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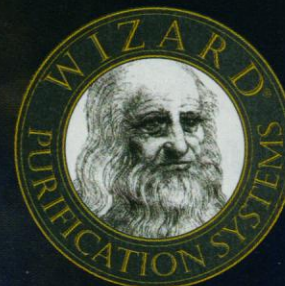
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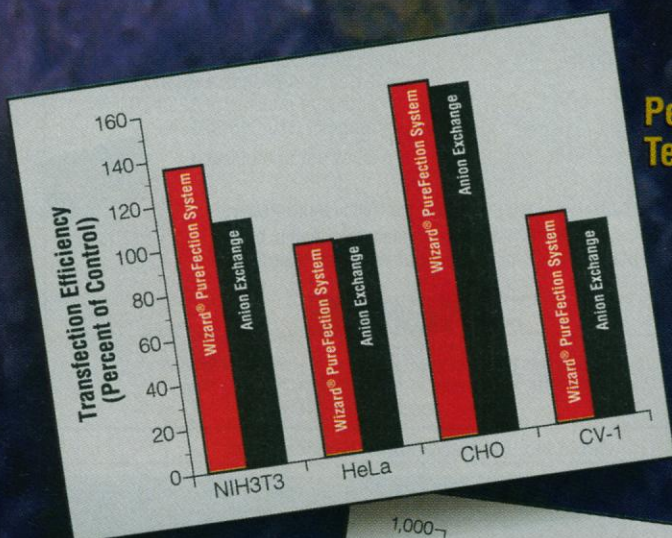
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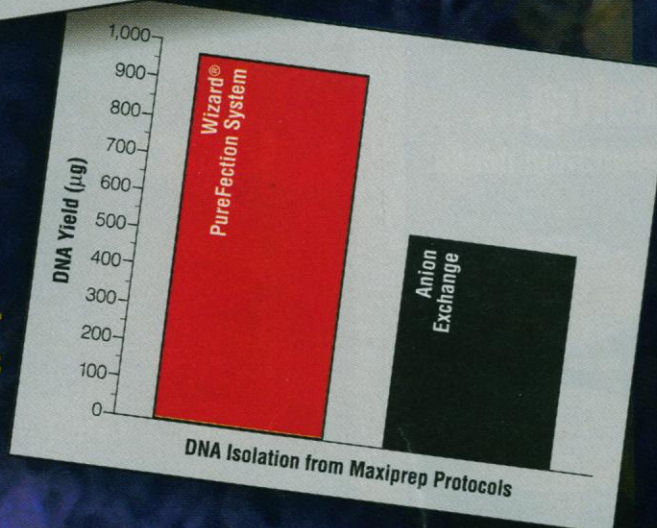


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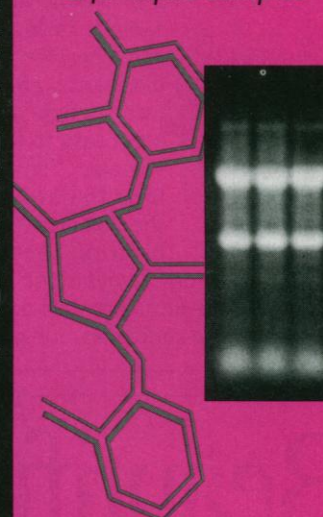
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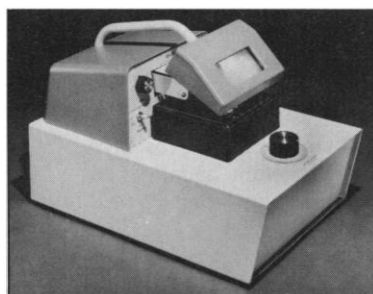
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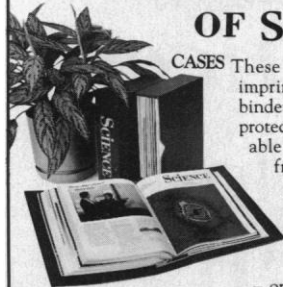
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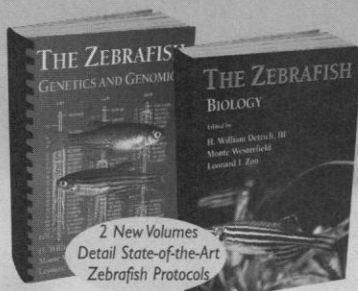
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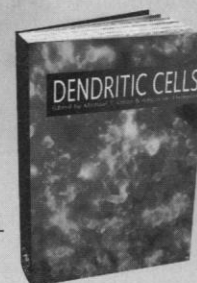
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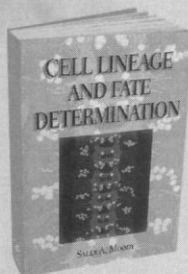


