction and engineering, e.g., in angiogenesis, bone healing, nerve growth, etc. Expertise in the cellular regulation of receptor-ligand interactions as related to growth factors is desirable. The appointee will emphasize cross-disciplinary, sponsored research with bioengineering faculty under the auspices of the Pharmaceutical Engineering Institute.

Molecular immunology. The appointee will develop an independent and extramurally funded research program in the molecular biology of the secretory immune system, with emphasis on mechanisms of modulation by cytokines and other molecules. The appointee will also be expected to collaborate with other faculty in an ongoing program of vaccine research and development, to include the Pharmaceutical Engineering Institute as well as the Center for Molecular Medicine and Infectious Diseases.

The successful applicants will also be expected to participate in the instructional programs of the College as appropriate. Applicants must have the Ph.D. and postdoctoral experience. In addition, the D.V.M., M.D., or equivalent medical degree is preferred. Send a letter of application, description of research goals, curriculum vitae, and names of three references to: **Dr. Ludeman Eng, Head, Department of Biomedical Sciences and Pathobiology, College of Veterinary Medicine, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061.** Individuals with disability desiring accommodations in the application process should notify **Dr. Eng** at the above address or by **Telephone: 540-231-4652; e-mail: laeng@vt.edu.** Review of applications will begin on February 1, 1999, but applications will be accepted until a suitable candidate is identified. *Virginia Polytechnic Institute and State University has a strong commitment to the principle of diversity and, in that spirit, seeks a broad spectrum of candidates including women, people of color, and people with disability.*

DIRECTOR OF THE PROTEIN-NUCLEIC ACID SHARED CORE FACILITY at the Medical College of Wisconsin

Applications are invited for Director of the Protein-Nucleic Acid Shared Core Facility at the Medical College of Wisconsin. The Director will supervise the operation of a facility offering peptide synthesis and sequencing, MALDI mass spectrometry, amino acid analysis, protein purification by 2D gels and HPLC, DNA synthesis and sequencing, plasmid and vector construction, phage display, and flow cytometry. The Director of the Facility is expected to provide expert advice on the application of these methodologies to current research projects carried out at the Medical College. New services are added as need arises, and there is also opportunity for independent or collaborative research. The Facility, its staff, and the Director's position are well supported by the Medical College. The Director should hold a Ph.D. in an appropriate field and be qualified for appointment to the faculty of one of the Basic Science Departments.

Consideration of applications will begin December 15, 1998, and will continue until the position is filled. Interested individuals should send their curriculum vitae, including a description of their expertise in the areas specified, and the names of three references to:

**Protein-Nucleic Acid Shared Core Facility
Search Committee**
Department of Biochemistry
Medical College of Wisconsin
8701 Watertown Plank Road
Milwaukee, WI 53226-0509

Affirmative Action/Equal Opportunity Employer.

Wittenberg University. Tenure-track **ASSISTANT PROFESSOR.** Invertebrate biology (marine biology preferred) for August 1999. Ph.D. or ABD. Principle responsibilities: teaching courses in invertebrate biology and related areas, research with undergraduates. Send curriculum vitae, teaching philosophy, transcripts, and three letters of recommendation to: **Dr. Tim Lewis, Chair, Department of Biology, Wittenberg University, P.O. Box 720, Springfield, OH 45501.** E-mail: tlewis@wittenberg.edu. Review of applications begins 22 January 1999. *Wittenberg University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITION HUMAN GENE THERAPY

The College of Medicine at the University of Florida invites applicants for a full-time, tenure-track position at the **ASSISTANT to FULL PROFESSOR** level. The position is available for an individual with an M.D. and/or Ph.D. degree with a minimum of two years of postgraduate research experience in gene therapy, mammalian genetics, or mammalian virology who has a strong interest in and commitment to the clinical application of human gene therapy and/or vector development. Preference will be given to individuals who have experience in the study of herpes virus vectors or herpes virus latency. The position will involve joint clinical/basic science appointments as appropriate within the Gene Therapy Center in the College of Medicine at the University of Florida. The position may be a joint appointment in the University of Florida Brain Institute and may be eligible for funding in part from the Howard Hughes Institute. The successful applicant will be expected to (a) direct an independent research program in mammalian genetics, human gene therapy, or mammalian virology; (b) facilitate the development of a clinical-grade gene therapy production laboratory and a Vector Core Laboratory for making preclinical-grade vectors; and (c) assist in the development of human applications for gene therapy. The anticipated start date is July 1, 1999, and the salary is negotiable. Send curriculum vitae, bibliography, a brief description of research interests, and names and addresses of three references by February 1, 1999, to: **Dr. Nicholas Muzyczka, Gene Therapy Center, c/o Department of Molecular Genetics and Microbiology, Box 100266, University of Florida, Gainesville, FL 32610.**

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

FACULTY POSITION UNIVERSITY OF MICHIGAN DEPARTMENT OF PHYSIOLOGY Integrative Biology Functional Analysis of Genetically Engineered Animals

We seek to recruit a tenure-track **JUNIOR FACULTY MEMBER** who uses modern tools of genetic engineering (gene targeting/transgenesis/gene transfer) to study physiological processes in the context of the whole animal. The new faculty member will also contribute to the teaching mission of the department. In addition to a competitive start-up package, the successful candidate will play an important role in a new interdepartmental Center for Integrative Biology, and also compete for a position in the University of Michigan's Biological Scholars program (see 20 November 1998 *Science*). Applicants should send (1) a summary of research accomplishments and future plans, (2) curriculum vitae, and (3) arrange for three references sent to: **Chair: Integrative Biology Search, Department of Physiology, 7744 Medical Science II, University of Michigan, Ann Arbor, MI 48109-0622.**

University of Michigan is an Equal Opportunity/Affirmative Action Employer committed to achieving diversity among its faculty and staff.

HOWARD HUGHES LECTURER IN BIOLOGICAL SCIENCES LEHIGH UNIVERSITY

The Department of Biological Sciences at Lehigh University is seeking candidates for a three year, non-tenure-track Lecturer position funded by a biological sciences education grant from the Howard Hughes Medical Institute. The Hughes Lecturer will contribute to innovative educational activities in biological sciences spanning course and curricular development, instruction, undergraduate involvement in research, and outreach. Opportunities for collaborative research with faculty are available. Applicants with the Ph.D. in cell, molecular, or integrative biology; neuroscience; or biochemistry are appropriate and preference will be given to individuals who can effectively bridge two or more areas. The position offers a competitive salary and full benefits and is available July 1, 1999. Send curriculum vitae, statement of educational philosophy and teaching interests, and four references to: **Chair, Hughes Lecturer Search, Department of Biological Sciences, 111 Research Drive, Lehigh University, Bethlehem, PA 18015.** The deadline for applications is January 31, 1999. *Lehigh University is an Affirmative Action/Equal Opportunity Employer and is committed to retaining women and minorities.*

DIRECTOR LIFE SCIENCES AND BIOTECHNOLOGY INSTITUTE

Purdue University

Purdue University seeks a person with vision to direct its Life Sciences and Biotechnology Institute. The Institute's mission is to enhance life science research at Purdue by facilitating coordination and providing focus for interdisciplinary research across the Schools of Agriculture, Consumer and Family Science, Engineering, Liberal Arts, Pharmacy, Science, and Veterinary Medicine. The University is committed to enhancing Life Sciences and Biotechnology research and is prepared to invest resources to achieve this end.

Position Responsibilities

The director will coordinate and promote life science research activities within the University; lead development of collaborative life science relationships with governmental and private sectors; assist faculty in identifying research opportunities; and organize life science-related multidisciplinary research and outreach programs. The position is full-time with a minimum of half-time effort devoted to Institute leadership. Remaining effort can include responsibilities in research, education, or other administrative duties.

Requirements

Applicants must have an M.D./D.V.M. or Ph.D. in a life science discipline. He or she is expected to have effectively directed an extramurally funded research program. Administrative and academic experience should be commensurate with an appointment to a senior-level faculty position in one of the participating Schools.

The director will report to the Vice President for Research and Dean of the Graduate School.

Applications / Nominations

A review of applications will commence by January 15, 1999, and continue until that position is filled. Nominations or applications containing a résumé and names of three references should be sent to:

**Dr. Victor L. Lechtenberg, Dean
of Agriculture**
1140 Ag Administration Building
Purdue University
West Lafayette, IN 47907-1140
Phone: (765) 494-8391
Fax: (765) 494-7420
vll@agad.purdue.edu



University of Toronto Faculty of Medicine



Program in Proteomics and Bioinformatics

The Faculty of Medicine, University of Toronto announces the creation of a new interdisciplinary and interdepartmental Program in Proteomics and Bioinformatics. The program, under the aegis of the Graduate Departments of Biochemistry, Laboratory Medicine and Pathobiology, Molecular and Medical Genetics, and Medical Biophysics will train doctoral and post-doctoral students in this rapidly developing area. The participating units in the Program include the above mentioned Departments as well as the Banting and Best Department of Medical Research, the Department of Medicine, the Research Institute of the Hospital for Sick Children, the Samuel Lunenfeld Research Institute of the Mount Sinai Hospital and the Ontario Cancer Institute/Toronto Hospital.

Applications are invited for 10 faculty positions in this Program. Areas for recruitment include, but are not restricted to, data mining and databases, differential gene expression by microarrays, disease phenotyping, functional genomics, metabolic pathways, molecular evolution, protein design, protein mass spectrometry and protein-protein interactions.

Requirements include a Ph.D. degree or equivalent and at least two years of post-doctoral training. Successful applicants will be expected to establish excellence in an independent research program, to compete effectively for external funding and to play an active role in the delivery of the educational objectives of the Program. Effective July 1, 1999, the appointments will normally be made at the Assistant Professor level although outstanding applicants at a higher level will be considered. Salary will be commensurate with qualifications and experience. Depending on the sponsoring Department the position will be tenure track or a five year renewable contract.

Applicants should forward a curriculum vitae outlining current and long-term research objectives especially as they pertain to Proteomics and Bioinformatics and arrange for three letters of reference to be sent before February 1, 1999 to:

Dr. Peter N. Lewis
Director, Program in Proteomics and Bioinformatics
Department of Biochemistry
University of Toronto
Toronto, Ontario Canada M5S 1A8
email: chair.biochemistry@utoronto.ca

web site: <http://utl1.library.utoronto.ca/www/medicine/depts.htm>

In accordance with its Employment Equity Policy, the University of Toronto encourages applications from qualified women and 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.

POSITIONS OPEN

FACULTY POSITIONS (TWO) IN MOLECULAR MICROBIOLOGY/ IMMUNOLOGY

Due to expanding research emphasis, the Department of Microbiology, University of Osteopathic Medicine and Health Sciences (UOMHS), invites applications for two tenure-track (ASSISTANT or ASSOCIATE PROFESSOR) positions. Located near downtown Des Moines, the University educates Physicians and allied health professionals and maintains an active and growing research program. Successful candidates must have Doctoral and postdoctoral training and will be expected to develop an externally funded research program involving cellular or genetic approaches to mechanisms of infection and immunity. The candidates will also participate in a team-taught microbiology course; one of the positions is reserved for an Immunologist. Space and start-up funds are available for these positions.

Applicants should forward a curriculum vitae, copies of representative reprints, and a cover letter describing research interests and plans as well as a description of teaching strengths. Three persons familiar with the candidate should also be named as references. Address applications to: **Dr. Bryan Larsen, Dean for University Research, University of Osteopathic Medicine and Health Sciences, 3200 Grand Avenue, Des Moines, IA 50312.**

Review of applications will begin January 15, 1999, and continue until the position is filled. *UOMHS is an Equal Opportunity Employer.*

FACULTY POSITIONS IN SPINAL CORD INJURY THE UNIVERSITY OF MIAMI School of Medicine

The Miami Project to Cure Paralysis/Department of Neurological Surgery at the University of Miami School of Medicine is seeking two outstanding Neuroscientists to join its comprehensive spinal cord injury research program. Academic appointments will be at the ASSISTANT and ASSOCIATE/FULL PROFESSOR levels. A significant record of accomplishment, as well as the potential to attract independent research funding are important considerations for these positions. The Miami Project offers an excellent and dynamic basic science/clinical research program directed toward clarifying the pathophysiology of spinal cord injury and developing novel treatments to promote functional recovery after injury. The successful applicant will collaborate as a member of a multidisciplinary program and will have access to a large state-of-the-art facility. Candidates should have an interest in the molecular biology of neuronal development and regeneration, stem cell biology, transplantation experience. The positions are available for June 1999. Those interested should send their curriculum vitae and a brief summary of research interests and goals to: **W. Dalton Dietrich, Ph.D., Scientific Director, The Miami Project to Cure Paralysis, University of Miami School of Medicine, P.O. Box 016960 (R-48), Miami, FL 33101.** *Equal Employment Opportunity/Affirmative Action.*

DEPARTMENT HEAD AND CURATOR

The Denver Museum of Natural History is reopening the position for Department Head and Curator in the Department of Zoology. The primary responsibilities of the successful candidate are management of the Zoology Department, participation in leadership of the Collections and Research Division, and research and educational programming in area of specialization. Experience in management, grant writing, and work in informal science education must be demonstrated. The Department has collections in ornithology, mammalogy, and entomology and one Curator in each specialization. Applicants must demonstrate a strong record of collections-based research in one of these areas of specialization. Scientists whose research program also includes a field component are particularly encouraged to apply. Expertise on the ecosystems of the Great Plains and Rocky Mountains highly desirable. The successful candidate should desire to interact with the public and the media about their area of specialization. Ph.D. in zoology or a related field is required. Salary range competitive and commensurate with experience. Please send curriculum vitae, three letters of reference, and examples of both popular and scientific writing to: **Chief Curator, Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, CO 80205.** Deadline for applications is March 15, 1999; start date is June 1, 1999. *Equal Employment Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITIONS IN PHARMACOLOGY UNIVERSITY OF VIRGINIA

Applications are invited for two tenure-track positions in the Department of Pharmacology to be filled at the rank of ASSISTANT PROFESSOR or HIGHER. The Department is seeking applicants with significant postdoctoral research experience and research interests relevant to cell signaling using contemporary approaches, including molecular structure, genetic analysis of function in model organisms or differentiated cells, control of transcription, and the organization and function of the cardiovascular, nervous, or immune systems. Successful candidates will be expected to develop or maintain externally funded research programs and to participate in graduate and medical student teaching. The University of Virginia provides a highly interactive scientific community well supported by core facilities, research centers, and training programs (find more information about our Department at our website: <http://www.med.virginia.edu/medicine/basic-sci/pharm/Pharm.html>). Highly competitive salary and start-up packages are available for these positions.

Curriculum vitae, statement of research accomplishments and plans, and three letters of recommendation should be directed to: **Dr. John Lawrence, Chair, Faculty Search Committee, Department of Pharmacology, Box 448, Jordan Hall, University of Virginia, Charlottesville, VA 22908.** *The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Applications from women and underrepresented minorities are encouraged.*

Bridgewater State College seeks applicants for the following full-time, tenure-track faculty positions, which include opportunities for teaching and advising undergraduate and graduate students during the nine-month academic year. Opportunity exists for additional teaching in the summer.

ASSISTANT PROFESSOR. Biological sciences, with specialty in cell/animal developmental biology. To teach developmental biology, transmission electron microscopy techniques, introductory biology, and upper-level courses appropriate for the department's biomedical concentration; advise undergraduate students in the biomedical concentration; supervise original undergraduate research.

ASSISTANT PROFESSOR. Biological sciences, with specialty in wetlands plant biology, plant taxonomy, and/or plant morphology. To teach wetlands biology, plant taxonomy and/or plant morphology, introductory biology, and upper-level courses appropriate for the department's environmental concentration; and supervise original undergraduate research.

Both positions require an earned Ph.D.; teaching experience preferred; and knowledge of biostatistics is desirable. To apply, submit letter of application, résumé, and the names, addresses, and telephone numbers of three professional references to: **Office of Human Resources, Bridgewater State College, Bridgewater, MA 02325.** Website: <http://www.bridgew.edu/>. Review of complete application files will begin January 4, 1999, and continue until positions are filled. *Bridgewater State College is an Equal Opportunity Employer that actively seeks to increase the diversity of its work force.*

GOVERNORS STATE UNIVERSITY MOLECULAR MICROBIAL ECOLOGY

Governors State University (GSU) invites applications and nominations for a **TENURE-TRACK FACULTY POSITION** (12-month contract) in molecular microbial ecology for fall 1999. Applicants should be broadly trained in biology with solid academic preparation in molecular biology and microbiology and research experience in addressing environmental problems using molecular techniques. A strong commitment to undergraduate education serving a diverse student population is required. Scholarly research is essential. Candidates must have an earned Ph.D. by the start date. Responsibilities include teaching microbiology, cell/molecular biology, and biotechnology in the undergraduate biology curriculum; microbial ecology/environmental microbiology in the graduate environmental biology curriculum; and a service course for non-majors and/or an additional course appropriate to background; and supervision of graduate research. Review of applications begins February 15, 1999. Send letter of interest addressing qualifications, a curriculum vitae, three references, all academic transcripts, and other supporting materials to: **Phyllis Klingensmith, Ph.D., Biology Faculty Search Committee, Governors State University, University Park, IL 60466-0975.** *GSU is an Affirmative Action/Equal Employment Opportunity Employer.*

POSITIONS OPEN

ANIMAL DEVELOPMENTAL BIOLOGIST

The Department of Biological Sciences invites applications for a tenure-track faculty position at the ASSISTANT or ASSOCIATE PROFESSOR level. The position is available July 1, 1999, and is open to applicants with a strong background in animal developmental biology (Ph.D. degree and at least three years of postdoctoral experience and a record of productive high-quality research). The successful candidate will establish an active, externally funded research program in contemporary developmental biology and be committed to excellence and innovation in teaching at the undergraduate and graduate levels. The major teaching responsibilities will fall in the area of developmental biology. Potential applicants are invited to visit the website of the Department of Biological Sciences (website: www.ucalgary.ca/UofC/faculties/SC/BI/) and its embedded links to the Virtual Embryo and the Department of Biochemistry and Molecular Biology in the Faculty of Medicine.

A complete application should include the following: a curriculum vitae with an e-mail address, a concise outline of research plans including copies of maximally three representative publications, and a statement of teaching interest and philosophy. Candidates should also arrange to have three letters of reference sent under separate cover. The closing date for receipt of the complete application package and reference letters is February 26, 1999. Please send to:

**Dr. A. P. Russell, Head
Department of Biological Sciences
University of Calgary
2500 University Drive N.W.
Calgary, Alberta T2N 1N4 Canada
FAX: 403-289-9311**

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Calgary respects, appreciates, and encourages diversity.

PROTEIN BIOCHEMIST TENURE-TRACK POSITION AT THE UNIVERSITY OF MONTANA

The Division of Biological Sciences invites applications for a tenure-track position at the ASSISTANT PROFESSOR level, to begin fall 1999. The successful candidate is expected to develop a vigorous, externally funded research program in protein biochemistry; direct graduate students; and contribute to the undergraduate research program. Teaching expectations are undergraduate and graduate courses in biochemistry, including a graduate-level course in proteins and enzyme kinetics. Requirements are a Doctoral degree, record of research accomplishments, including postdoctoral experience, and teaching experience. Preference will be given to candidates whose research interests complement current emphases in the biological sciences and other university programs (website: <http://www.umt.edu/biology/dbs>). Send letter of application, curriculum vitae, statement of research goals and teaching interests, and three letters of reference to: **Dr. Scott Samuels, Chair, Protein Biochemistry Search Committee, Division of Biological Sciences, The University of Montana, Missoula, MT 59812.** Telephone: 406-243-5122; FAX: 406-243-4184. Completed applications received by February 1, 1999, will be assured of full consideration. *Affirmative Action/Equal Opportunity Employer.*

PRECLINICAL FACULTY

As part of an ongoing faculty enhancement program, Lake Erie College of Osteopathic Medicine (LECOM) invites applications for full-time Doctoral-level preclinical faculty positions in medical anatomy, biochemistry, microbiology, pharmacology, and physiology. Appointees should have excellent teaching skills with experience in medical school education. Faculty are also expected to develop productive research programs. Rank is based upon qualifications and experience; salary is competitive. Opportunities also exist for future administrative advancement. Applicants should send a curriculum vitae, a brief summary of teaching interests and research plans, names, addresses, and telephone numbers of at least three professional references, to: **Silvia M. Ferretti, D.O., Dean and Vice-President of Academic Affairs, Lake Erie College of Osteopathic Medicine, 1858 West Grandview Boulevard, Erie, PA 16509.** Applications will be screened immediately and will continue to be accepted until all positions are filled. *LECOM is an Affirmative Action/Equal Opportunity Employer and encourages female and minority candidates.*

STAFF SCIENTIST POSITION

The Occupational Epidemiology Branch, Epidemiology Biostatistics Program, Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health seeks applicants for a Staff Scientist position. This position is a nontenured limited appointment with an initial appointment of up to five years, and is renewable based on the discretion of the Institute. This position requires working under the general direction of a Senior Epidemiologist and is responsible for coordinating a case-control study of bladder cancer. To qualify, applicants must have a medical degree and a Ph.D. in epidemiology with experience in conducting epidemiologic investigations involving the collection of biological tissues and publications on case-control studies of cancer. The salary range is \$55,969 to \$90,426. To apply for this position, please submit a curriculum vitae, three letters of reference, description of experience in conducting epidemiologic studies with collection of biologic tissue, and examples of publications on case-control studies of cancer. To apply for this position, applicants must submit their applications by January 8, 1999, to **Ms. Judy Schwadron, National Cancer Institute, Division of Cancer Epidemiology and Genetics, 6130 Executive Boulevard, Suite 316, Rockville, MD 20852.**

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Vanderbilt University School of Medicine

POSTDOCTORAL RESEARCH OPPORTUNITIES

The Department of Microbiology and Immunology seeks applications for its postdoctoral research training program. Research fronts include virology, molecular and cellular immunology, molecular genetics, molecular pathogenesis, and biotechnology. Positions are available with the following faculty:

Chris Aiken
Dean Ballard
Mark Boothby

Mark Denison
Terry Dermody
Barney Graham

Neil Green

Jacek Hawiger

Wasif Khan

Gene Oltz
Luc Van Kaer
Peter Wright

Molecular biology of human immunodeficiency virus
Molecular mechanisms in T cell activation and retroviral gene expression
Dissection of the influence of signal transduction pathways on the development and survival of effector and memory-phenotype T cells
Coronavirus polyprotein expression, processing, and functions
Molecular mechanisms of reovirus pathogenesis
RSV immunopathogenesis and vaccine development; mechanisms of virus-induced membrane fusion
Molecular genetics of membrane protein insertion and processing within the endoplasmic reticulum
Mechanisms of septic shock; cell adhesion and intracellular delivery of biomolecules
Genetic and biochemical studies of signal transduction pathways in B lymphocytes in normal and immunodeficiency diseases
Regulation of V(D)J recombination and lymphocyte development
Antigen presentation and T cell development
Analysis of the interactions of viruses, human epithelial cells, and immune effects in the induction of mucosal immune responses

Applicants should submit a curriculum vitae and names of three references to **Jim Bills, Department of Microbiology and Immunology, Vanderbilt University School of Medicine, Nashville, TN 37232-2363; fax: 615-343-7392; e-mail: jim.bills@mcmail.vanderbilt.edu.** For more information, please visit our website at: <http://www.mc.vanderbilt.edu/microbio/gp.html>.