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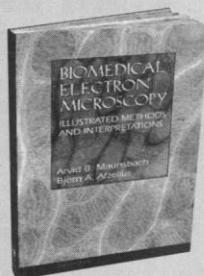
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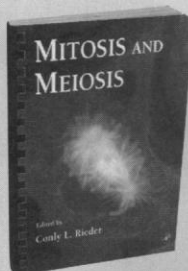
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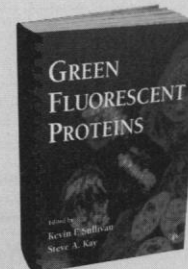


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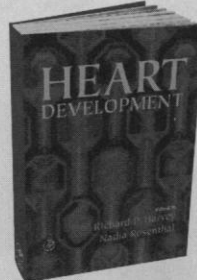
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The Ohio State University invites your nominations or application for the position of Associate Vice President for Agricultural Administration. This person also serves as **DIRECTOR**, Ohio Agricultural Research and Development Center (OARDC), and **ASSOCIATE DEAN**, College of Food, Agricultural, and Environmental Sciences.

Responsibilities: This leader will be the Chief Research Administrator of the College of Food, Agricultural, and Environmental Sciences and affiliated programs. This person interacts with faculty, staff, students, commodity leaders, legislators, and other stakeholders as an active participant and advocate of food, agricultural, and environmental sciences research as well as research that is funded in other colleges. The Associate Vice President is a member of an outstanding, cohesive administrative team representing research, extension, academic affairs, and international programs that reports directly to the Vice President for Agricultural Administration and Executive Dean of the College of Food, Agricultural, and Environmental Sciences.

Qualifications: The successful candidate is expected to have the following qualifications: an earned Ph.D. degree or equivalent in one of the food, agricultural, and environmental sciences or related disciplines; excellent communication, public relations, and interpersonal skills; demonstrated excellence in research; recognized vision and leadership ability; administrative experience at the university Department Chair level or equivalent; the ability to evaluate and nurture excellence in scholarship; outstanding intellectual depth, breadth, and a high level of energy; commitment to the land grant mission and to the internationalization of OARDC programs; able to earn tenure and the rank of Professor in one of the units supported by OARDC funding.

Salary and application: The salary is competitive, commensurate with qualifications and experience. Applications will be reviewed beginning January 15, 1999, and continuing until the position is filled. Send up-to-date credentials and a statement of leadership philosophy to: **Dr. L. H. Newcomb, Room 100 Agricultural Administration Building, 2120 Pyfffe Road, Columbus, OH 43210. FAX: 614-292-1218.**

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.

FACULTY POSITION IN BIOLOGY UNIVERSITY OF DELAWARE

The Department of Biological Sciences is currently undertaking a dramatic expansion of its programs and will be hiring several new faculty in the next few years. At this time, we invite applications for a faculty position at the **ASSOCIATE PROFESSOR** level. Serving as **GRADUATE PROGRAM DIRECTOR**, duties will include recruiting, advising, and monitoring graduate students; facilitating interdepartmental graduate programs; and developing innovative initiatives in graduate training. We seek an individual with an established research program in any of the current areas of focus of the Department (ecology and evolution, integrative biology, microbiology, and molecular and cellular biology) and a commitment to quality teaching. Preference will be given to candidates with strong records in graduate education.

The starting date for this position is September 1, 1999, or earlier. Applications received by February 15, 1999, will be given full consideration. Applicants should send a curriculum vitae, a description of research interests and goals, a statement of interests and goals relevant to service as Graduate Program Director, and the names of three references to: **Dr. John H. McDonald, Chair, Search Committee, Department of Biological Sciences, University of Delaware, Newark, DE 19716. FAX: 302-831-2281; e-mail: mcdonald@udel.edu.**

The University of Delaware is an Equal Opportunity Employer and encourages applications from minority group members and women.

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, teaching 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.**

FACULTY POSITION BACTERIA-HOST INTERACTIONS

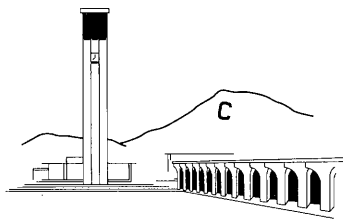
The Department of Microbiology at the University of Virginia School of Medicine invites applications for a tenure-track faculty position at the rank of **ASSISTANT or ASSOCIATE PROFESSOR**. Candidates should have a Ph.D. or M.D. and postdoctoral experience. The successful candidate will be expected to establish a productive research program investigating mechanisms of bacterial pathogenesis, especially with respect to immune evasion or signal transduction, and to participate in graduate and medical student teaching.