Vanderbilt University is an Equal Opportunity, Affirmative Action Employer.



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Cambridge Location

CARDIOVASCULAR PROGRAM MANAGER

Genzyme seeks an experienced investigator with proven expertise in Cardiovascular Physiology and/or Pharmacology to take on Program Management responsibilities. You will contribute to the building and management of our Cardiovascular Development Programs. Your input will range from experimental design of pre-clinical animal studies to providing input and gaining consensus on clinical trial safety and efficacy end-points and regulatory strategy as well as technology assessment of cardiovascular licensing opportunities. Your interaction with senior members of the various program teams including scientists, medical, clinical and regulatory representatives within Genzyme and with our research/development partners will also be a critical factor to success in this role. Requirements include: Ph.D. or D.V.M. with an established research background in cardiovascular physiology and/or pharmacology; several years' experience in program management in the biopharmaceutical industry; effective interpersonal communication skills; and demonstrated Project Management, budget, and staff management experience. This position is based in Cambridge, MA. Job Code: KC-98-713

Contact: Ken Chin, Staffing Consultant, Genzyme Corporation, One Kendall Square, Cambridge, MA 02139-1562. Phone: (617) 761-8898. Fax: (617) 374-7200. Email: kchin@genzyme.com

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GENOMICS Hubbard Brothers Chair in the Biological Sciences

The University of New Hampshire invites applications and nominations for an Endowed Professorship in Genomics. We are looking for an individual with a distinguished record of scholarly activity, an internationally recognized program of sponsored research, and a commitment to excellence in education, to build vigorous interdisciplinary programs uniting our existing strengths with new technologies in genomic biology.

The successful candidate will join an appropriate department within the College of Life Science and Agriculture. The College is diverse, with Departments of Animal and Nutritional Sciences, Biochemistry and Molecular Biology, Microbiology, Natural Resources, Resource Economics and Development, Plant Biology and Zoology. Graduate degrees in Genetics are offered through an interdepartmental program involving 12 faculty from five departments.

The University is located one hour north of Boston on a semi-rural campus in the Seacoast region of New Hampshire. A public Land-Sea- and Space-Grant research university, it is home to more than 10,000 undergraduate and 1,700 graduate students. Additional information about the University and its programs can be found at <http://unhinfo.unh.edu/>. Specific inquiries may be directed to: **Dr. Thomas Kocher, Search Committee Chair, (603) 862-2115, email: Tom.Kocher@unh.edu.**

UNH supports diversity among its faculty and strongly encourages women and minority candidates to apply for this position. Applicants should send a letter describing current and future research activities, names of three or more references, as well as a C.V. and copies of five relevant publications to: **Genomics Search Committee, College of Life Science and Agriculture, Taylor Hall, University of New Hampshire, Durham, NH 03824.** Review of applications will begin January 1, 1999 and will continue until a suitable individual is found.

POSITIONS OPEN

ASSISTANT PROFESSOR. Veterinary science, Penn State. Applications are invited for a faculty position at the level of Assistant Professor in the area of microbiology as related to animal health, food safety, and/or animal-human disease transmission. The candidate is expected to develop and maintain an externally funded research program focused on microbiology and infectious diseases of bacterial etiology. Preference will be given to candidates with excellent potential to develop a research program focusing on virulence factors, immunologic mechanisms of host defense, or bacteriology related to pre-harvest food safety. Excellent facilities exist for farm and laboratory animal research, including use of transgenic animal models. The *E. coli* Reference Collection offers exceptional research materials and information. The position is 80 percent research and 20 percent resident education. Teaching responsibilities will include co-ordinator of an undergraduate course, graduate-related course development, and participation in general education courses. The candidate should possess a Ph.D., D.V.M.-Ph.D., or equivalent degree, with graduate training in microbiology, immunology, pathobiology, or related discipline. Candidates must have a strong commitment to research and teaching career, effectively express themselves orally and in writing, and demonstrate program leadership and the ability to collaborate with others. Applicants should submit a curriculum vitae a brief statement of research interests, and the names, addresses, telephone numbers, and e-mail addresses of at least three references to: **Dr. C. Channa Reddy, Chair, Faculty Search Committee, Pennsylvania State University, 226 Fenske Building, Department S-4003, University Park, PA 16802.** Applications will be accepted until February 28, 1998, or until a qualified candidate is identified. *Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its work force.*

PLANT MOLECULAR BIOLOGISTS. The Ohio State University. Two tenure-track positions at the **ASSISTANT/ASSOCIATE PROFESSOR** levels are in the area of plant molecular biology/biotechnology. Successful candidates will be expected to establish a strong, creative, and competitive research program. Applicants addressing fundamental aspects of plant development, plant-microbe interactions, cell biology, genomics, or the regulation of metabolism are especially encouraged, but applications will be seriously considered in any important area of plant molecular biology or pathology. Competitive salaries, set-up funds, and research facilities will be provided. It is anticipated that these positions will be made in the Departments of Plant Biology and Plant Pathology. Participation in the teaching program of the home department is expected. Applicants must have a Ph.D. and an established record of research independence and productivity. Please submit a curriculum vitae, concise statement of research interests, teaching experience and interests, and three letters of recommendation to: **Wolfgang Bauer, Search Committee Chair, Plant Biotechnology Center, Rightmire Hall, Ohio State University, Columbus, OH 43210-1002.** Applications will be reviewed beginning January 1, 1999. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to apply.*

Biology. Messiah College invites applications for two tenure-track **ASSISTANT PROFESSOR** positions in the Natural Sciences Department, available August 1999: a Molecular Biologist and a Vertebrate Biologist. For Molecular Biologist position, we are seeking applicants qualified to teach advanced undergraduate lecture/laboratory course in molecular biology. Other teaching responsibilities may include developmental biology, microbiology, general biology, and other courses appropriate to the applicant's specialty. For the Vertebrate Biologist position, department seeks applicants qualified to teach lecture/laboratory courses in human anatomy and physiology, human biology, comparative anatomy, and other courses appropriate. Candidates for both positions should enjoy teaching a wide range of undergraduate major and non-major biology courses and science-related general education courses. Ph.D. in biological sciences required. Successful candidates will be expected to mentor students in research projects appropriate for a four-year college. Messiah College is a Christian college of the liberal and applied arts and sciences, committed to an embracing evangelical spirit. Send letter of inquiry, curriculum vitae, references, and placement file (if available) to: **Dr. Gary Emerberger, Chair, Department of Natural Sciences, Messiah College, Grantham, PA 17027.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR, RESISTANCE AND SUSCEPTIBILITY TO INFECTIONS RESEARCH GROUP Department of Medical Microbiology University of Manitoba

The Department of Medical Microbiology, Faculty of Medicine, University of Manitoba invites applications for a tenure-track position at the rank of Assistant Professor beginning July 1, 1999. We seek outstanding young scientists with a Ph.D. and/or M.D. degree using innovative approaches to study HIV immunology.

The successful candidate will be expected to join the Biology of Sexually Transmitted Infections Research Group, which is based in Winnipeg and is also involved in extensive collaborative studies in Nairobi, Kenya.

The candidate will also be expected to establish an independently funded research program related to resistance and susceptibility to HIV infection and disease, and participate in undergraduate, medical, and graduate teaching programs.

The salary range for the position is \$41,300 to \$50,000. A negotiable package of start-up funds will be available.

Applicants should send curriculum vitae and summary of research interests and future plans, together with the names of three referees to: **Dr. Kevin Coombs, Department of Medical Microbiology, University of Manitoba, 730 William Avenue, Winnipeg, Manitoba R3E-0W3 Canada.** Closing date for applications is February 28, 1999.

Further information can be found at website: http://www.umanitoba.ca/faculties/medicine/units/medical_microbiology.

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.

ASSISTANT PROFESSOR PLANT BIOLOGY

The Department of Plant Biology at Arizona State University invites applications for a tenure-track faculty position at the Assistant Professor level. Preference will be given to candidates applying imaginative molecular genetic approaches to solve fundamental questions at the organismal level. This can relate to structural, functional, or developmental issues and should complement existing strengths in the department. The successful candidate will be expected to develop a vigorous extramurally funded research program and contribute to teaching at the undergraduate and graduate level. Applicants must have a Ph.D., postdoctoral experience with evidence of research productivity, and excellent communication skills. Information about the department and this position can be found at website: <http://lsvl.la.asu.edu/plantbiology/>. Applicants must send a curriculum vitae, statement of research interests and teaching philosophy, and the names, addresses, and e-mail addresses (if possible) of four referees to: **Chair, Molecular Genetics Search Committee, Department of Plant Biology, Arizona State University, Box 871601, Tempe, AZ 85287-1601** before January 22, 1999. *Arizona State University is an Equal Opportunity/Affirmative Action/Title IX Employer.*

BIOLOGIST. Idaho State University, Department of Biological Sciences, anticipates a nine-month tenure-track position for a Biologist, at the level of **ASSISTANT PROFESSOR**, commencing August 1999. The successful candidate must hold a Doctorate (postdoctoral experience preferred), and will be expected to train students from undergraduate to Doctoral levels and develop a research program that complements existing faculty research interests (see website: <http://www.isu.edu/departments/bios>). A research program that emphasizes biological education is an option. Major teaching responsibilities will include participation in introductory courses in biology, in a biology methods course for secondary teachers, and in graduate biological education seminars. The successful applicant will work with students in Doctoral programs (Ph.D. and Doctor of Arts) that prepare them to teach at the college level. The position will remain open until filled. Please send a letter of application, curriculum vitae, and a statement of teaching experience, teaching philosophy, and research goals. Also have three letters of recommendation sent by February 15, 1999, to: **Biologist Search Committee Chair, Department of Biological Sciences, Box 8007, Idaho State University, Pocatello, ID 83209-8007.** *Idaho State University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

INVERTEBRATE ZOOLOGIST/ WETLANDS ECOLOGIST TENURE-TRACK POSITION California State Polytechnic University

Invertebrate Zoologist with interest in field-oriented teaching/research in the area(s) of riparian, estuarine, or other wetland environments. Ph.D. in biological science required, with potential for excellence in undergraduate teaching, a serious interest in research, and the ability and intention to write grant proposals. Candidate must be able to develop and teach courses from the following areas, depending upon her/his interests and experience: freshwater biology, wetland ecology, restoration ecology, conservation biology, natural resource management, or invertebrate systematics. The applicant will also be expected to develop a research program and graduate courses in her/his specialty, teach general ecology and introductory biology courses, and participate in the development of a new environmental science major. **ASSISTANT PROFESSOR** position begins fall 1999.

Our 35-member faculty offers B.S. degrees in five areas and an M.S. degree to 980 students. See website: <http://www.intranet.csupomona.edu/~biology/> for more information. Applicants must send a letter of intent, completed application form, curriculum vitae, three recent letters of reference, and two additional referees (with telephone numbers for all) to: **Dr. Len Troncale, Biological Sciences Department, California State Polytechnic University, Pomona, CA 91768-4032.** E-mail: ltroncale@csupomona.edu. Initial review of applications will begin January 15, 1999, and continue until position is filled. *An Equal Opportunity/Affirmative Action Employer.*

MARINE BENTHIC ECOLOGIST. The Chesapeake Biological Laboratory (CBL) of the University of Maryland Center for Environmental Science (UMCES), seeks a Benthic Ecologist to fill a tenure-track position at the **ASSISTANT PROFESSOR** level. We wish to expand our expertise and interests in ecological processes that regulate function within estuarine and coastal marine benthic communities. Application of candidates that combine biological, physical, and chemical perspectives will be especially welcome. The successful candidate will establish an externally funded research program and participate in the University-wide Graduate Education Program. Interdisciplinary research is strongly encouraged and excellent opportunities exist for collaboration with the fisheries, toxicology, and environmental chemistry groups at CBL and with Ecologists and Oceanographers at other UMCEs laboratories (Horn Point Laboratory and Appalachian Laboratory). A Ph.D. in marine ecology, biological oceanography, or a related field is required and postdoctoral experience is preferred. More information on CBL and UMCEs can be obtained from our website: <http://www.cbl.umces.edu>. Please submit a curriculum vitae, a statement of research interests, three publications, and the names of at least five references to: **Dr. Walter R. Boynton, Chair, Ecologist Search Committee, Chesapeake Biological Laboratory, University of Maryland Center for Environmental Science, P.O. Box 38, Solomons, MD 20688-0038.**

PLANT PHYSIOLOGIST or DEVELOPMENTAL BOTANIST. Tenure-track **ASSISTANT PROFESSOR** beginning fall 1999 in the Biology Department at Colorado College, a private, undergraduate, highly selective, liberal arts institution enrolling approximately 1,900 students. Responsibilities include (1) teaching introductory botany, cell biology, and an upper-level course in plant physiology or plant development and (2) development of a research program involving undergraduates. Ph.D. required, teaching and postdoctoral research experience highly desirable. The College seeks candidates who understand diverse perspectives and learning styles, with particular emphasis on the perspectives of women and minority groups. Applicants should send (1) cover letter that includes a description of professional background and goals; (2) statement of teaching philosophy; (3) description of current and future research plans; (4) curriculum vitae with e-mail address; (5) copies of undergraduate and graduate transcripts; and (6) four letters of recommendation to: **Tass Kelso, Chair, Department of Biology, Colorado College, Colorado Springs, CO 80903** no later than January 18, 1999.

Colorado College is an Equal Opportunity Employer; we welcome members of all minority groups and reaffirm our commitment to hire without regard to race, color, age, religion, sex, national origin, sexual orientation, or disability.

Research Chair in Molecular Biology of Beef Cattle Production

University of Alberta, Edmonton. The Department of Agricultural, Food and Nutritional Science at the University of Alberta invites applications for a Canada-Alberta Beef Industry Development Fund Chair in the area of Molecular Biology of Beef Cattle Production. The tenure-track appointment will be made at the Associate or Full Professor level with a balance of 75% research and 25% teaching.

The appointee will develop a world-class research and teaching program on the application of molecular biology techniques to the improvement of beef and beef cattle production. The candidate will possess a PhD in a scientific discipline relevant to the study of the molecular biology of cattle, will have an established research record in molecular biology and a commitment to its application in research on bovine physiology and beef production. Demonstrated leadership ability, excellent communication skills and a strong commitment to technology transfer are essential. It is anticipated that the Chair will play a key role in enhancing cooperation among scientists and other stakeholders in an Alberta beef research network which includes the University of Alberta, Alberta Agriculture, Food, and Rural Development (AAFRD), and the Agriculture and Agri-Food Canada (AAFC) Research Centres at Lethbridge and Lacombe. The University of Alberta has excellent on-campus research facilities and equipment, including a state-of-the-art Molecular Biology and Biotechnology Centre, numerous specialized analytical laboratories, a large animal metabolism unit, and a research ranch which includes a herd of 500 beef cows (for further details see www.afns.ualberta.ca). In addition the Chair will have access to AAFC research stations in Lacombe and Lethbridge which offer an additional range of facilities and research strengths in many complementary areas including rumen microbiology/biotechnology and meat science.

Applications, including a statement of research and teaching interests, curriculum vitae, and the name of three referees should be sent by January 31, 1999 or until a suitable candidate has been found, to:

Dr. John Kennelly, Chair
Department of Agricultural, Food, and
Nutritional Science
University of Alberta
Edmonton, Alberta, Canada T6G 2P5

For further information on this position contact Dr. Kennelly at (403) 492-2131 / (403) 492-4265 (fax), email chair@afns.ualberta.ca or visit our web site at www.afns.ualberta.ca.

The University of Alberta is committed to the principal of equity in employment. As an employer we welcome and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.

The Many Faces of

Research

St. Jude Children's Research Hospital, located in Memphis, Tennessee, is one of the world's premier research centers for research and treatment of catastrophic diseases in children, primarily pediatric cancers. St. Jude is a learning environment offering professional growth and diversity for the research technologist and postdoctoral fellow where biomedical education extends beyond the laboratory and clinical experience. Workshops, seminars and lectures are regularly presented by both the St. Jude faculty and distinguished visiting investigators. Our non-faculty research staff career ladder provides several levels of promotion and financial compensation for talented and motivated technologists to advance in their field. Experienced technologists may assist the principal investigator by performing research experiments, developing new procedures, participating in the publication of research results, managing laboratory operations and training laboratory personnel. Opportunities are available in a wide variety of programs.

For additional information, please refer to our website:
www.stjude.org

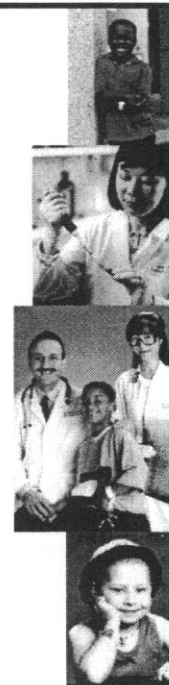
Candidates may also call our Job Hotline at:
800-545-6292

Resumes should be sent to:
St. Jude Children's Research Hospital
Human Resources Dept. SC1218
332 N. Lauderdale, Memphis, TN 38105
Fax: 901-495-3123
E-mail: human.resources@stjude.org

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Photos courtesy of St. Jude Biomedical Communications Dept.



**St. Jude Children's
Research Hospital**
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University of Notre Dame



The Walther Cancer Research Center has been established in the College of Science at the University of Notre Dame as a privately funded, multidisciplinary program stressing preclinical basic research directed toward the study, treatment, and prevention of cancer. Several positions as Walther Cancer Research Fellows are currently available in the Center.

Focus topics include prostate and breast cancer with secondary emphasis on bladder, ovarian, and endometrial cancer. Specific areas include cytoskeletal dynamics, membrane trafficking, molecular motors, and small G proteins in relation to the apoptotic response of tumors to hormone and chemotherapy, using cell culture, autochthonous tumor models, orthotopic xenografts, and transgenic models of cancer. Additional areas of supported research include the role(s) of the thrombolytic and fibrinolytic genes in the growth and metastasis of tumors, as studied in gene targeted animals, in the initiation, progression, and metastasis of hormone dependent tumors.

The design, discovery, and targeted delivery of new compounds for the study and treatment of cancer is a major goal of the Center. The techniques of computational, synthetic, and combinatorial chemistry will be used to interface chemical applications with biological studies. Design and synthesis will provide new compounds of particular interest as probes of biological mechanisms, tumor growth inhibitors, and delivery systems.

Principal Investigators associated with the Center of Excellence include:

Cell and Molecular Biology: Drs. Crislyn D'Souza-Schorey; Douglas J. Fishkind; Alan L. Johnson; Joseph E. O'Tousa; Morris Pollard; Jeffrey S. Schorey; Martin Tenniswood; Kevin T. Vaughan; JoEllen Welsh

Gene Targeting: Drs. Subhash C. Basu; Francis J. Castellino; Victoria A. Ploplis; Elliot D. Rosen

Drug Design and Discovery: Drs. Paul Helquist; Marvin J. Miller; Bradley D. Smith; Richard E. Taylor; Olaf Wiest.

Further information about the Center, including a list of ongoing research projects, can be obtained from the Web page at <http://www.science.nd.edu/centers/walther.html>.

Applications are sought from individuals wishing to pursue multidisciplinary postdoctoral research working with different laboratories in biology, biochemistry, and chemistry. Individuals with a background in cell biology, signal transduction, oncology, synthetic chemistry, or biomolecular modeling are encouraged to apply by submitting a letter of application, curriculum vitae, publication list, and statement of research interests, and to have three letters of recommendation sent to:

Walther Cancer Research Fellows
Professor Steven A. Buechler, Executive Director
College of Science
229 Nieuwland Science Hall
University of Notre Dame
Notre Dame, IN 46556 USA

POSITIONS OPEN

INTEGRATIVE PHYSIOLOGIST

The Institute of Arctic Biology and the Department of Biology and Wildlife at the University of Alaska Fairbanks invite applications for a tenure-track faculty position as an **ASSISTANT PROFESSOR**, available after 15 August 1999. We seek applicants with postdoctoral training and the ability to develop externally funded research programs in animal physiology, with the potential for combining approaches from the molecular to the behavioral level. Candidates whose research interests complement those of existing programs are encouraged to apply; these include nutritional physiology, hibernation physiology, cryobiology, gene regulation of metabolism, and neural and endocrine adaptations of high-latitude animals. The successful candidate will be expected to be effective in graduate student training and to have a serious commitment to undergraduate teaching. Previous undergraduate teaching experience is preferred. Teaching duties will include two courses per year and could include undergraduate physiology and a graduate course. Applicants should submit a curriculum vitae, statements of teaching philosophy and research interests, representative reprints, and solicit at least three letters of recommendation to be sent to: **Dr. Brian M. Barnes, Chair, Integrative Physiology Search, Institute of Arctic Biology, University of Alaska Fairbanks, AK 99775**. For full consideration, applications should be received by 15 February 1999. Further information about the University is available at website: <http://mercury.bio.uaf.edu/>. The University of Alaska is an Equal Opportunity/Affirmative Action Employer and Educational Institution.

STRUCTURAL BIOLOGIST

The Biochemistry Department of the University of Nevada, Reno invites applications for a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Researchers from all areas of structural biology/physical biochemistry, preferably related to molecular processes underlying human disease, are encouraged to apply. The successful candidate will (1) have a Ph.D. in biochemistry or allied discipline and postdoctoral experience; and (2) be expected to develop an outstanding research program, participate in undergraduate and graduate education, and contribute to development of a growing department.

Candidates should submit a current curriculum vitae, a summary of research experience and future goals, copies of three significant publications, and the names and addresses of at least three references (including e-mail, FAX, and telephone) to:

Faculty Search Committee
c/o Dawn Arnold
Department of Biochemistry/330
University of Nevada
Reno, NV 89557-0014

To receive full consideration, applications must be received for review by January 31, 1999.

The University of Nevada is an Affirmative Action/Equal Employment Opportunity Institution. We encourage applications from minorities and women.

MOLECULAR MICROBIOLOGY UNIVERSITY OF TENNESSEE-KNOXVILLE

The Department of Microbiology seeks to fill an academic position at any rank from **ASSISTANT** (tenure-track) to **FULL PROFESSOR** (tenured after one year in residence). Candidates must have a Ph.D. in microbiology or a related area, postdoctoral experience in research, and publications in reviewed journals of excellent quality. They must also have interest in teaching at the graduate level in their area of expertise and at the undergraduate level in microbial physiology and genetics. Candidates for Assistant Professor must have the capacity to field a research program in molecular microbiology fundable at the national level. Candidates for higher ranks must have experience in supervising graduate students and Postdoctoral Fellows and be involved in research in molecular microbiology funded at the national level. Applicants should send a letter of interest accompanied by a curriculum vitae, bibliography, statement of research and teaching interests, and names of three referees to: **Dr. Dwayne C. Savage, Chairman, Search Committee, University of Tennessee, Department of Microbiology, M409 Walters Life Sciences Building, Knoxville, TN 37996-0845**. Evaluation of applicants will begin on February 1, 1999, and continue until position is filled. The University of Tennessee is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer.

POSITIONS OPEN

MICROBIOLOGIST

The Department of Biological Sciences at California Polytechnic State University, San Luis Obispo is seeking applicants for a tenure-track position at the **ASSISTANT PROFESSOR** level available September 1999. Salary is commensurate with qualifications and experience. The successful candidate will teach general microbiology and courses in his/her area of expertise. Candidates with experience in molecular methods and parasitology, host-parasite interactions, or immunology will be given preference. Other duties will include student advising and directing students in undergraduate and graduate (M.S. level) research. Applicants must have a Ph.D. or equivalent at time of hiring. A strong commitment to teaching and to productive professional development are essential.

To obtain an application refer to recruitment code 93040 and send a letter of interest to: **Dr. V. L. Holland, Chair, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA 93407**.

Applicant files must be completed by February 15, 1999. A completed file will contain the following: (1) application form; (2) curriculum vitae; (3) statement of interest with respect to teaching and research; (4) three letters of recommendation (submitted directly by references); (5) official graduate transcripts. All materials are to be sent to the address above. Refer to recruitment code 93040 in all correspondence.

Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of women, persons of color, applicants with disability, and members of other underrepresented groups. Affirmative Action/Equal Employment Opportunity.

PROFESSOR AND DIRECTOR UNIVERSITY OF FLORIDA FLORIDA MEDICAL ENTOMOLOGY LABORATORY

Applications are invited for the position of Center Director, who provides research and administrative leadership at the Florida Medical Entomology Laboratory, a unit of the University's Institute of Food and Agricultural Sciences that is located in Vero Beach on Florida's Atlantic coast. The Laboratory has a legislative mandate to perform basic and applied research on the biology and control of biting arthropods and the diseases they transmit. The position requires an earned Ph.D. in entomology or a related field with experience in conducting a major research, extension, or teaching program and academic credentials equivalent for a tenured Professor. Further details about the position (#935470) and the Laboratory's current programs are available at the website: www.ifas.ufl.edu/~veroweb/. Candidates are requested to submit by February 15, 1999, a formal letter of application, a résumé that includes professional experience and a publication list, and the names and addresses (including e-mail) and telephone numbers of five individuals who may be contacted regarding qualifications, to: **Dr. L. P. Lounibos, Chair, Search and Screen Committee, University of Florida, 200 9th Street S.E., Vero Beach, FL 32962**. Telephone: 561-778-7200; FAX: 561-778-7205; e-mail: lpl@icon.vero.ufl.edu. The University of Florida is an Affirmative Action/Equal Opportunity Employer and encourages women and minorities to apply.

Tenure-track faculty member in medical oncology. Stanford University School of Medicine. We are searching for a **PHYSICIAN SCIENTIST** at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** in the Division of Oncology, Department of Medicine. Candidates should have an M.D. or M.D.-Ph.D., be trained in the subspecialty of medical oncology, and be accomplished in research. They should be prepared to establish an independent laboratory program in cancer research. Applicants with expertise in molecular and cell biology, immunology, or genetics and in the translation of scientific methods and discoveries to problems in clinical oncology are especially encouraged. Salary support, laboratory space, and start-up funds are available for this position. Successful candidates will have demonstrated their ability to obtain peer-reviewed research funding. Participation in clinical care and in teaching will be expected. Please send curriculum vitae, a statement of career plans, and three names of references to: **Ronald Levy, M.D., Chief, Division of Oncology, Stanford University School of Medicine, SUMC M211, Stanford, CA 94305-5115**. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

POSITIONS OPEN

ASSISTANT PROFESSOR in the Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology (VCAPP), Washington State University seeks to fill a tenure-track position to begin July 1, 1999. Required: Ph.D. or D.V.M.-Ph.D. or equivalent plus postdoctoral research experience. Preferred: Those with a research program in an area consistent with current department strengths will be given preference. Experience and/or enthusiasm for teaching professional and/or graduate students in endocrinology, microanatomy, or pharmacology. Willingness and ability to collaborate in current ongoing research, publications in high-impact journals, and demonstrated communication and interpersonal skills. Review of applicants will begin February 15, 1999, and will continue until the position is filled. The application should include a cover letter, curriculum vitae, description of teaching experience, summary of research interests and potential projects, and the names, addresses, and telephone numbers of three references. Mail application materials to: **VCAPP Faculty Search Committee, Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology, Washington State University, Pullman, WA 99164-6520**. E-mail: bmorton@vetmed.wsu.edu. Washington State University is an Equal Opportunity/Affirmative Action Employer and Employer. People of color, women, persons of disability, Vietnam-era and disabled veterans, and/or persons between the ages of 40 to 70 are encouraged to apply.

ASSISTANT PROFESSOR of biology. Applications are invited for a full-time tenure-track faculty position, beginning August 1999. Applicants must have a Ph.D. degree in biology or a related area (expertise in animal ecology or zoology preferred). Successful candidate will conduct research and teach introductory biology (evolution, systematics, and ecology) for majors, environmental biology for non-majors, and upper-level courses in area of specialization.

Purdue University Calumet, a campus of the Purdue system, enrolls over 9,000 students in more than 80 Associate, Bachelor's, and Master's degree programs in 16 academic departments. The 12-building, commuter campus is situated on 180 wooded acres in northwest Indiana, less than one hour by car or train from Chicago. The Department of Biological Sciences offers programs leading to a B.S. degree and an M.S. degree in biology.

To apply, send a statement of teaching and research experience and interest, curriculum vitae, copies of transcripts, and three letters of recommendation to: **Search Committee, Biological Sciences, Purdue University Calumet, Hammond, IN 46323**. Reviewing process begins January 25, 1999; applications will be accepted until position is filled. Purdue University Calumet is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR DEPARTMENT OF PHARMACOLOGY

Applicants are sought for a full-time, tenure-track Assistant Professor faculty position to participate in the research, instructional, and service activities of the Department. Candidates must have a Ph.D. degree in pharmacology or a closely related discipline and a record of research productivity in molecular pharmacology. Areas of research interest include, but are not limited to, immunology, endocrinology, and neuropharmacology. For information, contact website: www.olemiss.edu/depts/pharmacology/. Submit a letter outlining research interests and qualifications, curriculum vitae, and names of three references by February 1, 1999, to: **Administrative Manager, School of Pharmacy, NCDNP Room 1026, University of Mississippi, University, MS 38677**. The University of Mississippi is an Affirmative Action/ADA/Equal Opportunity Employer.

ASSISTANT PROFESSOR MICROBIOLOGY

The University of Nebraska at Omaha announces a tenure-track position starting August 1999. The position requires an earned Ph.D. The successful candidate will teach introductory microbiology and upper-level courses, help with premed advising, and develop an active research program. For more information see website: www.unomaha.edu/~wwwbio/. Screening of applications will begin January 22, 1999, and continue until the position is filled. Send curriculum vitae, statements of teaching and research objectives, and three letters of recommendation to: **Chair, Department of Biology, University of Nebraska at Omaha, 6001 Dodge Street, Omaha, NE 68182-0040**. UNO is an Equal Opportunity Employer.



CHAIR Department Of Biology

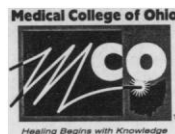
Morgan State University invites applications for the position of Chair of the Department of Biology. Morgan State University is a State-supported Historically Black Institution located in the City of Baltimore within the State of Maryland. The Department of Biology has well-established programs offering Bachelor of Science (B.S.) degree programs in Biology and in Medical Technology and a Master of Science (M.S.) degree program in Biology. In addition, the Department is currently developing a Ph.D. degree program in Biology. The Department of Biology has 508 students pursuing a B.S. degree in biology and has 25 faculty members, of which eight are actively involved in basic research. The Department has several NIH-funded grants, including the Minority Access to Research Careers (MARC), Research Infrastructure at Minority Institutions (RIMI), Minority Biomedical Research Support (MBRS), and BRIDGES program grants.

The successful candidate will have a Ph.D. degree and a distinguished record of scholarly activity, including a proven track record in teaching, research, and scholarship. He or she must have administrative and leadership ability and be able to focus on enhancing the academic, teaching, research, and service activities of the Department of Biology. In addition, the individual must be able to motivate faculty and staff, mentor faculty, and develop close collaborations that are required for the efficient running of the department.

Applications should include a curriculum vitae, a brief statement of attributes and special qualities of the applicant that make him/her the ideal candidate for this position, three letters of recommendation, and an official transcript. Submit applications to:

T. Joan Robinson, Ph.D., Dean
School of Computer, Mathematical, and Natural Sciences
Calloway Hall, Room 217, Morgan State University
1700 East Coldspring Lane
Baltimore, MD 21251

The deadline for application submission is January 15, 1999.



MCO Endowed Chair in Microbiology & Immunology

The Department of Microbiology and Immunology at the Medical College of Ohio, together with the interdisciplinary Graduate Training Programs in Molecular Basis of Disease and in Molecular & Cellular Biology, is seeking a nationally recognized scientist to fill a newly endowed chair. MCO established this Chair as one of its strategic research initiatives to further the development of vaccines and immunotherapies relevant to chronic infection and cancer.

Candidates for the position must have scientific leadership capabilities, distinguished research productivity, and teaching experience. The candidate must also have a doctoral degree (Ph.D., M.D., M.D.-Ph.D.) and meet the College's other requirements for a tenure-track faculty appointment at the rank of Associate Professor or Professor. There are no clinical responsibilities, though a joint appointment in a clinical department is available if appropriate.

A competitive salary and start-up package will be provided, along with substantial laboratory space in a modern research building. Review of applications will begin on February 1, 1999, and will continue until the position is filled. Send a description of current research, representative reprints of published work, a *curriculum vitae*, and names and addresses of three references to: **Dr. Garry T. Cole, Chair, Search Committee, Department of Microbiology and Immunology, Medical College of Ohio, 3055 Arlington Avenue, Toledo, OH 43614-5806.** Nominations for this position are also invited. Further information about research and training programs at MCO can be found at www.mco.edu/micro.

Affirmative Action/Equal Opportunity Employer.

SYMPOSIUMS

HIV and the Nervous System: Emerging Issues

April 14-16, 1999
Holiday Inn Georgetown
Washington, D.C.

**Abstracts for Poster Presentations
will be accepted in the following areas:**

Immunology of HIV in the CNS
HIV and the Blood Brain Barrier
Viral Load and Pathogenesis in the CNS
HIV Co-Receptors in the CNS
Therapeutics

PLANNING COMMITTEE

David Clifford, M.D., St. Louis, MO
Dana Gabuzda, M.D., Boston, MA
Howard Gendelman, M.D., Omaha, NE
Francisco Gonzalez-Scarano, M.D., Philadelphia, PA
Walter Royal III, M.D., Baltimore, MD

S Y M P O S I U M

The National Institute of Mental Health and the National Institute of Neurological Disorders and Stroke are sponsoring a symposium on the effects of HIV infection on the nervous system, the mechanisms of neuronal damage, and the critical role of CNS infection on HIV/AIDS pathogenesis. The purpose of the meeting is to bring together researchers to review current research and identify important questions for future research.

Deadline for abstracts is February 1, 1999.

For program information, contact:

A.P. Kerza-Kwiatecki, Ph.D., NINDS, 301-496-1431
email: ak45w@nih.gov
Dianne Rausch, Ph.D., NIMH, 301-443-7281
email: dr89b@nih.gov

For abstract information and packages, contact:
Pamela Handon, B.L. Seamon & Associates, Inc.,
301-577-0244, ext. 25; email: pam@blseamon.com

Biomedical Imaging Symposium

Visualizing
the
Future
of
Biology
and
Medicine

June 25-26, 1999

Natcher Conference Center
National Institutes of Health
Bethesda, Maryland

Charting a vision for the future
of biomedical imaging research
is the goal of a two-day
symposium sponsored by the
National Institutes of Health.

www.nih.gov/grants/becon/meeting99/index.htm

For information, contact:

Chipper Whalan, Capital Consulting Corporation
telephone: 301.468.6001; fax: 301.468-0338;
e-mail: cwhalan@md.capconcorp.com



POSITIONS OPEN

ASSISTANT PROFESSOR of clinical pathology. School of Veterinary Medicine, University of California, Davis. ACVP Board certification or eligibility required. Ph.D. preferred. Qualifications: clinical experience and competence in clinical pathology; demonstrated aptitude/experience in teaching; documented research record or potential to develop an independent research program utilizing contemporary molecular technologies for the characterization of animal diseases. Responsibilities: participation in lectures/laboratories; 40 percent commitment to the Clinical Pathology Service of the Veterinary Medicine Teaching Hospital (VMTH); development of a creative, independent, and productive basic and/or clinically oriented research program to define disease processes at the cellular or organismal level is an essential requirement of this position. Final filing date: February 15, 1999, or until filled. Submit letter of intent outlining special interest in the position; overall qualifications, experience, and career goals; curriculum vitae; and the names and addresses of three professional references to: **N. James MacLachlan, Chairman, Department of Pathology, Microbiology and Immunology, School of Veterinary Medicine, University of California, Davis, CA 95616.** *The University of California is an Affirmative Action/Equal Opportunity Employer.*

The Department of Psychology at The University of Illinois at Chicago (UIC) invites applications for a tenure-track faculty appointment at the **ASSISTANT PROFESSOR** level in biopsychology, beginning fall 1999. Applicants must have a Ph.D. and an active research program in behavioral neuroscience employing animal models, with an emphasis on central mechanisms. The successful applicant will also contribute to The Laboratory of Integrative Neuroscience (LIN), a unit of the UIC College of Liberal Arts and Sciences that involves 14 neuroscience faculty from three Departments (Psychology, Biological Sciences, and Philosophy). For more information about our program, please see the Department of biopsychology website: <http://www.uic.edu/depts/psch/biopsych.html>, which includes a link to the LIN home page. Submit letter of application, curriculum vitae, statements of research and teaching interests, and three letters of reference to: **Dr. Michael W. Levine, Chair, Neuroscience Search Committee, c/o Robert Canavan, Department of Psychology (M/C 285), The University of Illinois at Chicago, 1007 West Harrison Street, Chicago, IL 60607-7137.** To ensure full consideration, applications should be received by January 15, 1999. *UIC is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF BIOLOGY VASCULAR PLANT BIOLOGY AND FRESHMAN LABORATORY COORDINATOR

Georgia College and State University invites applications for a tenure-track position as Assistant Professor of biology, with primary duties in coordinating introductory biology laboratories, supervising graduate students, and teaching aquatic vascular plant biology for majors and graduate students. Ph.D. required; experience in laboratory coordination desirable. Application deadline 1 February 1999; starting date is 1 August 1999. Effective teaching, scholarly activity, and university/community service are requirements for promotion and tenure. Research involving students is strongly encouraged. Send curriculum vitae and letter of application detailing relevant experience, and arrange for three letters of recommendation and transcripts of all earned degrees to be sent to: **Dr. Kenneth S. Saladin, Search Committee Chair, Department of Biological and Environmental Sciences, Georgia College and State University, Milledgeville, GA 31061.** E-mail: ksaladin@mail.gcsu.edu. *An Affirmative Action/Equal Opportunity Employer.*

The Department of Biology, Manhattanville College, seeks broadly trained **BIOLOGIST** for a full-time tenure-track **ASSISTANT PROFESSOR** position, starting date September 1999, and a **VISITING ASSISTANT PROFESSOR** for the spring semester 1999. Applicants must have a Ph.D., or equivalent degree, in biology, and the ability to teach introductory biology, microbiology, immunology, and introductory nutrition (developmental biology and/or biochemistry plus). Applicants should submit a cover letter including teaching philosophy and research interests, a current curriculum vitae, and the names of three references as soon as possible for Visiting, and March 1, 1999, for full-time to: **Dr. Annemarie Bettica, Chair, Biology Department, Manhattanville College, 2900 Purchase Street, Purchase, NY 10577.** *Manhattanville College is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN



ASSISTANT/ASSOCIATE PROFESSOR OF ORNITHOLOGY

The Department of Biology at Coastal Carolina University invites applications for a tenure-track position at Assistant/Associate Professor level in ornithology with emphasis in genetics, including molecular techniques, starting in August 1999. The successful candidate must possess a Ph.D. and a strong commitment to undergraduate education. In addition to an upper-level course in ornithology, teaching responsibilities will include introductory lectures and laboratories. The department seeks candidates to actively involve undergraduates in research projects and to participate in professional activities and community projects with the local Audubon Society. Each applicant should submit a letter of application, curriculum vitae, statement of teaching philosophy and research interests, and names, addresses, and telephone numbers of three (3) references to: **Dr. Joseph Pinson, Chair, Department of Biology, Coastal Carolina University, P.O. Box 261954, Conway, SC 29528-6054.** Deadline for applications is February 15, 1999. For more information about the department, please visit our website: <http://www.coastal.edu/science/biology/bio.htm>.

Coastal Carolina University is an Equal Opportunity/Affirmative Action Employer.

EVOLUTIONARY BIOLOGIST

St. Mary's College of Maryland, a public honors college, located an hour and a half southeast of Washington, D.C., invites applications for a tenureable appointment at the **ASSISTANT PROFESSOR** level to begin August 1999. We seek a Biologist who studies evolution using molecular tools and who is committed to teaching and research involving undergraduate students at a small public liberal arts college. Teaching responsibilities include introductory courses for non-majors, participation in the first-year sequence for majors, a second-year course in ecology and evolution, and upper-division courses in molecular evolution and population ecology. Applicants should have or expect a Ph.D. before the starting date. Please submit a cover letter, résumé (including e-mail address), a statement of teaching philosophy and research interests, and arrange to have three letters of recommendation sent to: **Chair, Molecular Evolution Search Committee, St. Mary's College of Maryland, St. Mary's City, MD 20686.** Review of applications will begin immediately and continue until the position is filled. Visit our website: <http://www.smcm.edu/>. *St. Mary's College is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR/PHYSIOLOGIST.

The Department of Biology at Saint Louis University, an institution in the Catholic Jesuit tradition dedicated to education, research, and health care, invites applications for a tenure-track, Assistant Professor position beginning fall 1999. Applicants should have postdoctoral experience and record of research productivity. The candidate is expected to develop an independent, extramurally funded research program involving M.S., Ph.D., and undergraduate students, teach vertebrate physiology, and courses in his/her area of expertise. Primary interest is for expertise in cellular/molecular aspects of microbial physiology; however, other areas will be considered. Submit a statement of teaching and research goals, representative reprints, curriculum vitae, and three letters of recommendation to:

**Elizabeth Keath, Ph.D.
Search Committee Chair
Department of Biology
Saint Louis University
3507 Laclede Avenue
St. Louis, MO 63103-2010
E-mail: keath@slu.edu**

For more information visit our website: www.slu.edu. Review of candidates will begin immediately, deadline is January 31, 1999. *Saint Louis University is an Affirmative Action and Equal Opportunity Employer.*

POSITIONS OPEN

TWO BIOLOGY POSITIONS VALDOSTA STATE UNIVERSITY

Position One: Valdosta State University (VSU) is seeking a broadly trained Field Biologist to serve as a Director for a recently acquired natural area. Specific duties will include teaching non-majors biology and an education course in integrated science, and administration and development of the natural area for teaching, research, and outreach programs for school districts and local groups. This is a 12-month position at the **ASSISTANT/ASSOCIATE** level. Position Two: the successful candidate will teach comparative vertebrate anatomy. The ability to teach some combination of human anatomy and physiology, vertebrate physiology, and integrated science is preferred, but not required. This is a 10-month position at the **ASSISTANT PROFESSOR** level. Both positions are tenure-track, require a Ph.D. with research interests open. Submit a letter of application stating position applied for, résumé, statements on teaching philosophy and research interests, and three letters of reference by 22 January 1999 to: **Dr. David L. Bechler, Department of Biology, Valdosta State University, Valdosta, GA 31698-0015.** *Valdosta State University is an Affirmative Action/Equal Opportunity Employer.*

Tenure-track faculty position at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level in the Department of Biomedical Sciences of the Ohio University College of Osteopathic Medicine. Primary responsibilities are to teach organ system physiology in a clinically oriented, innovative medical curriculum and to develop an externally fundable research program. Priority will be given to individuals whose expertise relates to some aspect of renal or endocrine physiology and who will be able to interact effectively with colleagues in the area of molecular biology. A Ph.D. (or equivalent) and appropriate postdoctoral training or experience is required. The appointment is to begin in the fall of 1999. The 11-month salary will be commensurate with experience, and is accompanied by an excellent benefits package. Review of applications will begin February 15, 1999, but applications may be tendered until the position is filled. Submit a statement of career interests, a curriculum vitae, representative reprints, and three (3) letters of recommendation to: **John N. Howell, Ph.D., Search Committee Chair, Department of Biomedical Sciences, Ohio University College of Osteopathic Medicine, 304 Grosvenor Hall, Athens, OH 45701.** E-mail: howell@ohiou.edu.

Ohio University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR DEPARTMENT OF ANATOMY

The Department of Anatomy at Philadelphia College of Osteopathic Medicine invites applications for a tenure-track position at the level of Assistant Professor. Candidates should demonstrate a sound knowledge of gross anatomy and histology and a strong commitment to teaching. Participation in medical and graduate school courses as well as in other departmental programs will be required. Candidates are expected to maintain an active research program in which medical and graduate students can participate. A Ph.D. is required along with prior teaching experience. Postdoctoral research is recommended. Salary and benefits are competitive and commensurate with experience. Please submit your curriculum vitae and three names and addresses of individuals for potential letters of reference to: **Robert J. Niewenhuis, Ph.D., Department of Anatomy, Philadelphia College of Osteopathic Medicine, 4170 City Avenue, Philadelphia, PA 19131-1693.** Application deadline is February 1, 1999. *PCOM is an Equal Opportunity/Affirmative Action Employer.*

Human neuroscience. The Psychology Department at Wesleyan University has a tenure-track **ASSISTANT PROFESSOR** position for a Neuroscientist who focuses on human populations. He/she should have a competitive research program that incorporates undergraduates, and be prepared to teach an introductory course in the department's neuroscience and behavior area, a quantitative methods course, and an upper-level psychology course in his/her area of expertise. Appointment begins July 1, 1999. Send curriculum vitae, reprints, statement of research and teaching interests, and three letters of recommendation by January 15, 1999, to: **Neuroscience Search Committee, Department of Psychology, 207 High Street, Wesleyan University, Middletown, CT 06459-0408.** *Wesleyan is an Equal Employment Opportunity/Affirmative Action Employer.*

Scientific Manager In Vivo NMR Research Center, NINDS, NIH

The Division of Intramural Research of the National Institute of Neurological Disorders and Stroke invites nominations and applications to fill the Scientific Manager position in the In Vivo NMR Research Center of NIH. The NMR Center provides facilities, assistance, and expertise for state-of-the-art magnetic resonance imaging (MRI) and spectroscopy (MRS) of humans and animals to the entire NIH community. We are seeking exceptional candidates for the day-to-day management of operation within the NMR Center. This includes assigning project responsibilities, assuring approved projects are conducted efficiently, monitoring staff progress and performance, and equipment management and upgrades. The candidate must have demonstrated abilities to develop and implement a wide variety of state-of-the-art MRI and MRS techniques. The Scientific Manager will be responsible for development of new techniques to aid specific projects both from the recent literature as well as research and development of work in unexplored areas where little or no guidance is available. The successful candidate should have a Ph.D. degree and at least one year of advanced experience with *in vivo* MRI/MRS techniques. The successful applicant will have demonstrated experience working independently and as part of interdisciplinary research teams. Experience operating and programming GE scanners is desirable as is experience with laboratory management. Salary is very competitive and consistent with the level of experience of the candidate.