By February 15, 1999, applicants should send their curriculum vitae, list of publications, and statement of research interests, and arrange to have three letters of reference sent to: **Search Committee, Department of Microbiology, University of Virginia, HSC Box 441, Charlottesville, VA 22908.**

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



UNIVERSITY OF CALIFORNIA
RIVERSIDE



Senior Faculty Position-Structural Biology (X-ray Crystallography)

Applications are invited for a senior tenure-track faculty position in the College of Natural and Agricultural Sciences, University of California, Riverside. Applicants should have strong credentials in the broad area of structural biology using as their principle approach protein X-ray crystallography. Successful applicants should hold the doctoral degree or equivalent, and will be expected to develop and maintain a productive independent

research program and participate in undergraduate, graduate, and postdoctoral level training activities. Mid-career and senior scientist applicants should have well-funded research programs. A generous and competitive start-up package will be provided to the successful candidate. The departmental affiliation for the position will likely be in the Department of Biochemistry, but could also be in the Departments of Chemistry or Biology. The position is available July 1, 1999. Applicants should forward a complete Curriculum vitae, a list of three names and addresses from whom letters of reference might be obtained, and a summary of their future research directions to:

Structural Biology Search Committee
College of Natural and Agricultural Sciences
University of California
Riverside, CA 92521

Review of applications will begin January 15, 1999, and will continue until the position is filled. The University of California is an Affirmative Action/Equal Opportunity Employer.

Science

ASSOCIATE EDITOR

An editorial position at *Science* is available for a Ph.D. scientist with a broad range of interests and research experience in the biological sciences. Applicants should have postdoctoral experience and publications in peer-reviewed journals. This position offers an exciting opportunity to explore new modes of information technology and innovations in teaching science. Interest in electronic publishing and experience with Web technology are desired. Editors have varied responsibilities including solicitation, selection, and editing of manuscripts. Previous editorial experience is not required. This is a three-year full-time position in our Washington, DC, office; however, extension of the position for a successful incumbent is considered likely.

Applicants should send their curriculum vitae, a cover letter describing their qualifications and salary requirements, and contact information for three references to:

Mr. Gregory Stokes
AAAS
1200 New York Avenue, NW
Washington, DC 20005

EOE/Non-smoking work environment

Science

POSTDOCTORAL FELLOW

The National Cancer Institute's Frederick Cancer Research & Development Center (NCI-FCRDC), located in scenic Frederick, Maryland, is a complex of highly technical R&D laboratories and Center support activities. **SAIC Frederick** manages the Operations & Technical support contract for the NCI-FCRDC, and functions as a contemporary biotechnology organization dedicated to the development of knowledge and tools for diagnosis, treatment, and prevention of human cancer and AIDS.

The Laboratory of Leukocyte Biology is seeking a motivated individual to study NF- κ B and cytokine signaling regulated by the ubiquitin-proteasome pathway. A background in molecular biology is required. Experience in DNA cloning, cell biology, and protein biochemistry would be desired.

Activation of the nuclear factor κ B (NF- κ B) consists of a series of reactions. In response to extracellular stimuli, the inhibitor molecule, I κ B α , is phosphorylated, ubiquitinated, and degraded by the 26 S proteasome. During these processes, the transcription factor is released from the inhibitor and transfers to the nucleus to modulate gene expression. Valosin-containing-protein (VCP), a member of the AAA (ATPases associated with a variety of cellular activities) family, has been identified to physically associate with both the ubiquitinated I κ B α and the 26 S proteasome. VCP is hypothesized to act as a molecular chaperone that transfers the ubiquitinated I κ B α to the proteasome for degradation.

Current research is focused on identifying other substrates of the ubiquitin-proteasome pathways, the involvement of VCP in the pathways, and the structure-function relationships of VCP.

You'll work in a campus-like setting near Baltimore and Washington, DC. Put your expertise to work for **SAIC Frederick** and play a key role in the quest to conquer cancer and related diseases!

We offer a competitive salary and a comprehensive fringe benefits program, including insurances, 401(k) savings plan, stock purchase programs, relocation assistance, and more. Forward CV with references, in confidence, to: Barbara J. Norton-Gill, Technical Recruiter, **SAIC Frederick**, NCI-FCRDC, PO Box B, Frederick, MD 21702-1201; e-mail: hr@mail.ncifcrf.gov. Please reference job code S-6330/12-98.

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INNOVATION.
A Sense Of
ACCOMPLISHMENT.