Applicants should send curriculum vitae, bibliography, statement of research interests, and the names of three references to:

NMR Center Scientific Manager Search Committee
c/o Scott Sigley, NINDS, HRB
Building 31, Rm. 8A23
31 Center Drive, MSC 2540
Bethesda, MD 20892-2540

Applications must be postmarked by February 26, 1999.
NIH is an Equal Opportunity Employer.



Pioneer Hi-bred International, Inc.
An Equal Opportunity Employer

RESEARCH ASSOCIATE (Job #98389C)

An individual is needed to provide protein analysis support for Regulatory Affairs and the protein assay validation group. This individual will join a lab that is responsible for analysis of proteins in transgenic crop plants. Duties/responsibilities include planning, discussing and executing experiments in support of regulatory studies. Communicate data and conclusions quickly to Research Manager. Results/conclusions of experiments are presented orally and/or in writing as appropriate. Perform experiments under full Good Laboratory Practice protocol as required. Responsibilities also include identifying and developing new technology and on-going monitoring of results for QC purposes and some statistical analysis. This individual is expected to contribute to discussions in all areas of protein analysis as well (kit development, application and assay development). A B.S. in biological sciences or closely related field and 1-2 years of protein analysis experience, particularly ELISA is desired. Experience with transgenic plant protein analysis would be beneficial. The successful candidate must have excellent communication skills. Also, demonstrated ability to manage multiple projects and multiple experiments at one time is highly desired. Competence in statistics, quality control and MS Office software is required. GLP experience is preferred. Please submit your resume in scannable format to: Pioneer Hi-Bred International, Inc. ATTN: Human Resources - Research (Job #98389C), PO Box 1004, Johnston, IA 50131-1004; e-mail: jobsresearch@phibred.com. For more information on this position visit our website www.pioneer.com.

United States Environmental Protection Agency National Exposure Research Laboratory

PHYSICAL SCIENTIST GS-1301-11/12/13

The U.S. Environmental Protection Agency's National Exposure Research Laboratory in Research Triangle Park, North Carolina is seeking qualified candidates to fill multiple four-year term positions. The incumbent will be responsible for conducting exposure measurements or exposure modeling research in support of the Agency's Particulate Matter (PM) Program. **PM measurements** position responsibilities include designing, coordinating, and conducting field studies to better understand exposures to fine and ultrafine particulate matter; analyzing PM field study results; and reporting the results in the scientific literature. **PM modeler** position responsibilities include developing and validating personal and population PM exposure and dose models; statistically analyzing available PM exposure data and developing input variables for PM exposure models; integrating microenvironmental PM pollution data with demographic and cohort-specific time activity data; and reporting the study results in the scientific literature.

These are full-time term positions not-to-exceed four years. *U.S. citizenship is required* and candidates must meet U.S. Office of Personnel Management qualification requirements including specific educational coursework. Candidates should have the required education and/or experience as described in the announcements listed below. Salary ranges from \$38,593 to \$71,503 and is commensurate with qualifications. The selected candidates will be eligible for full benefits package, including relocation expenses, health insurance, life insurance, retirement, and vacation and sick leave.

HOW TO APPLY: All applicants must apply through the U.S. Office of Personnel Management (OPM) by calling the OPM automated jobline on (919) 790-2822 or accessing OPM via Internet at <http://www.usajobs.opm> AND requesting an OPM package for (Modeling) AR2025 or (Measurements) AR2013. Application materials must be received by **January 22, 1999**.

INTERDISCIPLINARY POSITION ENVIRONMENTAL, CHEMICAL, OR MECHANICAL ENGINEER

GS-0819/0893/0830-11/12/13

The U.S. Environmental Protection Agency's National Exposure Research Laboratory in Research Triangle Park, North Carolina is seeking qualified candidates to fill multiple four-year term positions. The incumbent will be responsible for conducting exposure measurements or exposure modeling research in support of the Agency's Particulate Matter (PM) Program. **PM measurements** position responsibilities include designing, coordinating, and conducting field studies to better understand exposures to fine and ultrafine particulate matter; analyzing PM field study results; and reporting the results in the scientific literature. **PM modeler** position responsibilities include developing and validating personal and population PM exposure and dose models; statistically analyzing available PM exposure data and developing input variables for PM exposure models; integrating microenvironmental PM pollution data with demographic and cohort-specific time activity data; and reporting the study results in the scientific literature.

These are full-time term positions not-to-exceed four years. *U.S. citizenship is required* and candidates must meet U.S. Office of Personnel Management qualification requirements including specific educational coursework. Candidates should have the required education and/or experience as described in the announcements listed below. Salary ranges from \$41,489 to \$71,503 and is commensurate with qualifications. The selected candidates will be eligible for full benefits package, including relocation expenses, health insurance, life insurance, retirement, and vacation and sick leave.

HOW TO APPLY: All applicants must apply through the U.S. Office of Personnel Management (OPM) by calling the OPM automated jobline on (919) 790-2822 or accessing OPM via Internet at <http://www.usajobs.opm> AND requesting an OPM package for (Measurements) Environmental AR2004; Chemical AR2007 and Mechanical AR2010 or (Modeling) Environmental AR2016; Chemical AR2019 and Mechanical AR2022. Application materials must be received by **January 22, 1999**.

The U.S. EPA is an Equal Opportunity Employer.

POSITIONS OPEN

STAFF PHYSICIAN

The Clinical Brain Disorders Branch of the National Institute of Mental Health (NIMH), NIH is seeking a Staff Physician for clinical and administrative support of its clinical research program. Applicants must be Board-certified in psychiatry with clinical research and administrative experience of at least eight years of postresidency training. Must have demonstrated productivity in leading a clinical research team including social workers, Psychologists, and Physicians. Must be familiar with writing research protocols, managing clinical research resources, use of clinical research instruments for family and genetic studies, and with collection and organization of a DNA database. Experience in biological research concerning schizophrenia is especially important.

Interested applicants should submit a curriculum vitae/bibliography and three letters of reference by December 13, 1998, to:

Ms. Mollie Strotkamp
NIMH Personnel
Building 45, Room 3AN-32
9000 Rockville Pike
Bethesda, MD 20892
Telephone: 301-496-5337

Brooklyn College/City University of New York, invites applications for a tenure-track position at the ASSISTANT PROFESSOR level in the Department of Biology beginning September 1999. We seek a broadly trained Physiologist/Zoologist who uses modern biology approaches. Preference will be given to applicants with a strong interest in the biology of invertebrates. The faculty member is required to develop a research program that generates external funding and trains undergraduate and graduate research students. Applicants must have a Ph.D. degree, postdoctoral training, publications, and a strong commitment to undergraduate education. A complete application consists of curriculum vitae, statement of research plans, and three letters of recommendation (to be sent directly from three referees). Review of applications will begin on October 15, 1998, and continue until position is filled. Apply to: Dr. Joan Rome, Office of Personnel Services, Brooklyn College, 2900 Bedford Avenue, Brooklyn, NY 11210. An Affirmative Action/Equal Employment Opportunity/IRCA/ADA Employer.

MICROBIOLOGIST. ASSISTANT PROFESSOR.

Tenure-track, Ph.D., September 1, 1999. Teach bacteriology, graduate course in area of specialty, microbiology for health science students, and lower-level biology courses. The candidate's potential as a teacher and as a director of undergraduate and graduate research are essential criteria. Preference given to individuals with research background in microbiology and a record of publications in refereed journals. Application deadline February 15, 1999. Midwestern State University is a liberal arts university with an enrollment of 5,800 students. The biology department offers both the B.S. and M.S. degrees in biology. Submit curriculum vitae, description of proposed research, a copy of transcripts, a statement of educational philosophy, and a list of three references with their addresses and telephone numbers who are familiar with your teaching and research to: Dr. Norman Horner, Director, Division of Science, Midwestern State University, 3410 Taft, Wichita Falls, TX 76308-2099. Equal Opportunity/Affirmative Action Employer.

SCIENTIST BLOOD TESTING TECHNOLOGIES

Héma-Québec is responsible for the collection, testing, and distribution of blood and related products in the province of Quebec. As part of its mandate to support operations, the Research and Development Department of Héma-Québec invites applications for the position of DEVELOPMENT SCIENTIST. You will be responsible for developing and evaluating new laboratory technologies for detecting infectious agents and antigens in blood. A Ph.D. and three years of postdoctoral training in molecular biology or microbiology are required as well as expertise in genomic amplification and immunologic techniques. Send curriculum vitae and names of three references no later than January 15, 1999, to:

Héma-Québec
Service des Ressources Humaines
4045 Côte-Vertu

Ville St-Laurent, Québec H4R-2W7 Canada
FAX: 514-832-1026

POSITIONS OPEN

University of Wisconsin-Madison Academic Staff Position (ASSISTANT SCIENTIST). Immediate opening at BioMagResBank, website: <http://www.bmrb.wisc.edu>, an international repository for data from NMR spectroscopy on biological macromolecules. Research aspects of this position (50 percent) focus on developing innovative technologies for the display, retrieval, and archiving of information derived from and associated with biomolecular NMR in collaboration with local computer scientists and Structural Biologists. Service activities (50 percent) include overseeing the completeness and consistency of author-submitted depositions, developing documentation to assist depositors and users of the databank, and maintaining links between BMRB and the major structure and sequence databases. The ideal candidate will have a Ph.D. in a biological or physical science, be skilled in biomolecular NMR spectroscopy, and have a knowledge of current computer technology, including fluency in C/C++.

Please send curriculum vitae and three letters of recommendation to: Cheryl Adams, University of Wisconsin-Madison, Department of Biochemistry, 433 Babcock Drive, Madison, WI 53706-1544 USA. Telephone: 608-262-9835; FAX: 608-262-3453; e-mail: adams@biochem.wisc.edu.

The University of Wisconsin is an Equal Opportunity Employer.

ECOLOGIST/BOTANIST/BIOGEOCHEMIST

The Queens College School of Earth and Environmental Sciences and the Department of Biology invite applications for a joint tenure-track appointment in the areas of field botany, ecology, and/or biogeochemistry. We seek a candidate with a Ph.D., and a record of research accomplishment in one of the three areas. Duties will include teaching undergraduate through Doctoral courses in botany and environmental science, and establishing an active research program in either area. Appointment will start fall 1999 at either the ASSISTANT or ASSOCIATE PROFESSOR level, depending on qualifications. A past history of funded research is highly desirable and is expected for appointment to Associate Professor level. Letter of application, a curriculum vitae, a research plan, transcripts of all degrees including Ph.D., and three letters of reference must be received by March 1, 1999, by:

Dr. Uldis Roze, Chair
Biology Department

Queens College of City University of New York
Flushing, NY 11367

Affirmative Action/Equal Opportunity Employer/ADA.

MOLECULAR ENTOMOLOGIST. Tenure-track ASSISTANT PROFESSOR position requiring a Ph.D. with emphasis in the molecular biology and biochemistry of arthropods. Develop nationally recognized and extramurally funded molecular entomology research program that interfaces with established programs in insect-plant interactions, vector-pathogen interactions, insect pathology, or biocontrol. Excellent opportunity to establish a basic research program with applications in a productive multidisciplinary environment. Send curriculum vitae, graduate transcripts, letter with professional interests and career goals, names, addresses, and telephone numbers of five references, plus recent reprints or manuscripts to: Dr. P. Larry Phelan, Entomology, Ohio Agricultural Research and Development Center, 1680 Madison Avenue, Wooster, OH 44691. E-mail: phelan.2@osu.edu. For more information, visit website: <http://iris.biosci.ohio-state.edu/osuent/>. Applications accepted until January 30, 1999, or when suitable applicant found. Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK POSITION ATMOSPHERIC CHEMISTRY/AIR QUALITY

Duke University's Nicholas School of the Environment invites applications for a tenure-track ASSISTANT PROFESSOR in atmospheric chemistry/air quality. The successful candidate is expected to develop a nationally recognized externally funded research program, to teach graduate-level courses, and to advise graduate-level research and professional students. We seek applicants with expertise in tropospheric chemistry with emphasis on air pollution sciences. Applicants should send a curriculum vitae, statement of research and teaching interests, and names of three references before February 15, 1999, to: Chair, Atmospheric Chemistry Search Committee, Duke University, School of the Environment, P.O. Box 90328, Durham, NC 27708-0328 USA. Duke University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

SCIENTIST MARKER-ASSISTED BREEDING

Novartis Seeds, Inc. is seeking a highly motivated and experienced scientist to lead the research team working on high-throughput molecular assay development and implementation of this technology to our corn breeding programs. As a lead scientist of the molecular marker team, located in Stanton, Minnesota, you will actively participate on a global team with other Marker Scientists within Novartis Seeds to help define, develop, and implement process projects in corn and other crops. This position reports to the Director, Marker-Assisted Breeding, NAFTA. Requirements include a Ph.D. in a relevant scientific discipline with demonstrated knowledge and ability in applying molecular biology to a marker-assisted breeding program. Candidates also should have a demonstrated proficiency in setting project milestones and achieving goals. Interpersonal skills, ability to work in a team environment, and a strong desire to succeed are essential. Novartis Seeds offers a competitive salary and benefits package. Please send cover letter and résumés to: Michelle Larson, Novartis Seeds, Inc., Human Resources, P.O. Box 959, Minneapolis, MN 55440. Novartis Seeds, Inc. is an Equal Opportunity Employer.

RESEARCH INVESTIGATOR

University of Michigan Medical School, Department of Pediatrics has a position available for a Ph.D. to investigate the development of transport function in the embryonic kidney. Experience in molecular biology, cell biology, and membrane transport is preferred. The successful applicant will join an active, multidisciplinary research group studying the development of kidney function. The position requires experience in methods development in membrane transport and molecular biology, strong knowledge of techniques such as PCR, RNA extraction, cDNA cloning, and *in situ* hybridization. The ability to work independently and interact with a broad range of scientists and clinicians is essential. Research Investigator positions are intended for persons for whom a full-time career in independent research is expected. Interested applicants should submit curriculum vitae and the names, addresses, and telephone numbers of three references to: Jean Robillard, M.D., University of Michigan, Department of Pediatrics, D3202 Medical Professional Building, Ann Arbor, MI 48109-0718. E-mail: robilla@umich.edu; FAX: 734-763-4208. University of Michigan is an Equal Opportunity Employer.

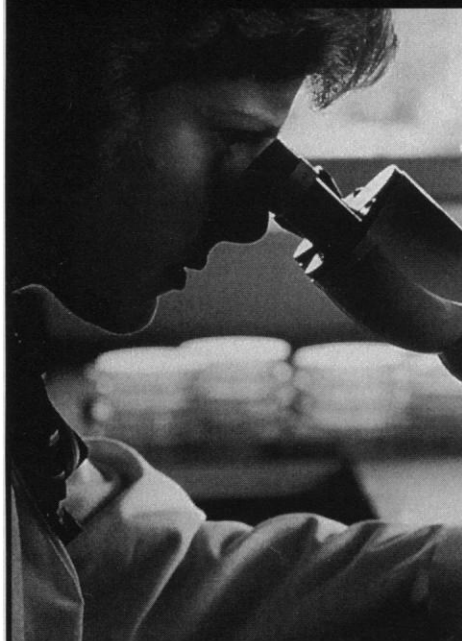
ASSISTANT PROFESSOR PHYSIOLOGIST

Tenure-track position starting fall 1999, to teach introductory biology for non-majors, cellular/molecular biology, and an elective in some area of physiology. It is expected the successful candidate will (1) commit to excellence in teaching; (2) establish an active research program involving undergraduates; and (3) seek external funding for scholarly activities. Ph.D. required. Submit curriculum vitae, statements of teaching and research interests, and three letters of recommendation to: Dr. Elliott B. Mason, Chair, Department of Biological Sciences, P.O. Box 2000, SUNY-College at Cortland, Cortland, NY 13045. To ensure full consideration, applications must be received by January 29, 1999. SUNY Cortland is an Affirmative Action/Equal Employment Opportunity/ADA Employer. The College has a strong commitment to the affirmation of diversity and offers interdisciplinary degree programs in the areas of multicultural studies.

The Environmental Studies Program at Bowdoin College seeks an Applied Ecologist for a one-year position as ASSISTANT PROFESSOR, beginning fall 1999. Postdoctoral experience preferred. Teaching responsibilities include a course in experimental design/statistical analysis and two courses in fields such as marine ecology, ecosystem ecology, forest ecology, or wildlife management. Bowdoin is a highly selective co-educational liberal arts institution on the coast of Maine with several field stations.

Send letter of application, curriculum vitae, statement of research and teaching interests, and three letters of recommendation by February 15, 1999, to: Environmental Science Search Committee, Environmental Studies, 6700 College Station, Bowdoin College, Brunswick, ME 04011-8467. Bowdoin College is committed to Equal Opportunity through Affirmative Action. Women and members of minority groups are encouraged to apply.

THE NATIONAL CANCER INSTITUTE SCHOLARS PROGRAM



A CAREER DEVELOPMENT PROGRAM PROVIDING
OUTSTANDING NEW INVESTIGATORS
AN OPPORTUNITY TO ESTABLISH A FIRST
INDEPENDENT RESEARCH PROGRAM

- Scholars receive up to 4 years of support at the NCI, followed by up to 2 years of support in an extramural institution.
- Scientists with 0-5 years of post-doctoral training in the areas of basic, clinical, or population-based biomedical research are invited to apply.
- Applications are due March 22, 1999.

For more details, contact:

Lester S. Gorelic, Ph.D., Cancer Training Branch, National Cancer Institute
301-496-8580 ■ 301-402-4472 (Fax) ■ lg2h@nih.gov
<http://www.nci.nih.gov> and click on "What's New."

FDA Medical Reviewers

• REGULATORY REVIEW SCIENTISTS •

* CHEMISTRY * PHARMACOLOGY * TOXICOLOGY *
* PHARMACOKINETICS * MICRO/BIOLOGIST *

The Food and Drug Administration, Center for Drug Evaluation and Research (CDER) invites applications from experienced scientists in the chemical (organic, analytical, medicinal), biomedical, biological and pharmacological sciences. Tasked with the responsibility to promote, protect and enhance the health of the public, CDER employs scientists in the dynamic, highly challenging and innovative atmosphere of drug development, evaluation and research. Review Scientists evaluate studies submitted by pharmaceutical manufactures in support of New Drug and Investigational New Drug Applications (NDA/INDs). They evaluate the quality and adequacy of manufactures' tests, determine the validity of drug safety and efficacy claims, write reviews, and evaluate events on marketed drugs.

QUALIFICATIONS: Basic qualifications require a

degree in the physical or life sciences. A doctorate degree with at least two years postdoc experience in the scientific discipline, coupled with good analytical and communicative skills are highly desired for these positions. Candidates for Civil Service or Commissioned Corps appointments must be U.S. citizens. U.S. permanent residents can apply for staff fellowship appointments. Graduates of foreign colleges/universities must provide proof of U.S. education equivalency certification.

SALARY: Civil Service GS-12/13, \$47,066 to \$72,758, including an excellent benefits package and flexible work schedules.

HOW TO APPLY: Submit curriculum vitae with cover letter indicating that you are applying under **source code 99010** (Science Magazine) to:

Food and Drug Administration
7520 Standish Place, MPN1, Room 225, HFD-64
Rockville, Maryland 20855
Attn: Recruitment Staff

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POSITIONS OPEN

GEORGIA RESEARCH ALLIANCE EMINENT SCHOLAR IN VACCINE RESEARCH

The University of Georgia invites nominations and applications for a distinguished scholar with national and international accomplishments commensurate with appointment to a Georgia Research Alliance Endowed Professorship in the area of vaccine research. Applicants should show expertise and creativity in vaccine research and related disciplines including immunology, microbiology, parasitology, biochemistry, and genetics. The successful candidate will have the ability to establish and direct a research group with a primary focus on animal vaccines, and the capability to cooperate with the private sector. The Eminent Scholar will be based in one of the seven academic departments within the College of Veterinary Medicine, and have the exciting opportunity to build an interdisciplinary program with scholars at the University of Georgia as well as with researchers among Georgia's other research universities and biomedical industries. The Scholar's program will occupy extensive laboratory space within the newly completed Animal Health Research Center, a unique, 76,000-square foot facility with state-of-the-art BL3 biocontainment capabilities. A generous laboratory equipment start-up package is provided. Applicants will be considered as received with the first major review on March 1, 1999; applications received by that date are assured of consideration. To apply, send a letter describing research goals and accomplishments, curriculum vitae, and the names and addresses of four references to:

Dr. Harry Dickerson
Search Committee Chair
Associate Dean for Research and Graduate Affairs
College of Veterinary Medicine
The University of Georgia
Athens, GA 30602-7371

An Affirmative Action/Equal Employment Opportunity Institution.

SCIENTIFIC REVIEW ADMINISTRATOR OPENING DATE: NOVEMBER 30, 1998 CLOSING DATE: DECEMBER 29, 1998 Announcement Number: CA-98-2016

The Special Review, Referral, and Resources Branch, Division of Extramural Activities of the National Cancer Institute (NCI), National Institutes of Health (NIH), is seeking an individual to join a multidisciplinary group of Scientific Review Administrators to manage the initial peer review of research grant applications submitted to the NCI. These activities are based in Rockville, Maryland, a suburb of Washington D.C., but some travel (site visits) will be involved. Candidates should have independent research experience in one or several of the following areas of science: current methods in cancer prevention and control; bioengineering; clinical investigation; or cancer cellular biology. Candidates should also be familiar with the NIH grant application, review, and support processes. *Candidates must be United States citizens.* The salary range for the position is \$47,066 to \$85,978. To obtain information about the application process or documents required for consideration for this position, candidates may contact: **The National Cancer Institute, Office of Human Resources and Consulting Branch, Telephone: 301-402-2789.** To obtain a FAX of this information, **Telephone: 1-800-728-5627 or 301-594-2953** and enter FAX ID# 1919. *Veterans who are preference eligibles or have been separated from the armed forces under honorable conditions after three years or more of continuous active service may apply. Selection for this position will be based on merit, with no discrimination for nonmerit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability. The NCI/NIH is an Equal Opportunity Employer.*

RESEARCH ASSISTANT PROFESSOR at Georgetown University Medical Center, Department of Radiation Medicine. Requires Ph.D. degree with two years of experience in atomic force microscopy of DNA. Background in radiation physics required. Position available May 1, 1999. Salary range from \$40,000 to \$50,000. Send curriculum vitae to:

Anatoly Dritschilo, M.D.
Professor and Chairman
Department of Radiation Medicine
Georgetown University Medical Center
3800 Reservoir Road N.W.
Washington, DC 20007

Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN



JAVA/WEB SOFTWARE ENGINEER

The Genetics Computer Group (GCG) has a position open for a Java/Web Software Engineer interested in entering the rapidly growing field of bioinformatics. GCG, an Oxford Molecular company, is dedicated to the field of computational molecular biology. Our flagship product, the Wisconsin Package for sequence analysis, is used by over 30,000 scientists at academic institutions as well as biotechnology and pharmaceutical companies worldwide.

We are seeking an experienced Java/Web Software Engineer to work as part of an expert team to develop user interfaces and server gateways to bioinformatics algorithms. Experience with one or more of the following is essential: Java, Perl, CGI programming (World Wide Web), C/C++ programming, UNIX.

Experience with software development tools such as CORBA, RMI, and OODBMS is also desirable. Send curriculum vitae or résumé with three references to:

Genetics Computer Group
Attn: Java/Web Programmer
575 Science Drive
Madison, WI 53711

Genetics Computer Group is an Equal Opportunity/Affirmative Action Employer.

DIRECTOR MARKER-ASSISTED BREEDING

Novartis Seeds, Inc. is seeking a highly motivated and experienced leader to direct the research team applying and integrating molecular marker technology to complement and enhance our corn breeding effort. As the leader of the molecular marker team, located in Stanton, Minnesota, you will interact closely with our worldwide plant breeding teams (Area Product Teams) that are focused on germplasm improvement to meet specific market needs. In addition, you will actively participate on a global team with other Marker Scientists within Novartis Seeds to help coordinate our marker/breeding efforts in corn and in other crops. This position is also a member of the Research Management Team within the United States. Requirements include a Ph.D. in genetics or plant breeding, strong statistical, quantitative genetics, and analytical skills. Candidates should have a demonstrated proficiency in setting project milestones and achieving goals. Interpersonal skills, ability to work in a team environment, and a strong desire to succeed are essential. Previous experience using and applying molecular markers to applied breeding programs, preferably in corn, is critical. Novartis Seeds offers a competitive salary and benefits package. Please send cover letter and résumés to: **Michelle Larson, Novartis Seeds, Inc., Human Resources, P.O. Box 959, Minneapolis, MN 55440.** *Novartis Seeds, Inc. is an Equal Opportunity Employer.*

DIRECTOR OF ORTHOPAEDIC RESEARCH

Seeking a Director to establish and direct a basic science and clinical research program within the Division of Orthopaedic Surgery at The Queen's Medical Center. The Director must be successful in securing grant funding, producing publications accepted by peer-reviewed journals, and directing and supervising the orthopaedic resident research program. Detailed information is available at **website: <http://www.queens.org>**. Contact: **Dr. Allen B. Richardson, Program Director and Chairman, Division of Orthopaedics, e-mail: abrmd@hawaii.edu**. Please include a description of your research focus/interest.

ASSOCIATE RESEARCH SCIENTIST position available in the Transgenic Facility of Columbia University, Herbert Irving Comprehensive Cancer Center. Operate facility to produce transgenic and knockout mice; assist Investigators with experimental design and interpretation. Minimum requirements: Ph.D. plus two years of relevant postdoctoral experience, expertise in both DNA and cell culture, experience in all aspects of transgenic and ES cell technology. Send or FAX curriculum vitae and names of three references to: **K. Antman, M.D., MHB 6N-435, 177 Ft. Washington Avenue, New York, NY 10032.** FAX: 212-305-3035. *We take Affirmative Action toward Equal Employment Opportunity.*

POSITIONS OPEN

USDA NATIONAL NEEDS GRADUATE FELLOWSHIPS

The Department of Animal Sciences, University of Illinois at Urbana-Champaign (UIUC) announces the availability of two USDA National Needs Graduate Fellowships emphasizing research in applied genome science. The training mission is to provide opportunities for fundamental research on genes and proteins, and to explore the practical applications of genome-based technologies to animal agriculture. The program has four major interdisciplinary themes: (1) applied and environmental microbiology, (2) gene mapping and marker-assisted selection, (3) manipulation of host defense, and (4) modification of growth, reproduction, and lactation. Facilities on the UIUC campus that may serve as resources include the Biotechnology Center, the W. M. Keck Center for Comparative and Functional Genomics, and the National Center for Supercomputing Applications. The stipend is \$17,000 per year plus a tuition and fee-waiver for three years (additional financial support will be provided after the initial three years if necessary).

Requirements: B.S. or M.S. in biology, biochemistry, cell biology, food science, genetics, microbiology, molecular biology, physiology, or a related area. *Applicant must hold U.S. citizenship.* Preference will be given to applicants that have prior research accomplishments and other exemplary achievements in either academia or industry.

Please contact:

Professor Bryan A. White
Graduate Program Coordinator
Department of Animal Sciences
The University of Illinois
1207 West Gregory Drive
Urbana, IL 61801
Telephone: 217-333-2091
FAX: 217-333-8804
E-mail: b-white2@uiuc.edu

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

MARINE SCIENTIST

The Dauphin Island Sea Laboratory (DISL) announces the availability of a position for a Marine Scientist with primary research interests in marine and estuarine vascular plants. We seek candidates who can interact and collaborate with a faculty of twelve Ecologists and Oceanographers and take advantage of the diverse and understudied emergent and submerged wetland habitats in the local coastal zone. Candidates may work at any level of biological organization (molecular to ecosystem).

This position is expected to be filled at the **ASSISTANT PROFESSOR** level, with salary provided for 10 months per year. Start-up funds will be available. Successful applicants will be expected to develop an independent research program and must demonstrate strong potential for attracting extramural funding. Teaching responsibilities (graduate and undergraduate) normally include two courses per year.

The DISL is a 36-acre campus where teaching and research are supported by 65-foot and 42-foot research vessels, and a newly renovated flowing seawater laboratory.

Applicants should send a curriculum vitae, a brief statement of teaching and research interests, two to three selected reprints, and the names and contact information (including e-mail addresses) of three references to: **Marine Scientist Search Committee, Dauphin Island Sea Laboratory, 101 Bienville Boulevard, Dauphin Island, AL 36528.** Website: www.disl.org. Review of applications will begin 1 February 1999. *DISL is an Equal Opportunity Employment/Affirmative Action/Minorities/Females/Disabled Employer.*

RESEARCH ASSOCIATES

Two full-time contractual openings working in the School of Computer, Mathematical, and Natural Sciences. Master's degree required; however, Ph.D. is preferred. Expertise in molecular biology, cell biology, immunohistochemistry, gel electrophoresis, and tissue culture. Salary negotiable. For consideration apply to: **Human Resources Department, Morgan State University, 1700 East Cold Spring Lane, Baltimore, MD 21251.**

Immediate **RESEARCH ASSOCIATE** position at Norfolk State University (Virginia) on expression of bacterial hem genes. The candidate should have a Ph.D. and molecular biological experience. Background in heme biochemistry is preferable. Send résumé and two letters of reference by e-mail to: **Debabrata Majumdar, Telephone: 757-683-2543; e-mail: dm@vgr.nsu.edu**.

TARGETED GENETICS CORPORATION

is a Seattle-based biotechnology company developing gene and cell therapy products for the treatment of certain acquired and inherited diseases. The Company has three lead development programs targeting cystic fibrosis, cancer, and infectious diseases as well as an extensive gene delivery and cellular therapy technology platform. Continued success has created opportunities to join our team in the following areas:

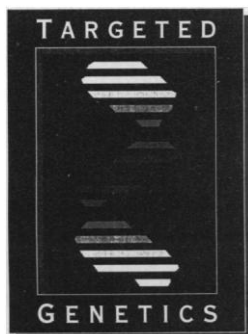
Ph.D. SCIENTISTS

- Purification Process Development
- PCR Assay Development
- Analytical Methods
- Toxicology

R&D ASSOCIATES

- Assay Support
- Assay Validation
- GMP Manufacturing
- Raw Materials Testing
- Analytical Biochemistry

For consideration, please submit your C.V. / résumé to:



TARGETED GENETICS CORPORATION

Human Resources

1100 Olive Way

Suite 100

Seattle, WA 98101

FAX: (206) 521-7872

E-mail:

careers@targen.com

We are an Equal Opportunity Employer



United States Environmental Protection Agency National Exposure Research Laboratory

The U.S. Environmental Protection Agency's (EPA) National Exposure Research Laboratory (NERL) in Cincinnati, Ohio is seeking qualified candidates for the position of Molecular Biologist/Ecologist, GS-401-11/12/13:

Ecological Exposure Research Division, Molecular Ecology Research Branch, OPM Announcement #AR0141: The incumbent plays a leading role in developing ecological exposure indicators at the molecular level, with immediate emphasis on indicators of altered genetic diversity in aquatic ecosystems. Candidates must have expertise in molecular biology and the ability to relate molecular data to ecological parameters, including those of population biology/genetics. Extramural resources management duties occupy less than 10% of the incumbent's time and include technical evaluation of proposals, reviewing contractor work plans, defining scope of work, certifying deliverables and reviewing reports.

Requirements: Applicants should have a Ph.D. degree in molecular biology/biochemistry with demonstrated knowledge of population biology/genetics and ecology; or a degree emphasis in population biology/genetics with a demonstrated expertise in molecular biology.

This is a permanent, full-time position. *U.S. citizenship is required* and candidates must meet U.S. Office of Personnel Management qualification requirements including specific educational coursework. Candidates should have the required education and/or experience as described in the announcement listed below. Salary ranges from \$39,432 to \$73,056 and is commensurate with qualifications. The selected candidate will be eligible for a full benefits package, including relocation expenses, health insurance, life insurance, retirement, and vacation and sick leave.

HOW TO APPLY: All applicants must apply through the U.S. Office of Personnel Management (OPM) by calling the OPM automated jobline on (919) 790-2822 or accessing OPM via Internet at <http://www.usajobs.opm.gov> AND requesting an OPM package for Announcement Number AR0141. Application materials must be received by 1/29/99.

The U.S. EPA is an Equal Opportunity Employer.

Exponent

One of the leading independent consulting firms, combines the skills of scientists, engineers, physicians, and business consultants into one dynamic organization. With over 50 disciplines, we offer clients the expertise and knowledge they need to solve complex scientific and engineering problems.

We are currently seeking individuals with advanced degrees and consulting expertise in the following technical disciplines:

Accident Reconstruction
Hydrology
Data Analysis
Biomechanics
Mechanical Engineering
Human Factors

Civil Engineering
Automotive Engineering
Industrial Hygiene
Ecology
Chemistry
Toxicology

Positions are available in the following U.S.-metropolitan areas: Atlanta, Boston, Chicago, Denver, Detroit, Houston, Los Angeles, Miami, New York, Philadelphia, Phoenix, Portland, San Francisco, Seattle, and Washington DC.

Exponent offers a generous compensation and benefits package. We are an Equal Opportunity Employer. For confidential consideration, please contact:

Human Resources
Exponent
P.O. Box 3015
Menlo Park, California 94025
fax: (650) 328-3049
e-mail: hr@exponent.com

For more information on Exponent, visit our website at:
www.exponent.com

POSTDOCTORAL FELLOWSHIPS

DNAX Research Institute, located near Stanford University, conducts research in a variety of areas of molecular and cellular biology with an emphasis on immunology, hemopoiesis and oncology. We currently have postdoctoral openings in our Cell Signaling Department.

A position is currently available in the laboratory of Dr. Ronald Herbst to study the involvement of protein tyrosine phosphatases in the regulation of cell growth and transformation.

Dr. Jim Johnston has an opening for a postdoctoral fellow to study cytokine signal transduction in hematopoietic cells.

Qualified applicants should send a curriculum vitae, statement of research interests, and the names of three references to: Human Resources Department, DNAX Research Institute, 901 California Avenue, Palo Alto, CA 94304-1104. DNAX is an equal opportunity employer, m/f/h/v.

DNAX

POSITIONS OPEN

CHIEF, LABORATORY OF CLINICAL STUDIES NATIONAL INSTITUTES OF HEALTH National Institute on Alcohol Abuse and Alcoholism Division of Intramural Clinical and Biological Research

An outstanding Clinician-Investigator to direct a clinical research program is sought by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health (NIH). The position is located in the Clinical Center, Building 10 on the NIH Campus in Bethesda, Maryland. The Laboratory of Clinical Studies is a component of the NIAAA's Division of Intramural Clinical and Biological Research (DICBR).

The Laboratory Chief is responsible for establishing an independent clinical research program focusing on the causes, consequences, and treatments of alcohol abuse and alcoholism. Successful candidates should have a broad perspective of clinical research and the neurobiological underpinnings of alcoholism. The Laboratory has approximately 60 employees, Fellows, and guest researchers and an eleven-bed inpatient ward, an outpatient clinic, and access to facilities for both structural and functional brain imaging. It has a budget of approximately \$8.5 million, which includes clinical support services.

The applicant must possess a medical degree. Experience must include managing a senior-level research program that is recognized nationally. The total compensation will be commensurate with education and experience. Salary may range from \$77,798 to \$151,800 per year. Candidates may be eligible for relocation or other bonuses.

All applications should include the following: a current curriculum vitae and bibliography; a one-page synopsis of research accomplishments and research plans; and the names, addresses, and telephone numbers of five professional references. A list of the requirements or additional information about the position may be obtained by contacting **Ms. Hanratty** at the address listed below. Applications should be sent to:

Ms. Kathleen Hanratty
NIH, Building 31, Room 1B58
31 Center Drive MSC 2088
Bethesda, MD 20892-2088
Telephone: 301-402-2997
FAX: 301-402-0016
E-mail: kh54d@nih.gov

Applications must be received no later than January 31, 1999.

NIH is an Equal Opportunity Employer. Applications from women, minorities, and persons with disability are strongly encouraged. The DICBR/NIAAA is a smoke-free environment. This advertisement supersedes previous announcements.

EXECUTIVE DIRECTOR RANCHO SANTA ANA BOTANIC GARDEN

Rancho Santa Ana Botanic Garden is devoted to the collection, cultivation, study, and display of native California plants and to graduate training and research in plant systematics and evolution. Founded in 1927, the Garden is a nonprofit, private, charitable trust affiliated with the Claremont Colleges in Claremont, California, and offers a graduate program in botany conferring both Master's and Doctorate degrees.

Reporting to the Board of Trustees, the Executive Director is the Chief Executive Officer of the Garden with overall responsibility for the management of the institution, including \$2.5 million budget and a staff of approximately 44. He/she serves as a Chief Fundraiser and directs the botany program. An advanced degree is preferred. Excellent benefits package and relocation assistance available. Send résumé and cover letter to: **Morris & Berger, 201 South Lake Avenue, Suite 700, Pasadena, CA 91101. FAX: 626-795-6330.**

Rancho Santa Ana Botanic Garden is an Affirmative Action Employer.

PLANT MOLECULAR BIOLOGIST

NovaFlora, Inc., is a biotechnology company focusing on the development of ornamental plants. A Ph.D.-level scientist with expertise in plant regeneration and transformation is sought. Applicants should send a letter stating their research interests, experience, and background, as well as copies of publications, curriculum vitae, names and e-mail addresses of three references to: **Dr. Michael S. Dobres, NovaFlora, Inc., University City Science Center, Suite 350, Philadelphia, PA 19104. E-mail: info@novaflora.com; website: http://www.novaflora.com.**

POSITIONS OPEN

ATCC

RESEARCH SCIENTIST ANIMAL VIROLOGY

The American Type Culture Collection, serving as one of the world's largest and diverse repositories of biological materials, is seeking a Ph.D.-level Molecular Virologist with a minimum of two years of postdoctoral experience in molecular-oriented studies of viral taxonomy, replication, or pathogenesis. Expertise with human or primate retroviruses is highly desirable. Individual must be able to identify grant and contract opportunities, develop an externally funded research program, and be able to collaborate with existing staff on applied research projects in support of the Virology Collections.

The ATCC occupies a new facility on the George Mason University (GMU) campus and is a partner with the Institute for Biosciences, Bioinformatics, and Biotechnology, also on the GMU campus. ATCC offers a competitive salary and comprehensive benefits package. Interested candidates should mail a letter of interest and résumé, including salary history, to:

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

Visit our website: www.atcc.org.

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

IMMEDIATE OPENING FOR IMMUNOLOGIST

The Neuromuscular Diseases Section, National Institute of Neurological Disorders and Stroke (NINDS), NIH is looking for an experienced immunology **POST-DOCTORAL FELLOW** to actively participate in ongoing studies involving the basic immunologic mechanisms of autoimmune muscle disorders. *Candidates should be U.S. citizens or permanent residents.* This is a two-year appointment as a Staff Fellow (or Senior Staff Fellow, if more experienced), renewable up to five years. The position is available immediately and located at the Clinical Center in the main NIH complex, in Bethesda, Maryland.

Interested candidates (Ph.D.'s or M.D.'s) should send curriculum vitae and related information to: **The Chief, Neuromuscular Diseases Section, NINDS, NIH, Building 10/Room 4N248, 10 Center Drive MSC 1382, Bethesda, MD 20892-1381. Telephone: 301-496-9979; FAX: 301-402-0672.**

Two **RESEARCH SCIENTISTS**, one funded and one pending, for Biosensor/Interaction Analysis Core and associated Structural Biology Core. Core staff participate in planning, execution, and data analysis and interpretation for biomolecular recognition studies using BIACORE and IAsys optical biosensors and in associated recombinant protein production and structural/biophysical characterization. Hiring criteria include background in protein chemistry and recombinant expression/purification, specific experience with biosensors or other related biophysical methods, skill in multitasking. For candidates with Ph.D. in biochemistry, biophysics, chemistry, or related field, although highly qualified candidates with Bachelor's or Master's degree will be seriously considered for one of the positions. Résumés and names, telephone, FAX, and e-mail for three references to: **Irwin Chaiken, Ph.D., University of Pennsylvania School of Medicine, 913 Stellar Chance Laboratories, 422 Curie Drive, Philadelphia, PA 19104. FAX: 215-349-5572; e-mail: chaiken@mail.med.upenn.edu.**

MEDICAL WRITERS

Leading New York City medical education/communications company has an immediate opening for Medical Writers. Familiarity with development of biological/biomedical sciences manuscripts essential. Ph.D. or advanced degree in the biological sciences preferred. The ability to write clearly and concisely is essential. The candidate will be expected to work on his/her own initiative, interface with Physicians, clients, and Program Directors. Some travel may be required. Please send résumé to: **Human Resources Department, Health Science Communications, Inc., 12th Floor, 16 West 22nd Street, New York, NY 10010.**

POSITIONS OPEN

RESEARCH AGRONOMIST (GS-11/12/13). USDA, ARS, Northern Grain Insects Research Laboratory, Brookings, South Dakota, is seeking a Research Scientist as part of a multidisciplinary research team whose goal is to develop cropping/pest management systems that emphasize improved input efficiency and promote long-term sustainability. Considerable effort will be directed to determine the need for and identification of alternative crops and production methods for use in the Northern Great Plains and to develop efficient methods to integrate new crops and methods into existing crop production systems. Other objectives will include relating the within-field variance of plant growth and yield to the spatial distribution of variable soil chemical and physical properties, plant biological and physiological traits, key insect pests, and other environmental factors; and to determine the role, reliability, and cost-effectiveness of site-specific farming (GIS/GPS, remote sensing, variable rate input applications, etc.) in improving crop production and sustainability within Northern Great Plains production systems. *Must be a U.S. citizen.* A Ph.D. and postdoctoral experience are preferred. Salary will be commensurate with experience (\$38,593 to \$71,503). Call: **Dr. Laurence Chandler, Telephone: 605-693-5239; e-mail: lchandle@ngirl.ars.usda.gov** for position information. To view the complete announcement (#ARS-D9W-9082), refer to website: www.ars.usda.gov no later than January 26, 1999.

RESEARCH ENTOMOLOGIST (GS-11/12/13). USDA, ARS, Northern Grain Insects Research Laboratory, Brookings, South Dakota, is seeking a Research Scientist as part of a multidisciplinary research team whose goal is to develop cropping/pest management systems that emphasize improved input efficiency and promote long-term sustainability. The successful candidate will provide technical expertise on the behavioral biology, population ecology, and management of insects, including corn rootworm, European corn borer, and bean leaf beetle, infesting corn/soybean cropping systems, and should possess a broad understanding of insect pest problems and factors governing such problems in Northern Great Plains farming systems. Considerable effort will be directed to evaluate and develop quantitative information describing basic abiotic and biotic components influencing population growth and/or change of key insect pests of the corn/soybean cropping system and develop methods to manipulate these components to improve integrated management of the key pests. *Must be a U.S. citizen.* A Ph.D. and postdoctoral experience are preferred. Salary will be commensurate with experience (\$38,593 to \$71,503). Call: **Dr. Laurence Chandler, Telephone: 605-693-5239; e-mail: lchandle@ngirl.ars.usda.gov** for position information. To view the complete announcement (#ARS-D9W-9081), refer to website: www.ars.usda.gov no later than January 26, 1999.

The USDA is an Equal Opportunity Provider and Employer.

SENIOR CELL BIOLOGIST UNIVERSITY OF VIRGINIA

The Department of Biology at the University of Virginia invites applications for a tenured faculty appointment at the senior level in the area of cell biology. We are seeking an established, internationally recognized scientist with a vigorous research program using modern molecular, cellular, and genetic approaches to investigate fundamental problems in cell biology. While the primary appointment is in biology, an affiliation with a basic science department at the nearby Health Sciences Center is anticipated. The applicant should have a broad vision for the advancement of a campus-wide, interdisciplinary initiative in morphogenesis focused on the origin of cellular and organelle asymmetry, cell polarity, regulation of motility, cytoskeleton, and biomechanics of cell function. Areas of particular interest include mRNA and protein transport and localization, epithelial and mesenchymal cell polarity, cell signaling, the cytoskeleton, cell adhesion, and cellular biomechanics. Candidates should find our Center for Cellular Imaging (<http://shiva.bio.virginia.edu/~cci/>) attractive. Applicants are asked to submit curriculum vitae, a summary of past accomplishments, descriptions of current and future research plans and teaching interests, and the names of three references to: **Cellular Biology Search Committee, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, VA 22903-2247. Website: http://minerva.acc.virginia.edu/~biology.** Women and members of minority groups are encouraged to apply. Screening of applicants will begin immediately and the search will be continued until the position is filled. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

**NATIONAL CANCER INSTITUTE (NCI)
DIVISION OF CANCER TREATMENT AND DIAGNOSIS (DCTD)
DEVELOPMENTAL THERAPEUTICS PROGRAM (DTP)**

INFORMATION TECHNOLOGY BRANCH
SUPERVISORY CHEMIST/SUPERVISORY BIOLOGIST
GS-1320/401-15

ANNOUNCEMENT NUMBER: CA-98-2343

The NCI is accepting applications for the position of Chief, Information Technology Branch, Developmental Therapeutics Program (DTP), located in Rockville, Maryland. We are seeking applicants experienced in medicinal chemistry, organic chemistry, or biologic science with expertise in computational and/or mathematical modeling of biological and chemical information. The Information Technology Branch provides automated data processing support to the DTP and collects and manages the structural, chemical, inventory, shipping, biological testing and management support data associated with the various DTP programs. The Branch has responsibilities for (1) providing laboratory computer support for drug screening; (2) developing and maintaining automated quality control systems for screening operations to facilitate technical review and enhance operational efficiency; (3) developing and establishing data handling, storage and retrieval systems; (4) studying operational data processing needs of the DTP and recommending new methods where necessary; (5) maintaining and operating a repository of drug screening data; (6) maintaining an interactive Website for public access for DTP data; and (7) pro-actively utilizing the most modern informatics approaches for management, interpretation, and use by extramural investigators of DTP information. The incumbent of position will serve as Branch Chief with responsibility for the planning and direction of the Branch's projects and activities. This position requires a creative approach to problems, a capacity for extensive planning and evaluation, and an ability to apply sound scientific judgment.

Salary - \$77,798 - \$101,142

Benefits - Health and life insurance options, retirement, paid holidays, vacation and sick leave.

U.S. citizenship is required. Applicants must meet the basic experience and educational qualification requirements for Chemist and/or Biologist. In order to assess your qualifications, please address the following rating criteria: 1) Knowledge of chemical structure databases and biological databases; 2) Ability to plan and direct projects for conducting research regarding information technology; and 3) Ability to provide managerial and supervisory leadership to other professional staff.