As part of Cardiovascular Research, you will be involved in finding ways to help patients lead better, longer lives through innovative pharmaceutical products. You will become a member of a multi-disciplinary drug discovery team focused on stroke, thrombosis, atherosclerosis and congestive heart failure. We are looking for dedicated scientists of high caliber, with enthusiasm and proven effectiveness as experimental biologists and a keen interest in drug discovery and development.

**Ph.D. Pharmacology or Physiology-
Stroke Research**

A position is available for a senior scientist to join a multi-disciplinary team developing novel therapeutics for the treatment of acute ischemic stroke. The candidate should have proven expertise in animal models of cerebral ischemia. Demonstrated experience in the use of behavioral and/or neurological assessments during prolonged recovery would be an advantage.

**Ph.D. Neuronal Cell Biology-
Stroke Research**

This senior scientist position requires laboratory experience in areas of research related to cerebral ischemia and/or neuronal differentiation. Knowledge and expertise in neuronal or glial culture and cell-based assay systems is essential. The ability to integrate an understanding of cell biology with neurotoxicity and regeneration following cerebral ischemia is expected. In particular we are looking to strengthen our capacity and expertise within cell and molecular biology related to neuronal apoptosis, proliferation and differentiation.

**Ph.D. Biochemistry-
Thrombosis Research**

We are seeking a biochemist with experience in blood coagulation, platelet aggregation and fibrinolysis to join our thrombosis research group during this exciting time in the field. We expect the scientist to conduct creative research designed towards the elucidation of anti-thrombotic mechanisms and the discovery of novel anti-thrombotic agents. The qualified candidate will have the ability to integrate basic scientific knowledge and experience into problem solving relevant to drug discovery including: new target identification, elucidation of biochemical mechanisms, assay development, validation and testing of compounds for anti-thrombotic drug discovery. The candidate must exhibit a strong level of independence balanced with the ability to contribute effectively to team oriented approaches. Skill sets should include a deep knowledge base in the area of coagulation and hemostasis, broad spectrum of coagulation, fibrinolysis and platelet aggregation assay methodologies, enzymology/kinetic analysis.

**Ph.D. Biochemistry-
Atherosclerosis Research**

A position is available for a senior scientist with extensive background in the biochemistry of metabolic pathways involved in the development of atherosclerosis and/or insulin resistance. Demonstrated expertise in molecular pathways involved in lipoprotein metabolism, lipid biochemistry and/or enzymology are required. Experience with insulin signaling would be preferred.

**Ph.D. Biochemistry-
Congestive Heart Failure**

A position is available at the senior scientist level for a biochemist with extensive background in experimental protein biochemistry of cardiac cells associated with the development of heart failure. The scientist should have significant experience with the in vitro models (cardiac myocytes, fibroblasts) and the molecular and signaling pathways associated with cardiac contractility changes and fibroplasia. The scientist should have proven experience in the routine use of protein biochemistry, DNA-protein interaction, viral transfection, and tissue culture techniques. The capacity to develop and to interpret functional assays in cardiac cells would be preferred.

**B.S./M.S.-Cardiovascular Research
(Biochemistry, Pharmacology, Physiology,
Enzymology, Cell & Molecular Biology)**

Multiple associate positions exist in the cardiovascular research group in scientific disciplines related to the research positions described above.

Ph.D. applicants should have a minimum of three years postgraduate experience or its equivalent. Drug discovery experience in an industrial setting would be advantageous. A strong publication record and evidence of independent research are essential. All candidates are expected to contribute creatively to basic and applied research directed at drug discovery and should have excellent communication and interpersonal skills.



An excellent salary. A comprehensive benefits package. A sense of pride. You'll enjoy all this and more when you join us at Eli Lilly and Company. For immediate consideration, please send your resume to: Eli Lilly and Company, US Recruiting and Staffing, Division of Cardiovascular Research, Lilly Corporate Center, ADSCMPH12, DC 1818, Indianapolis, IN 46285. For more information, please visit our Web site: www.lilly.com. We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace.

**EPIDEMIOLOGIST
VIRAL GASTROENTERITIS SECTION
DIVISION OF VIRAL AND RICKETTSIAL DISEASES
NATIONAL CENTER FOR INFECTIOUS DISEASES
CENTERS FOR DISEASE CONTROL AND PREVENTION**

The Centers for Disease Control and Prevention is seeking qualified applicants for an Epidemiologist position in the Respiratory and Enteric Viruses Branch, Division of Viral and Rickettsial Diseases. The person will function as a key member of multidisciplinary scientific team responsible for the investigating transmission of viral gastroenteritis and prevention of infections and associated disease including rotavirus vaccination programs. The investigations will make use of state-of-the-art laboratory techniques, ongoing surveillance programs, population-based studies of disease and disease burden, and outbreak investigations.