For further qualification requirements, application procedures, and other additional information, please contact the NCI Staffing Office at (301) 401-2812. Please submit either an application for Federal Employment or a resume to: National Cancer Institute, Human Resource Management & Consulting Branch, 6120 Executive Boulevard MSC 7211, Executive Plaza South, Suite 550, Rockville, MD 20852-7211 by the closing date of 03/07/99.

NIH is an Equal Opportunity Employer



**Postdoctoral Position at NIH
Gene Isolation, Autoimmunity,
and Insulin-Dependent
Diabetes Mellitus
(IDDM)**

Two positions, for up to 5 years, available immediately. The laboratory clones, sequences, expresses, and determines the function of novel genes expressed in the beta cells of the pancreas, particularly in relationship to IDDM. Methodologies include cell transfection, gene knockout, and DNA microarrays. Current emphasis is on the function and regulation of IA-2 and IA-2 β , which are members of the protein tyrosine phosphatase family and major autoantigens in IDDM. The autoimmune response to these autoantigens is highly predictive in identifying individuals at risk of developing clinical disease. Applicants should have an M.D., Ph.D., or equivalent, with a strong background in molecular biology and/or immunology. Previous postdoctoral research experience desirable. Send curriculum vitae, bibliography, and names of three references to: **Abner Louis Notkins, M.D., Chief, Experimental Medicine Section, Infection and Immunity Branch, NIDCR, National Institutes of Health, Building 30, Room 121, 30 Convent Dr. MSC 4322, Bethesda, MD 20892-4322; Voice: (301) 496-4535; Fax: (301) 402-4163; e-mail: notkins@yoda.nidcr.nih.gov.**

**POSTDOCTORAL POSITIONS
CENTER FOR MOLECULAR MEDICINE
MAINE MEDICAL CENTER RESEARCH INSTITUTE**

The newly created Center for Molecular Medicine is currently undergoing a vigorous expansion which provides unique postdoctoral opportunities in cell and molecular biology. The Center's major research focus is on the molecular mechanisms of human diseases of the cardiovascular system, cancer, and bone and mineral metabolism. Specific research interests of participating faculty, include the following:

Robert Friesel, Ph.D. (friesr@mail.mmc.org)

- Normal and abnormal signal transduction during bone growth and development.
- Identification of novel antagonists of FGF signaling.

Lucy Liaw, Ph.D. (liawl@poa.mmc.org)

- Function of adhesion proteins during vascular injury.
- Extracellular signals affecting tumor growth and progression.

Volkhard Lindner, M.D., Ph.D.

- (lindnv@poa.mmc.org)
- The biology of high molecular weight FGF-2 complexes.
- Molecular genetics of vessel wall pathology.

Thomas Maciag, Ph.D. (maciat@mail.mmc.org)

- Regulation of endothelial cell migration, growth, differentiation and senescence.
- Molecular mechanisms of protein trafficking.

Philip Thorpe, Ph.D.

- (thorpp@mail.mmc.org)
- Biology of tumor vasculature.
- Molecular mechanisms of blood vessel formation and survival.

Calvin Vary, Ph.D. (varyc@mail.mmc.org)

- Molecular phenotyping of preosteoblast and osteoblast cells.
- Development of novel gene delivery systems.

Tracey Weisberg, M.D.

- (weisbt@mail.mmc.org)
- Animal models of human tumor growth and metastasis.
- Molecular mechanisms of tumor metastasis.

Applications are invited from candidates with a strong background in biochemistry, cell and molecular biology. We offer an excellent benefits package as well as a challenging and stimulating research environment. The Portland area offers an environment rich in cultural and recreational opportunities. For more information about Maine Medical Center Research Institute, visit our website at: <http://zappa.mmc.mmc.org>. Interested candidates should send a curriculum vitae and the names, addresses and telephone numbers of three references to the faculty E-mail address or mail to: **Center for Molecular Medicine, Maine Medical Center Research Institute, 125 John Roberts Rd., Suite 12, South Portland, ME 04106.**


Maine Medical Center
The Trusted Choice
The MaineHealth Family
An Affirmative Action Employer

POSITIONS OPEN

EXECUTIVE DIRECTOR POINT REYES BIRD OBSERVATORY

Point Reyes Bird Observatory (PRBO) invites applications for the position of Executive Director. We seek an individual with a national reputation as an outstanding scientist in avian conservation with demonstrated leadership and administrative abilities. The successful candidate should hold an advanced degree in an appropriate biological field and have demonstrated a proven track record of funding involving both governmental and nongovernmental sources. Previous administrative and leadership experience with an environmental NGO is highly desirable.

With an annual budget exceeding \$2 million, PRBO is an internationally recognized research and conservation organization focused on key environmental issues involving birds in the western United States. The organization conducts a wide variety of ecological research and conservation activities involving birds of riparian, wetland, and marine habitats. In addition, PRBO is also involved in educational activities through its volunteer programs in field ornithology. For more information regarding PRBO's programs and philosophy please consult its website: www.prbo.org. Competitive salary and benefits. Applicants should send a description of research, administrative, and fund raising experience and résumé/curriculum vitae to: **Point Reyes Bird Observatory Search Committee, 2527 Fillmore Street, San Francisco, CA 94115** by January 31, 1999.

PRBO is an Equal Opportunity Employer.

PROGRAM DIRECTOR HUMAN NUTRITION/FOOD SAFETY

The National Research Initiative Competitive Grants Program of the U.S. Department of Agriculture (USDA) seeks a qualified scientist to serve as Program Director for grants administration in the area of human nutrition and food safety. Candidates must have an advanced degree with major study in human nutrition or food safety, or related disciplines such as nutritional biochemistry, physiology, dietetics, food microbiology, food science, food chemistry, public health, epidemiology, risk assessment, or toxicology. *Candidates must be U.S. citizens and it is preferable that candidates have a Ph.D. or equivalent specialized experience.*

Applications must be postmarked by January 19, 1999. For programmatic information about the position, contact: **Dr. Peter Johnson, Division Director, National Research Initiative Competitive Grants Program, The Cooperative State Research, Education, and Extension Service/USDA, Stop 2241, 1400 Independence Avenue S.W., Washington, DC 20250-2241.** Telephone: 202-401-1896; FAX: 202-205-3641; e-mail: pjohnson@reeusda.gov. For information on application procedures/forms, contact: **The USDA Human Resources Division, Telephone: 202-720-6130.** USDA is an Equal Opportunity Employer.

RESEARCH SCIENTIST position available in microbial pathogenesis to study anthrax pathogenesis and vaccine development. The program is focused on the identification and molecular characterization of microbial virulence determinants and their mechanisms of action using *in vitro* cell culture and animal models. Position requires Ph.D. and postdoctoral experience in cell and/or molecular biology. A position for a **SENIOR TECHNICIAN/LABORATORY MANAGER** is also available. Interested applicants should send their curriculum vitae, statement of research interests, and names of three references to: **Dr. Arthur M. Friedlander, U.S. Army Medical Research Institute of Infectious Diseases, Frederick, MD 21702.** FAX: 301-619-2152; e-mail: friedlan@ncifcrf.gov.

ASSISTANT or ASSOCIATE INVESTIGATOR. Neurobiology. Full-time, tenure-track. Research in systems neurophysiology. Applicants should have a Ph.D., postdoctoral experience, and an active research program with a high potential for attracting external support. Review of applications will begin immediately and continue until the position is filled. Send curriculum vitae, statement of research plans, and names of three references to: **Systems Search Committee, Institute of Neurobiology, Medical Sciences Campus, University of Puerto Rico, Boulevard Del Valle 201, San Juan, PR 00901.** Telephone: 787-721-4149; FAX: 787-725-3804; website: <http://www.neurobio.upr.clu.edu>. The University of Puerto Rico is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN



The USDA, Agricultural Research Service, Beltsville Agricultural Research Center, Plant Sciences Institute, Insect Chemical Ecology Laboratory, in Beltsville, Maryland is seeking a **RESEARCH CHEMIST/RESEARCH ENTOMOLOGIST**, GS-1320/414-14/15. Salary is commensurate with experience (GS-14: \$66,138 to \$85,978 per year; GS-15: \$77,798 to \$101,142 per year). *Candidates must be U.S. citizens.* The position serves as Research Leader of the Laboratory whose mission is to discover and develop attractants, repellents, and other semiochemicals for the use in insect pest management programs. In addition to the basic education requirements, applicants must demonstrate (1) knowledge of principles, techniques, and procedures of chemistry and/or entomology; (2) ability to discover, synthesize, and/or use insect behavioral compounds for pest management; (3) ability to plan, coordinate, lead, and evaluate research programs of a multidisciplinary organization; (4) ability to design, plan, and conduct research and publish results in the area of insect behavioral compounds; (5) ability to manage, supervise, and motivate a diverse group of employees; and (6) ability to organize, coordinate, and disseminate research results to action agencies and other user groups. For information on the research program, contact: **Dr. Ron F. Korcak, Telephone: 301-504-5592.** This position has specific education and experience requirements and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the vacancy announcement by **Telephone: 301-504-1484** or by printing it from the Internet at website: <http://www.ars.usda.gov>. The vacancy announcement number for this position is ARS-X9E-9076. This announcement closes January 11, 1999. USDA/ARS is an Equal Opportunity Employer and Provider.

SENIOR SCIENTIST

XenoTech LLC, a biotechnology contract research organization, is seeking applications for Senior Scientists to oversee contract services for the study of xenobiotic metabolism, drug-interaction studies, P450 induction (both *in vivo* and *in vitro*), and/or product development.

Qualified applicants should possess a Ph.D. in pharmacology/toxicology or biochemistry and/or several years of experience in drug metabolism-related research; exceptional writing skills; and expertise in HPLC, cell culture, and/or molecular biology.

Salary commensurate with experience and qualifications. Company benefits include medical, dental, vision, and life insurance; 401(k) retirement plan; and paid vacation/holidays.

Position is available immediately. Qualified candidates should send résumé (please include salary expectations) and list of references to: **Dr. Ajay Madan, Principal Scientist, XenoTech LLC, 3800 Cambridge Street, Kansas City, KS 66103.**

NEUROTROPHIC BIOSCIENCE, INC.

Neurotrophic Bioscience, Inc. is a new Toronto-based biotechnology company that is focused on the development of neurotrophic factors and cell therapy for the treatment of Parkinson's disease. The following positions are available immediately: protein chemistry: **SENIOR SCIENTIST** (Ph.D./M.D.); cell and molecular biology: **JUNIOR SCIENTIST** (Ph.D./M.D.); cell culture and immunocytochemistry: **SENIOR TECHNICIAN** (M.Sc.); protein chemistry: **JUNIOR TECHNICIAN** (B.Sc.); cell culture: **JUNIOR TECHNICIAN** (B.Sc.). FAX your résumé to: **FAX: 301-654-6413** (before December 31, 1998). After January 1, 1999, mail your résumé to: **John Commissiong, Neurotrophic Bioscience, Inc., 115 Skyway Avenue, Toronto, Ontario M9W 4Z4 Canada.** Salary and benefits will be very competitive.

POSTDOCTORAL POSITION available immediately to study molecular/cellular biology and regulation of inducible human nitric oxide synthase (PNAS 95:7625, 1998), and its signaling in airway inflammation. Ph.D. or M.D. and experience in molecular biology/biochemistry are desired. Apply to: **N. T. Eissa, M.D., Baylor College of Medicine, One Baylor Plaza, FBRN B567, Houston, TX 77030.** FAX: 713-793-1445; e-mail: eissat@hotmail.com.

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

POSITIONS OPEN

Two funded **POSTDOCTORAL POSITIONS** are available immediately to work on animal models of neurodegenerative diseases. Applicants should have a relevant Ph.D. and/or M.D. and expertise in one or more of the following: neurohistology, modern anatomical methods, cell biology, and molecular biology. The selected candidates will join a multidisciplinary group in **Dr. William Mobley's** laboratory at Stanford University School of Medicine. The laboratory examines trafficking and signaling of neurotrophin receptors in normal mice and in transgenic models of neurodegeneration. Stanford University offers state-of-the-art laboratories with extensive core facility support including DNA and protein sequencing, oligonucleotide and peptide synthesis, confocal laser microscopy, and an outstanding animal facility. Interested parties should send a statement of research interest, curriculum vitae, no more than three reprints from refereed journals, and letters of recommendation to:

William Mobley, M.D., Ph.D.
Professor and Chairman

Department of Neurology and Neurological Sciences
Stanford University School of Medicine
Room P211
Stanford, CA 94305-5489

Stanford University is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS. Johns Hopkins School of Medicine. Available immediately to study the mechanisms of DNA damage and repair in mitochondria relevant to aging and cancer (See: **K. K. Singh** (Ed) "Mitochondrial DNA mutations in aging, disease and cancer," Springer, NY 1998). Individuals sought with experience in yeast genetics, biochemistry, and molecular biology and/or experience in mammalian cell culture, transfection, biochemistry, and molecular biology. Knowledge of mitochondrial biology is desirable but not required. Please forward your curriculum vitae and names of three references to: **Keshav K. Singh, Ph.D., Johns Hopkins Oncology Center, Room 2-121, 600 North Wolfe Street, Baltimore, MD 21287.** E-mail: kksingh@jhmi.edu.

DIRECTOR, GENE THERAPY CENTER

Tulane University Medical Center is accepting nominations and applications for Director of our gene therapy center, an Endowed Chair position. Qualified Doctoral-level candidates must have proven records in research funding, experience, achievement in gene therapy or molecular medicine, and administrative leadership experience for coordinating basic and clinical research. Salary negotiable. Send curriculum vitae and three references to: **Dr. Peter Gerone, Gene Therapy Search, Tulane University Medical Center, Chancellor's Office, 1430 Tulane Avenue, SL76, New Orleans, LA 70112.** E-mail: amorcos@tmcpop.tmc.tulane.edu; Telephone: 504-585-6144; FAX: 504-588-5243.

POSTDOCTORAL POSITION available January 1999 to investigate the pathogenesis of *Brucella abortus*, and the expression of relevant *B. abortus* antigens in heterologous live vector expression systems. Studies will involve evaluation of host immunity to promising vaccine candidates. Applicants must have a Ph.D., and molecular microbiology experience. Send a letter of application, curriculum vitae, and names of three references to: **Dr. David W. Pascual, Veterinary Molecular Biology, Montana State University, Bozeman, MT 59717-3610.** FAX: 406-994-4303; e-mail: dpascual@montana.edu. ADA/Affirmative Action/Equal Opportunity Veteran's Preference.

A two-year **RESEARCH ASSOCIATE** post is available immediately, working on the genetic basis of spermatogenesis. At least three years of research experience in DNA manipulation, cloning, Southern, and Northern is required. Salary range: \$25,000 to \$30,000 per year plus benefits.

Applicants should submit their curriculum vitae and three reference letters by January 10, 1999, to: **Ms. Cora Kikunaga, Division of Endocrinology, Charles R. Drew University of Medicine and Science, 1731 East 120th Street, Los Angeles, CA 90059.** FAX: 323-563-9352.

Two **POSTDOCTORAL POSITIONS** available to study the molecular regulation of assembly, ER degradation, and secretion of proteins. Requires Ph.D. with strong background in cell and molecular biology. Experience in protein purification/biochemistry desired for one position. E-mail résumé or questions to: **Steve Chuck, Molecular Medicine Unit, Beth Israel Deaconess Medical Center and Harvard Medical School, e-mail: schuck@bidmc.harvard.edu; FAX: 617-667-8040.**



The Research Centre Jülich is jointly operated by the German Federal Government and the North Rhine-Westphalian State Government. It has a staff of about 4,300 and is a member of the Hermann von Helmholtz Association of German Research Centres (HGF). Our five interdisciplinary research activities are Materials Science and Structure of Matter, Information Technology, Life Sciences, Environmental Research and Energy Technology.

The Environmental Research activity is conducted by the *Institute of Chemistry and Dynamics of the Geosphere (ICG)*. The ICG has acknowledged expertise in exploring the compartments of atmosphere, vegetation, soil and water and offers excellent opportunities for experimental and theoretical work. The central goal is an understanding of the processes of material flows and conversions both within and between the compartments. The future Institute will consist of the following five sub-institutes:

Institute I: Stratosphere
Institute II: Troposphere

Institute III: Phytosphere
Institute IV: Agrosphere

Institute V: Sedimentary Systems

In all the sub-institutes, basic and applied research will be closely linked. The research topics represent major elements of the Federal Government's environmental research programme and are the basic components of HGF collaborative research. The Institute's activities are embedded in a broad range of national and international co-operations.

For Institutes II to V we are seeking scientists (m/f) as

Directors (C4)

By combining the four appointment procedures into one, it is intended to achieve the desired close interlinkage of the ICG's research topics by selecting suitable scientists from different scientific disciplines (agronomy, biology, chemistry, geochemistry, geophysics, meteorology, physics, physical chemistry). In addition to the scientific competence described below, the candidate should have the ability and the willingness to achieve the interdisciplinary collaboration pursued by our research approach. We are seeking eminent scientists who are experienced in leading a large research group, have an international reputation and who can represent their discipline in teaching and research as well as attract third-party funds.

In **institute II Troposphere**, research concentrates on the conversion and transport of anthropogenic and natural trace gases in the troposphere. Field and simulation experiments as well as model studies are to be employed for this purpose. The institute has at its disposal a unique combination of instruments for measuring radicals, trace gases and aerosols, an indoor smog chamber and an outdoor chamber for simulating photochemical atmospheric processes. The Institute's tasks include the participation in and co-ordination of extensive international programmes.

In **institute III Phytosphere**, experimental and theoretical work will be performed to quantify the fluxes between soil, vegetation and atmosphere and to elucidate the relevant mechanisms and their regulation. Plant physiology studies on the mass transport and metabolism will be complemented by micrometeorological, process and modelling studies of near-plant fluxes. Special growth chambers are available for gas-phase measurements and for the application of radiotracers. Special microprobe methods for cellular isotope analysis are established. The later establishment of an additional research group for micrometeorology is intended.

Institute IV Agrosphere is concerned with the fate and behaviour of natural and anthropogenic substances in cultivated soils and near-surface groundwater. The aim is to contribute to a better understanding of the fundamental processes in these systems in order to enable sustainable use of agroecosystems. Chemical/biological material transformation processes, chemical/physical binding and transport processes as well as modelling studies will be conducted. This research will be performed on different scales ranging from the molecular to the field scale. Laboratories with specialised measuring equipment, a field lysimeter station with a licence for handling radioactive tracers and two field sites with different hydrogeological conditions are available.

Institute V Sedimentary Systems will examine the conversion and transport processes that natural and anthropogenically introduced organic substances experience in sediments and sedimentary rocks in continental environments. This includes the elucidation of long- and short-term biological, chemical, physical and physicochemical processes in sediments. The investigation of interactions between sedimentary systems and the biosphere will contribute to clarifying the natural variability of environmental and climatic conditions on the basis of geological archives.

It is foreseen that each Director will, in a joint procedure with one of the universities of the state of North Rhine-Westphalia, be appointed to a University chair from where he/she will be seconded to take on his/her responsibilities at the Research Centre Jülich. The salary will conform to the C4 (full professor) scale of universities. Candidates are required to have „Habilitation“ or equivalent qualifications, the ability to lead an institute and to take part in teaching. The Research Centre Jülich would like to increase the number of women in leading positions and therefore qualified women are especially encouraged to apply.

Applications including a curriculum vitae, list of publications and a brief summary of scientific achievements should be submitted by 19 February 1999 to

Vorstand der Forschungszentrum Jülich GmbH · D-52425 Jülich, Germany

POSITIONS OPEN

POSTDOCTORAL RESEARCH SCIENTIST

Candidate should have a background in patch clamp technology and an interest in joining a group combining ion channel studies with high-speed, high-resolution calcium imaging within cellular microdomains. For calcium imaging we use a unique widefield high-speed digital imaging technology developed in conjunction with MIT's Lincoln Laboratories. The applicant will have the opportunity to interact with a group that has expertise ranging from optical physics to advanced programming to molecular biology. Our interests are cellular microdomains and intracellular signaling, with emphasis on smooth muscle and neurons. Salary will be commensurate with experience.

Contact: Professor John Walsh, Department of Physiology, University of Massachusetts Medical School, Worcester, MA 01655-0127. E-mail: john.walsh@ummed.edu.

POPULATION BIOLOGY, ECOLOGY, AND APPLIED MATHEMATICS

POSTDOCTORAL POSITIONS are available immediately for research in the Laboratory of Populations, Rockefeller University and Columbia University, on one or more of these topics: (1) dynamical behavior of nonlinear models of genetic demography and metapopulations; (2) role of body size in food webs; (3) measuring diversity of population age structures and species-abundance distributions; (4) integrating demographic and environmental GIS data; (5) integrating models from earth sciences and social sciences. Appointment is for one year. Renewal possible. For fuller description of positions and required application materials, e-mail: reink@rockefeller.edu, subject: postdoc info. An Equal Opportunity Employer.

POSTDOCTORAL POSITION in gustatory neurobiology available to study functional organization in brainstem gustatory nuclei. Experiments in this NIDCD-sponsored project focus on central topographic segregation and convergence of taste and oral somatosensory information and their relationship to efferent circuitry and neurotransmitter phenotype. Experience in neurophysiology, immunohistochemistry, or *in situ* hybridization desirable. Send or e-mail your research interests, curriculum vitae, and names and addresses of three references to: Dr. Susan Travers, The Ohio State University, College of Dentistry Section of Oral Biology, 305 West 12th Avenue, Columbus, OH 43210. E-mail: travers.3@osu.edu.

POSTDOCTORAL POSITION M. D. ANDERSON CANCER CENTER

NIH-funded positions are available immediately in the area of mammalian recombinational DNA repair. Studies will focus on identifying factors and elucidating mechanisms in the repair of interstrand crosslinks. Expertise in biochemistry and molecular biology required. Salary is competitive and commensurate with experience. Send curriculum vitae and three reference names to: Dr. Randy Legerski, Department of Molecular Genetics, M. D. Anderson Cancer Center, Houston, TX 77030. E-mail: randy_legerski@molgen.mdacc.tmc.edu.

POSTDOCTORAL POSITIONS (six) on National Heart, Lung, and Blood Institute Training Grant in cardiovascular molecular biology. Studies include transgenics, knockouts, mouse physiology, heart failure mechanisms, gene-treatment strategies. Ph.D. and/or M.D. required. Must be a U.S. citizen or permanent resident. Contact: Dr. Arnold Schwartz, Professor/Director, Institute of Molecular Pharmacology/Biophysics, University of Cincinnati, Cardiovascular Center, Cincinnati, OH 45267. Website: <http://www.med.uc.edu/cardio>; e-mail: schwara@email.uc.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION is available immediately for studying the role of 200-gene family in the regulation of cell-cycle and apoptosis. A Ph.D. degree and a strong demonstrated research background in molecular cell biology is required. Submit curriculum vitae with names of three references to: Divaker Choubey, Ph.D., Department of Radiotherapy, Loyola University Medical Center, 5th Avenue and Roosevelt Road (114B), Hines, IL 60141. Telephone: 708-343-7200, ext. 3407; FAX: 708-216-2647; e-mail: dcoube@rdth2.rdh.luc.edu. Loyola University is an Equal Opportunity/Affirmative Action Employer/Educator.

POSITIONS OPEN

POSTDOCTORAL FELLOW

The Rush Heart Institute Center for Pulmonary Heart Disease (Rush-Presbyterian-St. Luke's Medical Center, Chicago) is seeking a full-time Postdoctoral Fellow to provide direct support with experiments designed to elucidate mechanisms underlying the pathogenesis of heart failure and pulmonary hypertension. The candidate must demonstrate expertise in protein biochemistry, have experience in protein separation/purification and enzyme activity assay development, and have a Ph.D. in a field relevant to molecular biology and protein biochemistry. Inquiries may be directed by e-mail to: Dr. Lawrence Zisman, e-mail: pph@rush.edu.

RESEARCH ASSISTANT

The Rush Heart Institute Center for Pulmonary Heart Disease (Rush-Presbyterian-St. Luke's Medical Center, Chicago) is seeking a full-time Research Assistant to provide direct support to Lawrence Zisman, M.D. with experiments designed to elucidate mechanisms underlying the pathogenesis of heart failure and pulmonary hypertension. The candidate must demonstrate expertise in manipulating RNA and DNA; be capable of performing molecular biology techniques including PCR, cloning/subcloning, Southern hybridization, Northern hybridization, ribonuclease protection assay, library screening, and cell culture transfection; and have a Master's or Bachelor of Science degree in a field relevant to molecular biology. Inquiries may be directed by e-mail to: Dr. Lawrence Zisman, e-mail: pph@rush.edu.

Two NIH-supported **POSTDOCTORAL** or **RESEARCH ASSOCIATE** positions are available to study the molecular mechanism(s) of complement activation following ischemia and reperfusion injury. Successful candidates must have a Ph.D. and be experienced in protein biochemistry and/or molecular biology. Experience in epitope mapping, DD-RT PCR, and/or cloning are desired. Positions remain open until filled. Please submit a curriculum vitae and the names of three references to: Gregory L. Stahl, Ph.D., Center for Experimental Therapeutics and Reperfusion Injury, Anesthesia, Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115. FAX: 617-278-6957.

POSTDOCTORAL POSITION IN COGNITIVE NEUROSCIENCE

Available immediately in the Department of Physiology, University of Wisconsin, to study role of the thalamic reticular nucleus in attention mechanisms (*Neuroscience* 76: 1061-1081, 1997). Background in cognitive or systems neuroscience required. Send curriculum vitae and name of three references to: Dr. Vicente Montero, 621 Waisman Center, 1500 Highland Avenue, Madison, WI 53705. FAX: 608-265-4103; e-mail: montero@waisman.wisc.edu; website: <http://www.neuroscience.wisc.edu/faculty/montero.htm>.

POSTDOCTORAL POSITIONS

To study structure and function of the ribosome using three-dimensional cryo-electron microscopy. (1) Ribosomal biochemistry; (2) time-resolved imaging (background cryo-EM, physics); (3) modeling of ribosomal RNA (see, e.g., recent article of: Agrawal et al., *PNAS* 95:6134, 1998). Apply to: Dr. Joachim Frank, Howard Hughes Medical Institute, Wadsworth Center, Empire State Plaza, P.O. Box 509, Albany, NY 12201-0509. FAX: 518-486-2191; e-mail: joachim@wadsworth.org.

POSTDOCTORAL POSITION available to study modulation of neuronal potassium channels by volatile anesthetics. A strong background in neuroscience is preferred. Patch clamp experience is helpful. Please e-mail curriculum vitae with names and addresses of three references to: Dr. Bruce Winegar, S261, Department of Anesthesia, University of California San Francisco, CA 94143-0648. E-mail: bw@eleusis.ucsf.edu. Further details, website: <http://eleusis.ucsf.edu>.

A **POSTDOCTORAL POSITION** available immediately to study fish hearing and associated behaviors. Candidates with experience in neuroethology and Tucker Davis Technologies system are encouraged to apply. Must be U.S. citizen or permanent resident to qualify for funding source. Please send a curriculum vitae and names of three references to: Hong Y. Yan, Ph.D., School of Biological Sciences, University of Kentucky, Lexington, KY 40506-0225. E-mail: hyyan00@pop.uky.edu.

POSITIONS OPEN

Three **POSTDOCTORAL POSITIONS** available in Multidisciplinary Research Program. Molecular aspects of angiogenesis in ulcer/wound healing—role of growth factors and signal transduction, at the VA Medical Center, Long Beach and University of California, Irvine.

Investigators: E. Levin, M.D. (endocrinology), I. J. Sarfeh, M.D. (surgery), S. Szabo, M.D., Ph.D. (pathology), T. Ma, M.D., Ph.D. and A. Tarnawski, M.D., D.Sc. (gastroenterology).

This program is designed to develop new independent Investigators in the field within two to three years, with independent funding and academic appointment at the University. Qualifications: either M.D. or Ph.D., advanced expertise in molecular biology, good track records, a strong interest in academic career, and U.S. citizenship or permanent U.S. residency. Please send a letter of intent and curriculum vitae to: A. Tarnawski, M.D., D.Sc., 151 Research, VA Medical Center, 5901 East 7th Street, Long Beach, CA 90822.

POSTDOCTORAL POSITION (NIH-funded) in mucosal immunology available January 1999 to study how molecular design impacts upon desired T cell responses using live vector and DNA vaccine delivery systems. Conducted studies will focus on the influences of antigen-presenting cells as well as neutrophils (inflammatory responses) in biasing host mucosal immune responses in the gastrointestinal tract. Applicants must have a Ph.D., cellular immunology experience, and ability to design experiments relevant to T cell stimulation and cytokine assays. Some molecular biology experience is desirable. Send a letter of application, curriculum vitae, and names of three references to: Dr. David W. Pascual, Veterinary Molecular Biology, Montana State University, Bozeman, MT 59717-3610. FAX: 406-994-4303; e-mail: dpascual@montana.edu. ADA/Affirmative Action/Equal Opportunity/Veteran's Preference.

POSTDOCTORAL POSITION available to study mechanisms and control of vascular smooth muscle cell adhesion and motility. Candidates should have a recent Ph.D. degree and experience with biochemical, molecular, and cell biological approaches as applied to intracellular signaling and/or cytoskeletal protein dynamics. Please send a curriculum vitae and the names, addresses, and telephone numbers of three references to: Dr. Harold A. Singer, Director, Vascular Biology Research Group, Albany Medical College, 47 New Scotland Avenue (MC-8), Albany, NY 12208. E-mail: hsinger@ccgateway.amc.edu.

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

POSTDOCTORAL POSITION available to study the influence of female reproductive hormones on the neural control of the circulation in women. Individual will be involved primarily in NIH-funded studies of the influence of hormone status on the thermoregulatory and nonthermoregulatory reflex control of the cutaneous circulation. Send letter of interest, current curriculum vitae, and names of three references to: John M. Johnson, Ph.D., Department of Physiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. E-mail: johnson@uthscsa.edu.

UTHSCSA is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study the mechanism of bovine papillomavirus DNA replication and its regulation. The project focuses on changes in the interaction of host and viral replication components with the viral origin during replication initiation. A strong background of biochemistry is essential and experience in nucleic acid chemistry is helpful. Send curriculum vitae, a description of research experience, and the names of three references to: Dr. James Borowiec, Department of Biochemistry, New York University Medical Center, 550 First Avenue, New York, NY 10016. E-mail: borowj01@mcrcr.med.nyu.edu.

POSTDOCTORAL POSITION in structure/function studies of cloned mammalian Na/H exchangers with emphasis on mechanisms of regulation in epithelial cells. This position requires a Ph.D. and/or M.D. and expertise in molecular biology and protein biochemistry. Please send a curriculum vitae and names of three references to: Mark Donowitz, M.D. or Ming Tse, Ph.D., Johns Hopkins University School of Medicine, Division of Gastroenterology, 925 Ross Research Building, 720 Rutland Avenue, Baltimore, MD 21205-2195. E-mail: mtse@welchlink.welch.jhu.edu.

Postdoctoral Research

The Cedars-Sinai Research Institute is currently seeking professionals to join the Neurogenetics laboratory and the Laboratory for Molecular-genetic Medicine. Cedars-Sinai Medical Center is an affiliate of the UCLA School of Medicine. The Research Institute has established programs in molecular and cellular biology and human genetics. The following positions are available:

A total of 6 Postdoctoral Fellow/Research Associate positions are recruited for five areas: Molecular-genetic study of neurodegenerative disorders (Pulst et al., *Nature Genetics*, 1996), molecular analysis of familial CNS tumors (Scoles et al., *Nature Genetics*, 1998), developmental genetics (Yamakawa et al., *Hum Mol Genet*, 1998), mouse models of neurologic diseases (Bellugi et al., *TINS*, in press) and evolutionary genomics (<http://www.csmc.edu/genetics/korenberg/korenberg.html>). Applicants must possess a Ph.D. degree and significant experience in the above listed areas. The positions are funded for a minimum of two years. The salary is \$25,000 to \$32,000 per annum depending on experience.

Send curriculum vitae with names/addresses of 3 references to:

Dr. Stefan M. Pulst or Dr. Julie R. Korenberg, CEDARS-SINAI MEDICAL CENTER, 8631 W. 3rd Street, #1145E, Los Angeles, CA 90048. FAX: (310)967-0130. E-mail: Pulst@CSHS.org or Julie.Korenberg@CSHS.org Equal Opportunity Employer.



CEDARS-SINAI MEDICAL CENTER.

1999 MBL MICROBIOLOGY COURSES WOODS HOLE, MASSACHUSETTS

Microbial Diversity, June 13 - July 29, 1999

For graduate students, postdocs and established investigators who want to become competent in microbiological techniques for working with a broad range of microbes; and, become familiar with modern molecular genetic approaches for recognizing both possible affinities of as yet uncultivated bacteria and for understanding putative phylogenetic relationships. Limited to 20 students. Directors: **Edward R. Leadbetter**, University of Connecticut; and **Abigail Salyers**, University of Illinois. Application Deadline: March 1. Tuition: \$3,750

Molecular Mycology: Current Approaches to Fungal Pathogenesis, August 8 - 27, 1999

This course provides state-of-the-art training in molecular methods for fungal pathogens important in human disease. Intended for advanced graduate students, postdocs, and independent investigators. Limited to 16 students. Directors: **J. E. Edwards**, Harbor/UCLA Medical Center; **P. T. Magee**, University of Minnesota; and **Aaron P. Mitchell**, Columbia University. Application Deadline: April 13. Course Fee: \$2,000 (room & board provided).

Substantial financial aid is available to U.S. citizens, and non-residents holding proper visas. Admission to MBL courses is competitive; student selection is determined by review committees appointed for each course. Women and minorities are encouraged to apply.

For application forms and information contact: **Admissions Coordinator, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543-1015. Phone: (508) 289-7401 • E-mail: admissions@mbi.edu • Web: <http://www.mbl.edu>**



MARINE
BIOLOGICAL
LABORATORY

BBI Biotech Research Laboratories, Inc.

BBI Biotech, the research and development division and a wholly owned subsidiary of Boston Biomedica, Inc., is a growing biotechnology company located in Gaithersburg, MD. BBI Biotech, in addition to its R&D efforts in support of the quality control products produced by its parent, is a leading supplier of contract and service support for government and private industry. With a long and reputable history in infectious disease research, BBI Biotech is on the cutting edge of Cellular and Molecular Biology. Our major focus is the development of innovative diagnostic tests and reagents for infectious disease.

Join
BBI, and
Grow
with the
Best!



Director of Molecular Biology

Seeking a Ph.D. in Molecular Biology or related field with at least 6 years experience, preferably in a biotechnology company. Successful candidate will head up the Molecular Biology Department consisting of 12 scientists including 4 Ph.D.'s. Will direct group activities including working on the development of new technologies for pathogen inactivations, preparation of reagents from plasma, design of in-house PCR based assays for diagnosis of infectious disease, DNA sequence analysis including HIV and HCV genomes, genotyping and other molecular techniques. Proven ability in obtaining external funding a plus. Excellent organizational and communication skills are a must. Job Code: MB

Director of Molecular Product Development

Ph.D. in Molecular Biology or related field with at least 6 years experience in a biotechnology company required. Must be familiar with the design and use of molecular diagnostic tests for infectious diseases. Extensive knowledge of GMP production, scale-up, validating, training, and requirements for FDA licensing is required. The successful candidate will direct the development of independent controls and other QC reagents used in molecular diagnostic testing. In addition, will also interact with R&D to transfer new products to the manufacturing group for use in in-house molecular diagnostics. Job Code: MPD

We offer excellent compensation, benefits, and working environment. Interested candidates should send a cover letter or letter of interest with their complete CV indicating job code to:

BBI Biotech Research Laboratories, Inc.
217 Perry Parkway • Gaithersburg, MD 20877
Fax: (301) 208-8829
email: tadams@bbi.com EOE

EUROPEAN OPPORTUNITIES

UNIVERSITY OF DUNDEE MSI, Wellcome Trust Building ELECTRON MICROSCOPIST

(£21,815 – £29,048)

Applications are invited for a 5-year research fellowship position (fixed contract in the first instance) for an electron microscopist to join the newly established MRC-funded Dundee Eukaryotic Membrane Dynamics Co-operative Group. The successful applicant will be highly trained in immunoelectron microscopy and related technologies and will join a well-equipped and well-staffed electron microscopy unit. He/she will collaborate closely with other members of the Co-operative Group who are interested in different aspects of membrane traffic, organelle dynamics during the cell cycle and lipid mediators of signalling and trafficking and will provide major input into the different project areas. There will be an opportunity for the successful applicant to develop his/her own research interests using EM as a core technique.

Informal enquiries are encouraged and may be made to **John Lucocq**, e-mail: JLUCOCQ@DUNDEE.ac.uk; **Alan Prescott** (ARPRESCOTT@BAD.DUNDEE.ac.uk), or **Liz Smythe** (esmythe@DUNDEE.ac.uk).

CV and covering letter (2 copies of each), together with the names, addresses, telephone and fax numbers of 2 referees, should be sent to **Personnel Services, University of Dundee, DD1 4HN. Please quote Reference EST/438/89S.**

Closing date: 15 January 1999

The University is an Equal Opportunities Employer.

POSITIONS OPEN

PROTEIN NMR POSTDOCTORAL FELLOW

The University of Texas Medical Branch (UTMB) in Galveston has positions available immediately to study proteins and protein-receptor complexes involved in a variety of immune-related diseases using NMR spectroscopy. Preference given to candidates with prior experience in biological NMR but individuals with a strong interest in protein NMR and trained in molecular biology and protein chemistry, computational chemistry, or biophysical chemistry will also be considered. Excellent facilities are available including four channel 750 and 600 MHz spectrometers. Salary commensurate with experience. Please send a curriculum vitae and names of two references to: **Dr. Krishna Rajaratham, Department of Human Biological Chemistry and Genetics, 5138 Medical Research Building, University of Texas Medical Branch, Galveston, TX 77555-1055. E-mail: krishna@hbcg.utmb.edu.** UTMB is an Equal Opportunity/Affirmative Action University. Minorities/Females/Disabled/Veterans.

POSTDOCTORAL RESEARCH/STRUCTURAL BIOLOGY

Two positions available immediately: (1) subunit folding and dynamics in mechanisms of virus assembly; (2) structural determinants of recognition in DNA-protein complexes. Research involves Raman and UV-resonance Raman spectroscopy to probe biomolecular structure/function. Experience in protein/DNA isolation and characterization, or vibrational spectroscopy is preferred. English proficiency is essential. Résumé and three letters of reference to: **Dr. George J. Thomas, School of Biological Sciences—BSB 403, University of Missouri—Kansas City, 5100 Rockhill Road, Kansas City, MO 64110. Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS MASSACHUSETTS GENERAL HOSPITAL HARVARD MEDICAL SCHOOL

Postdoctoral positions are available immediately to study molecular mechanisms of human pituitary tumor pathogenesis. Experience in molecular biology/signal transduction is desirable. Applicants must be U.S. citizens or permanent residents. Send letter of interest, curriculum vitae, and names of three references to: **Dr. Anne Klibanski or Dr. Xun Zhang, Neuroendocrine Unit, Massachusetts General Hospital, BUL 457B, 55 Fruit Street, Boston, MA 02114. FAX: 617-726-5072; e-mail: xzhang5@partners.org. Equal Employment Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION available immediately to isolate and/or characterize genes underlying familial testicular germ cell cancer (*Cancer Res.* 55:2871, 1995; *Oncogene* in press, 1999); melanoma (*Oncogene* 11: 405, 1995; *NEJM* 338:879, 1998; *Nature Gen.* in press, 1999); and lung cancer. M.D. and/or Ph.D. candidates with expertise in molecular genetics, genome analysis, and cell biology preferred. Send covering letter with a brief description of research experience, curriculum vitae, and names and contact information for three references to: **David Hogg, M.D., Medical Sciences Building, Room 7238, 1 King's College Circle, University of Toronto, Toronto, Ontario M5S 1A8 Canada. E-mail: david.hogg@utoronto.ca.**

Two **POSTDOCTORAL POSITIONS** immediately available at Brigham and Women's Hospital and Harvard Medical School (i) to study the mechanism of specificity in ligand recognition by proteins of the LDL receptor family, and (ii) to identify candidate peptide-based drugs for cancer therapy from displayed libraries. Previous experience in protein biochemistry and molecular biology desirable. Please send curriculum vitae and list of three references to: **Dr. Stephen Blacklow, Harvard Medical School, Department of Pathology Thorn 528A, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. FAX: 617-264-5296; e-mail: sblacklow@rics.bwh.harvard.edu.**

POSTDOCTORAL FELLOWSHIPS at Harvard School of Public Health available immediately for Ph.D.'s or M.D.'s with strong research backgrounds in biochemistry or related fields for NIH-funded research that dissects the molecular mechanisms regulating enzyme function in cardiovascular disease. Send curriculum vitae and names of three references to: **Dr. Guy L. Reed, Harvard School of Public Health II-127, 677 Huntington Avenue, Boston, MA 02115. E-mail: reed@cvtlab.harvard.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN MOLECULAR VIROLOGY

Postdoctoral positions are available at the University of California, Davis campus to study (i) neoplastic transformation of oncogenic herpesviruses and (ii) molecular determinants of SIV and HIV immunodeficiency. Both projects involve molecular analysis of viral gene function with opportunities to participate in *in vivo* studies in non-human primate and mouse models at the new Center for Comparative Medicine. Collaborations will be encouraged with the new Basic Cancer Research Program (H.-J. Kung, Director). Successful candidates will have extensive experience in microbiology, molecular cloning, and tissue culture of viruses. Experience in cancer biology, transcriptional regulation, signal transduction, cell cycle control, and/or molecular pathology is highly desirable. Salary will be commensurate with experience. Send curriculum vitae, statement of career goals, and names and addresses of three references to: **Paul A. Luciw, Ph.D., Center for Comparative Medicine, University of California, 1 Shields Avenue, Davis, CA 95616. E-mail: paluciw@ucdavis.edu. UC Davis is an Equal Opportunity and Affirmative Action Employer.**

DNA REPAIR BIOCHEMISTRY/ MOLECULAR BIOLOGY

POSTDOCTORAL PROJECT. Novel issues in the repair of oxidative DNA damage in human cells pertaining to the structural cell biology of XPG complexes, hereditary disease, and cancer. Superb facilities and environment. Dynamic interactions with multidisciplinary faculties at Lawrence Berkeley National Laboratory and The Scripps Research Institute. Experience with molecular biology and protein expression-purification preferred; see website: www.scripps.edu/~jat. E-mail curriculum vitae to: **Dr. Priscilla Cooper, e-mail: pkcooper@lbl.gov. Minority applicants encouraged.**

POSTDOCTORAL POSITION. NIH-supported, to study regulation of ion transport in gastrointestinal epithelia using patch-clamp and imaging techniques. Experience with either or both of these techniques is preferable. Send curriculum vitae, including a statement of research interests, and names and addresses of three references to: **Dan R. Halm, Ph.D., Wright State University, Department of Physiology and Biophysics, 3640 Colonel Glenn Highway, Dayton, OH 45435. FAX: 937-775-3769; e-mail: dan.halm@wright.edu. Review begins January 8, 1999. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITIONS at Yale are available in the Molecular Biophysics and Biochemistry Department. See website: <http://bioinfo.mbb.yale.edu/job> sublinks. (1) Postdoctorate in bioinformatics/genomics, focusing on structural genomics and database analysis. Website: job/struc-genomics.htm; e-mail: mark.gerstein@yale.edu; FAX: 203-432-5175. (2) Postdoctorate in signal transduction, studying Abl and Arg nonreceptor tyrosine kinases in neuronal development and hematopoiesis. Website: job/signal-trans.htm; e-mail: anthony.koleske@yale.edu; FAX: 203-432-6178.

Harvard Medical School. **POSTDOCTORAL RESEARCH** positions in biological/social psychiatry. Research training in psychobiological areas with integrative seminar for Ph.D.'s and M.D.'s who are U.S. citizens or permanent residents. Fellowships begin summer 1999. Deadline March 1, 1998; rolling thereafter. Contact: **Clinical Research Training Program, Department S, Judge Baker Children's Center, 3 Blackfan Circle, Boston, MA 02115. Telephone: 617-232-8390, ext. 2559; e-mail: crtp@jbcc.harvard.edu. Minorities and M.D.'s encouraged to apply.**

POSTDOCTORAL POSITIONS

Two Postdoctoral positions are available to study the roles of PPAR γ -RXR signaling and iron-mediated NF- κ B activation in phenotypic changes in liver nonparenchymal cells. Strong background in molecular/cell biology required. Send curriculum vitae and three references to: **Dr. H. Tsukamoto, University of Southern California, School of Medicine, 2011 Zonal Avenue, HMR-101, Los Angeles, CA 90033. E-mail: rveloz@hsc.usc.edu.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH AT VANDEBILT MEDICAL SCHOOL

A Postdoctoral position is available immediately to work on the identification and molecular characterization of genes regulating pancreas development and islet cell function in mammals. The successful candidate will be part of the multidisciplinary team in **Dr. C. V. E. Wright** and **Dr. R. Stein's** laboratories using state-of-the-art molecular and cell biological techniques. Applicants must possess demonstrated skills in molecular biology. Refer to the following papers: *Development* 122:983-995, 1996; *Mol. Cell. Biol.* 17:3987-3996, 1997; *Mol. Cell. Biol.* 17: 6002-6013, 1997.

Apply by e-mail to: **Dr. Roland Stein, e-mail: roland.stein@mcml.vanderbilt.edu; FAX: 615-322-7026.** Written applications can be sent to: **Dr. Roland Stein, 708 Light Hall, Vanderbilt Medical School, Nashville, TN 37232.** Applicants should include a curriculum vitae and names of three referees.

POSTDOCTORAL FELLOWSHIP FRED HUTCHINSON CANCER RESEARCH CENTER

A Postdoctoral position is available immediately to investigate factors regulating retinoic acid receptor activation in different hematopoietic lineages. Experience in molecular biology with emphasis on protein biochemistry is desired. Please send curriculum vitae and the names of three references to: **Dr. Steve Collins, Director, Molecular Medicine Division, Fred Hutchinson Cancer Research Center, 1100 Fairview Avenue North, Seattle, WA 98109. FAX: 206-667-6523; Telephone: 206-667-4389; e-mail: scollins@fhcr.org.**

POSTDOCTORAL POSITION

Immediate opening for Postdoctoral Research Associate to study pancreatic physiology, with a focus on interactions between the acinar cell and islets of Langerhans. Strong background in molecular and cellular biology is required, along with experience in small animal surgery (rat/mouse). Please send curriculum vitae and names of three references to: **Michael E. Zenilman, M.D., Department of Surgery, Albert Einstein College of Medicine, 25-5, 1825 Eastchester Road, Jack and Pearl Resnick Campus, Bronx, NY 10461. FAX: 718-904-4983; e-mail: zenilman@aecom.vu.edu. AECOM is an Equal Opportunity Employer.**

POSTDOCTORAL FELLOW

Position available immediately to study lymphocyte activation and intracellular signaling in the context of immunosuppressive drugs. Experience in lymphocyte biology desirable, but candidates with other molecular biology experience will be considered. Please send curriculum vitae, names of three references, and a brief overview of your research background, interests, and accomplishments to: **Dr. T. D. Batiuk, Division of Nephrology, Indiana University-Purdue University at Indianapolis, FH 115, 1120 South Drive, Indianapolis, IN 46202. E-mail: tbatuk@iupui.edu.**

POSTDOCTORAL POSITION immediately available to investigate mitogenic or inflammatory stimulated signal transduction (e.g., see *EMBO J.* 16: 7054, 1997; *Nature* 395:713, 1998). Experience in molecular biology is essential. Please send curriculum vitae and three reference names to: **Jiing-Dwan Lee, Ph.D., IMM-12, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037. E-mail: jdllee@scripps.edu.**

TSRI is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study ion channel function. Requires experience in cellular electrophysiology and molecular biology. Send curriculum vitae and names of three references to: **Dr. G-N Tseng, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032. E-mail: gt10@columbia.edu. We take Affirmative Action toward Equal Employment Opportunity.**

TWO POSTDOCTORAL POSITIONS

(1) Mammalian gene regulation: prior experience with DNA footprint, transcription factors, etc. (2) Gene therapy: strong molecular skills needed; retroviral vector experience a plus. Send curriculum vitae and reference names by FAX to: **Dr. R. Junghans, Harvard Medical School, FAX: 617-432-7007.**

Agricultural Research Service

U.S. Department of Agriculture

Vacancy Announcement

National Program Leader for Genomics Animals • Plants • Microorganisms

This senior-level position is with ARS's National Program Staff, which directs research policies and programs for USDA's chief in-house science agency. The National Program Leader for Genomics will be responsible for developing the working agenda for a major genome research program on agriculturally important plants, animals, and microorganisms.

Candidates need an extensive background in molecular biology and/or bioinformatics and have advanced research experience in one or more of the specialty areas. This is a GS-15 position.

For details, visit www.ars.usda.gov/afm/hrd/resjobs/S9E-9031.HTM or call 301-504-1341.

ARS has more than 100 research locations across the country. This position is located in ARS headquarters in Beltsville, MD.

ARS is an Equal Opportunity Employer.

EUROPEAN OPPORTUNITIES



KUNGLA
TEKNISKA
HÖGSKOLAN

Assistant Professor in ENZYME DISCOVERY AND ENGINEERING

The position is at the newly established Wallenberg Wood Biotechnology Center at the Royal Institute of Technology in Stockholm. The research program is focused in enzyme discovery from the wood-forming tissues of trees with long-term applied goals in the Pulp and Paper Industries. The new Assistant Professor ("Forskarassistent") will be group leader responsible for the identification, assay development, and structure-function studies of new enzymes from EST-cDNA libraries of Poplar.

Qualifications for the post include a Ph.D. degree not more than 5 years ago in chemistry / biochemistry / molecular biology and some postdoctoral experience, preferably in molecular enzymology. The position — including some undergraduate and graduate teaching — will be for 4 years, with a possibility of an extension for a further 2-year period. Further information: **Professor Tuula Teeri**, tel: +46-8-790-6103, e-mail: tuula@biochem.kth.se or <http://www.biochem.kth.se/>.

The applications (in two identical copies) should contain a short description of the applicants scientific and pedagogic experience, an attested curriculum vitae with the names and E-mail addresses of two referees as well as a full list of scientific publications (copies of max. 3 most relevant scientific publications may be included). The applications, quoting the Reference Number 300-250/98 should be submitted to: **Kansli KKT, KTH, S-10044 Stockholm, Sweden** by January 15th, 1999.

EUROPEAN OPPORTUNITIES

CALL FOR LETTERS OF INTEREST

Malaria Drug Discovery Research Proposals New Medicines for Malaria Venture (MMV)

The New Medicines for Malaria Venture (MMV) has recently been established as a collaborative effort between several public sector organisations, the Global Forum for Health Research, several philanthropic organisations, and the Pharmaceutical Industry to provide a mechanism for the sustainable discovery and development of affordable antimalarial chemotherapies into the 21st century. The venture will operate under the umbrella of the Roll Back Malaria Programme recently initiated by the new Director-General of the World Health Organisation, Dr. Gro Harlem Brundtland. MMV is currently managed by the Special Programme for Research and Training in Tropical Diseases (TDR) at WHO.

MMV is initially focussing its efforts on drug discovery. MMV will provide significant resources for drug discovery projects that are judged to have a realistic chance of obtaining a clinical development candidate (up to several million US dollars per year over a 3 to 5 year period). Logistic support and impartial expert advice will also be made available to MMV supported drug discovery teams in order to facilitate the progression of projects as rapidly as possible.

It is envisaged that the majority of projects funded will be based on a partnership between an academic centre and a pharmaceutical company. However, this should not be viewed as restrictive. Good projects will also be welcome from stand-alone academic groups or from biotechnology and other pharmaceutical companies. Where it is thought that a project would benefit from the establishment of a partnership, individual groups can request assistance for this. MMV will make efforts and offer its services to facilitate their establishment and so optimise any project application.

This advertisement is initiating the process for the selection and funding of the inaugural MMV drug discovery projects.

1. A 2-page letter of interest outlining the nature of the drug discovery project envisaged should be submitted by Friday, 26 February 1999. This letter should include the following information
 - Scientific basis for the project
 - Project status
 - Stage of project (e.g. target identification, target validation; chemical leads, activities in culture and animal models, any pre-clinical studies, patent status)
 - critical issues (e.g. selectivity, pharmacokinetics, toxicology)
 - The project leader(s) who will drive the project, their background expertise and the time they are prepared to allocate to the project.
 - Institutional backing available for the project and commitment of resources, including space to house the projects; supplementary sources of funding; the nature of any partnerships.
 - Resource requirements (personnel, start-up and operating costs).
 - Areas where MMV assistance is needed to develop a complete drug discovery package (e.g. links to chemical libraries, high throughput screening and other methodologies, links to expertise in certain areas e.g. downstream preclinical development issues)
2. These letters of interest will be assessed by a panel of experts in drug discovery, including pharmaceutical industry representatives, and up to six projects will be selected for submission of a more detailed proposal. Assistance and advice will be given where necessary during this phase to optimise the quality of proposals and to ensure that all administrative issues are satisfactorily settled so that selected projects can be initiated rapidly.
3. The project teams preparing these detailed proposals will be required to present their proposals orally as well as in written form, to a selection panel in second quarter 1999 in Geneva.
4. It is hoped to fund an initial set of projects in third quarter 1999. Unsuccessful applicants will be kept updated about funding developments and maybe invited to resubmit as further funding becomes available.

For further information please contact:
New Medicines for Malaria Venture,
Tropical Disease Research (TDR/ L253),
World Health Organisation
CH-1211 Geneva 27, Switzerland
Fax: +41 22 791 4854
E-mail: mmv@who.int



POSITIONS OPEN

Two Mayo Clinic **POSTDOCTORAL RESEARCH** positions are available immediately for individuals interested in studies of amplification and genetic rearrangements in ovarian cancer. Projects include (1) identification of novel oncogenes and tumor suppressor genes involved in ovarian tumor development, (2) genetic analysis of tumor progression pathways in ovarian tumors using gene expression profiling, (3) identification of drug resistance and sensitivity genes and prognostic markers in ovarian tumors, and (4) the role of the common fragile sites in the development of ovarian cancer. Experience in genetics, cytogenetics, and/or molecular biology would be useful. A highly competitive salary with full benefits is available to motivated candidates. Send a full curriculum vitae with names and addresses of three references to: **Fergus J. Couch, Ph.D.** or **David I. Smith, Ph.D.**, Division of Experimental Pathology, Guggenheim 1001A, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905. E-mail: couch.fergus@mayo.edu. or smith.david@mayo.edu. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

POSTDOCTORAL POSITION in molecular retrovirology funded by NIH is immediately available to study the mechanisms of AIDS pathogenesis using simian immunodeficiency virus (SIV). Current projects focus on the viral envelope and nef proteins to understand the role of SIV coreceptor usage for CD4 depletion and the mechanisms of SIV replication in brain. A strong background in molecular biology, virology, and/or immunology is desirable. Please send curriculum vitae, statement of experience and interest, and three references to: **Toshiaki Kodama, D.V.M., Ph.D.**, Division of Pathobiology and Immunology, Oregon Regional Primate Research Center, 505 N.W. 185th Avenue, Beaverton, OR 97006. E-mail: kodamat@ohsu.edu. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study novel proteases required in the biosynthesis of active peptide hormones and neurotransmitters, including parathyroid hormone-related protein in cancer and opioid peptides in pain remediation. Project focuses on multiple molecular cloning approaches to obtain the structural identities of novel prohormone processing proteases. Experience in molecular cloning (including lambda phage) and cellular gene expression is desirable. Send curriculum vitae, brief description of research experience, and three references to: **Dr. Vivian Hook, University of California, San Diego, Department of Medicine, 9500 Gilman Drive #0822, La Jolla, CA 92093.**

POSTDOCTORAL POSITION is available in the Laboratory of Molecular Immunoregulation, National Cancer Institute to investigate the molecular mechanism of control of locus accessibility for V(D)J recombination regulated by Interleukin-7. Salary based on experience. Requirements: U.S. citizen/permanent resident, Ph.D. or M.D. Location: Frederick, Maryland. Position available March 1, 1999. Please send curriculum vitae and list names of three references to: **Dr. Kathrin Muegge, SAIC, Laboratory of Molecular Immunoregulation, NCI, Building 560, Room 31-45, Frederick, MD 21702-1201.** E-mail: muegge@mail.ncifcrf.gov.

Two **POSTDOCTORAL POSITIONS** available to study mechanisms of synaptic plasticity in hippocampal slices and in cultured *Aplysia* neurons. Experience in electrophysiology required. Send curriculum vitae and the names of three references to: **Dr. Robert Hawkins, Center for Neurobiology and Behavior, Columbia University, 722 West 168th Street, New York, NY 10032.** FAX: 212-543-5474; e-mail: rhawkins@pi.cpmc.columbia.edu. We take Affirmative Action toward Equal Employment Opportunity.

POSTDOCTORAL POSITION is available to examine alcohol effects on lipoproteins and the development of atherosclerosis utilizing various transgenic and knockout mouse models. Applicants should send curriculum vitae with names of three references to: **Dr. Mark Deeg, Division of Endocrinology, Indiana University Medical Center, 1481 West 10th Street, Indianapolis, IN 46202.** E-mail: mdeeg@iupui.edu. Indiana University is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available on new NIH grant. Study Eph receptor tyrosine kinase functions in neural development/transgenic models. Please send curriculum vitae, publications, and three references to: **Dr. Jin Chen, T-3219 MCN, Vanderbilt University, Nashville, TN 37232.** E-mail: jin.chen@mcmail.vanderbilt.edu.

POSITIONS OPEN



Message Pharmaceuticals, Inc. ("Message") is exploiting a novel and proprietary approach for identifying drugs that increase or decrease the *in vivo* production of proteins by regulation of mRNAs. To accomplish our goals Message is recruiting **POSTDOCTORAL SCIENTISTS** in the following areas:

Molecular biology. Experience in cDNA expression library construction and transfection of eukaryotic cells is required. An understanding of RNA/protein interactions is desired.

Cell biology. Experience in transfection and analysis of eukaryotic cells is required. Knowledge of different reporter systems is desirable.

In vivo pharmacology. Experience with animal models of cardiovascular disease, especially models of cholesterol regulation is required. Molecular pharmacology experience helpful.

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POSTDOCTORAL POSITION PLANT GENOMICS

A three-year Postdoctoral position is available immediately to participate in a study of structural and functional genomics of the model legume, *Medicago truncatula* as part of a consortium funded by the National Science Foundation. Experience in recombinant DNA techniques and library construction is essential. Experience in plant transformation is desired. Inquiries and applications to include a curriculum vitae and names, addresses, e-mail, and telephone numbers of at least three references should be directed to: **Dr. Michael G. Hahn, University of Georgia, Complex Carbohydrate Research Center, 220 Riverbend Road, Athens, GA 30602-4712.** E-mail: hahn@ccrc.uga.edu. Equal Employment Opportunity/Affirmative Action.

POSTDOCTORAL FELLOWSHIPS in neurovirology, University of Pennsylvania. Several Postdoctoral positions are available in an NIH training grant-supported program. Each position will last for two to three years, and may begin as early as March 1999. Candidates will have a choice of 11 established laboratories in several departments within the University of Pennsylvania. The laboratories focus on many aspects of molecular virology, pathogenesis, and gene therapy of virus diseases of the nervous system. See website: www.med.upenn.edu/micro/training5.html. Send curriculum vitae to: **Francisco Gonzalez-Scarano, School of Medicine, University of Pennsylvania, Clinical Research Building, 415 Curie Boulevard, Philadelphia, PA 19104-6146.**

POSTDOCTORAL POSITION

Postdoctoral position available January 1999 to study the molecular mechanisms of retinal angiogenesis. Ph.D. in biomedical sciences is required. Significant experience with molecular biological and cellular techniques is desirable. Please send curriculum vitae with names of three references to: **Dr. John S. Penn, Director of Research, Department of Ophthalmology and Visual Sciences, Vanderbilt University School of Medicine, 8016 MCE, Nashville, TN 37232-8808.** E-mail: john.penn@mcmail.vanderbilt.edu.

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POSTDOCTORAL POSITIONS. Available immediately two positions to study the effects of alcohol consumption on cell signaling mechanisms associated with the cellular immune response and tumor metastasis. Ph.D. required. Experience in molecular signaling and gene regulation is preferred. Send curriculum vitae and the names, telephone numbers, and e-mail addresses of three references to: **Dr. Gary Meadows, Department of Pharmaceutical Sciences, Washington State University, Pullman, WA 99164-6510.** E-mail: meadows@mail.wsu.edu. WSU is an Equal Opportunity/Affirmative Action Educator and Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE BROOKHAVEN NATIONAL LABORATORY

The Department of Applied Science at Brookhaven National Laboratory has a Postdoctoral Research Associate position available. The position requires a Ph.D. in organic geochemistry or related discipline, experience in sulfur and nitrogen geochemistries, and the ability to use state-of-the-art chromatographic and spectroscopic instrumentation including GC-MS and LC-MS.

Primary involvement will be in research of sulfur geochemistry aimed at a fuller understanding of the geochemical mechanism of sulfur incorporation into sedimentary organic matter and the role of sulfur in the preservation and diagenesis of organic matter in marine sediments. Under the direction of **A. Vairavamurthy**.

Résumés should be forwarded to: **M. Kipperman, Position #MK7944, Brookhaven National Laboratory, Building 185, P.O. Box 5000, Upton, NY 11973-5000.** Visit our website: www.bnl.gov. BNL is an Equal Opportunity Employer committed to work force diversity.

POSTDOCTORAL POSITIONS

Several ASEE Postdoctoral positions are available at The Naval Surface Warfare Center, Indian Head Division (25 miles south of Washington, D.C.). Research areas include (1) energetic ingredient synthesis using enzymatic, conventional organic, or supercritical fluids; and (2) experimental detonation physics. Applicants must be U.S. citizens (security clearance-eligible) and have a Ph.D. in either enzymology, organic chemistry, biochemistry, engineering, or physics. Send curriculum vitae to: **Dr. A. G. Stern, Naval Surface Warfare Center, Indian Head Division, Building 600, Indian Head, MD 20640.** NSWC-IHD is an Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL RESEARCH FELLOW-SHIP** is available to study molecular mechanisms of myofibrillar contractile dysfunction in stunned myocardium. There is a close working relationship with **Dr. Richard L. Moss's** laboratory in physiology. Experience in microscopy, protein chemistry, molecular biology, and calcium indicators are highly desirable. Minimum requirements are M.D. or Ph.D. in biologic science. Send applications with curriculum vitae and names of three references to: **Dr. William P. Miller, Professor of Medicine and Physiology, Cardiology, University of Wisconsin, 600 Highland Avenue, Madison, WI 53792-3248.** Telephone: 608-263-1531; FAX: 608-263-0405.

POSTDOCTORAL FELLOW. Medical College of Virginia Campus at Virginia Commonwealth University. Available immediately. Candidates with Ph.D. preferred, but M.S. or B.S. with two to five years of experience may apply. The NCI project involves studying the role of CYP450, GST, and estrogens in women's cancer. Experience in molecular biology essential, and in tissue culture and *in situ* quantitative PCR preferred. Send curriculum vitae to: **Dr. M. A. Sarkar, School of Pharmacy, Box 980533, Richmond, VA 23298.** FAX: 804-828-6321; e-mail: masarkar@vcu.edu.

POSTDOCTORAL POSITION. Newly NIH-funded, available immediately to study molecular mechanisms of tumor suppression by pVHL, implications of which include tumor angiogenesis and invasion, renal cyst formation, and renal development. Experience in molecular biology and/or protein chemistry preferred. Please send curriculum vitae and names of three references to: **Dr. Herbert T. Cohen, Boston University Medical Center, E-428, 88 East Newton Street, Boston, MA 02118.** FAX: 617-638-7326; e-mail: htcohen@bu.edu.

Fisheries Department, Auburn University, Alabama invites applications for three non-tenure-track, **POSTDOCTORAL FELLOW** positions in the area of stem cell knockout research. For complete information, Telephone: 334-844-4786 in order to have ample time to apply by initial screening date of January 5, 1999. Auburn University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

POSTDOCTORAL POSITION is available for participation in studies of population genetics and molecular evolution in *Drosophila*. Send a statement of research interests, curriculum vitae, names, telephone numbers, and e-mail addresses of two references to: **David Begun, Department of Zoology, University of Texas, Austin, TX 78712.** E-mail: djbegun@mail.utexas.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION. A Postdoctoral Fellowship is immediately available to study the molecular and cellular role of opioids and opioid receptors in human immunodeficiency virus (HIV-1) replication and reactivation. Studies will include a cellular and molecular analysis of the effects of opioids and opioid receptors on HIV-1 replication and reactivation. Experience and interest in HIV-1 and molecular biology is required. This position includes opportunities to collaborate within a rapidly growing center studying effects of opioids and other drugs of abuse on the immune system. *Applicants must be U.S. citizens or have resident alien status.* Please send curriculum vitae and three references to: **Dr. Earl Henderson, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. FAX: 215-707-7788; e-mail: eehender@astro.ocis.temple.edu.** Temple University is an Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL POSITION** is available to study new targets for the therapy of prostate and breast cancer. Using the EST database, new genes specifically expressed in prostate and breast have been identified. These genes will be cloned and characterized. Antibodies will be isolated by phage display and developed for the targeted therapy of cancer. A strong background in molecular biology and/or biochemistry is required. Applicants must have a Ph.D. or M.D. degree and should have less than five years of postdoctoral experience. Send curriculum vitae and contact information with three references to: **Ira Pastan, M.D., Laboratory of Molecular Biology, National Cancer Institute, National Institutes of Health, Building 37, Room 4E16, 37 Convent Drive, MSC-4255, Bethesda, MD 20892-4255. Telephone: 301-496-4797; FAX: 301-402-1344; e-mail: schombea@pop.nci.nih.gov.**

POSTDOCTORAL POSITION. A Postdoctoral position is available immediately to study the role of complement in regulating Schwann cell myelin gene expression, proliferation, and apoptosis using both *in vitro* and *in vivo* systems. The successful candidate will have a Ph.D. with background in neuroscience, glial cell biology, or immunology with experience in molecular biology and tissue culture. Send curriculum vitae and three reference letters to: **Carol L. Koski, M.D., Department of Neurology, University of Maryland School of Medicine, 22 South Greene Street, Baltimore, MD 21201. E-mail: ckoski@umaryland.edu.** The University encourages women and minorities to apply. Affirmative Action/Equal Employment Opportunity/ADA Employer.

COURSES & TRAINING

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The Interdisciplinary Graduate Program in the Institute of Chemical Toxicology, Wayne State University offers a Ph.D. degree and research experience in molecular and cellular toxicology. Focus areas include receptor-mediated cell signaling, regulation of cell cycle, and apoptosis; environmental toxicants and cell-cell interactions; DNA damage and repair mechanisms; transgenic/gene knockout and oxidative stress; molecular genetics; regulation of gene expression; metabolism of environmental chemicals; immunotoxicology; and mechanisms of metals toxicity.

Tuition costs are generally defrayed by competitive Graduate Assistantships and Fellowships. For information contact: **Dr. M. Runge-Morris, Admissions Director, Institute of Chemical Toxicology, 2727 Second Avenue, Detroit, MI 48201. Website: <http://www.wayne.edu/ict>.** Wayne State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply. Wayne State University—people working together to provide quality service.

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EUROPEAN OPPORTUNITIES

RESEARCH ASSOCIATE POSITION NEUROBIOLOGIST

The position is available from January 1999 to study cellular and synaptic mechanisms of pain and analgesia *in vitro*. Patch-clamp recordings in spinal cord slices (see: *Science* 281:419-424, 1998; *J. Neurosci.* 17:6483-6491, 1997), imaging and antisense technologies will be used in this project. The project is part of a major, newly established research program at the university. A highly competitive salary plus benefits and fascinating opportunities for cooperations will be provided for an experienced and highly motivated Ph.D. and/or M.D. at the University of Heidelberg, one of Europe's leading centers in the field of neuroscience. Please submit curriculum vitae plus names and addresses of three referees to: **Prof. J. Sandkühler, Department of Physiology II, University of Heidelberg, Im Neuenheimer Feld 326, Heidelberg 69120 Germany. E-mail: af8@ix.urz.uni-heidelberg.de.**

ANNOUNCEMENT

WORKSHOP ON ANTHROPOLOGY, GENETIC DIVERSITY, AND ETHICS February 12-13, 1999 University of Wisconsin-Milwaukee

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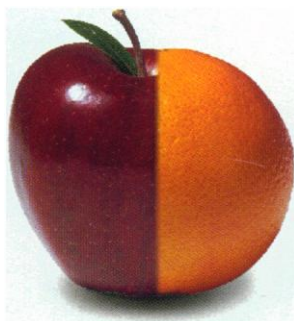
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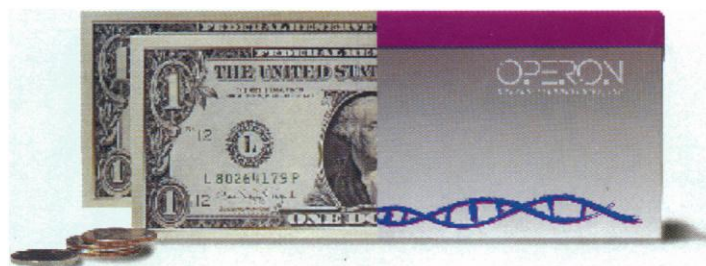
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