Qualifications preferred include outstanding scientific credentials; experience in epidemiologic investigations and studies of viral gastroenteritis and other infectious diseases; proven ability to communicate effectively; and experience working with laboratory scientists in epidemiologic studies. A medical degree or advanced degree (Ph.D., Sc.D., or other) in epidemiology is required. Candidates will be evaluated on (1) professional knowledge and experience in epidemiologic research on viral agents of gastroenteritis; (2) ability to utilize epidemiological, biostatistical, and laboratory methods to design, manage, and evaluate epidemiology research programs involving viral agents of gastroenteritis; (3) written communication abilities; (4) oral communication abilities; and (5) skills in leading multidisciplinary epidemiology, statistical, and laboratory investigations.

The position will be an initial two year Research Fellow appointment. Annual salary range from \$52,654 – \$65,821, depending on qualifications.

Further information can be obtained from **Larry J. Anderson, M.D., Chief, Respiratory and Enteric Viruses Branch, Telephone: (404)639-3596; FAX: (404)639-1307; or e-mail: lja2@cdc.gov**

Interested applicants should send their curriculum vitae in confidence along with the names of three references (including the current supervisor) by December 25, 1998, to **Ms. Janie L. Oddy, Human Resources Management Office, Centers for Disease Control & Prevention, 1600 Clifton Rd N.E. (C-12), Atlanta, GA 30341-3724 or by e-mail to jlo0@cdc.gov.**

CDC is an Equal Opportunity Employer and provides a smoke-free work environment.



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

ALSAC • Denny Thomas, Founder

**Emerging Viruses
Junior Faculty Position**

The Department of Virology and Molecular Biology at St. Jude Children's Research Hospital invites applications for a position at the Assistant Member level.

The successful candidate will demonstrate the ability to develop a program of research excellence that focuses on interspecies transmission and pathogenesis of influenza viruses. We are seeking a candidate who will pursue a multi-disciplinary, national and international approach to their problem and be willing to utilize the extensive resources available at St. Jude Children's Research Hospital. This Department currently has Faculty members working on problems related to influenza and parainfluenza viruses, HIV, EBV, and cell biology.

Applicants should include a curriculum vitae and statement of research interests and goals. Candidates should arrange to have three letters of recommendation forwarded to:

**Robert G. Webster, Ph.D.
Chairman, Department of Virology and Molecular Biology
St. Jude Children's Research Hospital
332 North Lauderdale St.
Memphis, TN 38105**

www.stjude.org



SUNSHINE

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SENIOR SCIENTIST/ASSOCIATE
Genetic Cloning**

Take biotechnology and your career in a new direction at Roche Vitamins Inc., an industry leader for human and animal health and nutrition. In these positions, you will be involved in cloning novel genes and/or performing modifications/improvements on vitamin pathways. Familiarity with genetic cloning techniques, vector construction, protein purification, enzymatic assay development, gene expression in heterologous systems, RNA techniques and PCR methods is necessary. The ability to plan and execute multiple tasks and apply/adapt new techniques to research is a must. Experience with plants or gram-positive organisms is a plus.

Associate level requires Bachelor's degree with minimum 2-4 years relevant experience conducting experiments or Master's degree with some relevant background. **Scientist** level requires Bachelor's degree with minimum 5-7 years experience or Master's degree in Biochemistry, Molecular Biology or a relevant field with minimum 2-3 years experience, with knowledge in gene expression and protein analysis. **Senior Scientist** level requires Ph.D or Master's degree (Molecular Biology/Biochemistry) and minimum of 8 years experience. Demonstrated communication skills and the ability to work effectively in a team environment are necessary.

At Roche Vitamins Inc., we offer our employees competitive salaries, comprehensive benefits, and a unique campus-like facility with state-of-the-art fitness center and on-site childcare. For consideration, forward your resume with salary requirements to: **Roche Vitamins Inc., Human Resources Dept-Code 98060, 45 Waterview Boulevard, Parsippany, NJ 07054-1298.** Principals only. We appreciate your interest in Roche Vitamins Inc., but can only respond to qualified candidates. Roche Vitamins Inc. is an equal opportunity employer fully committed to diversity in the workplace.



**IMMUNOLOGY/PARASITOLOGY
OAKLAND UNIVERSITY
BIOLOGICAL SCIENCES**

Applications are invited for a **TENURE-TRACK** position in either immunology or parasitology at the Assistant Professor level starting **August 15, 1999.**

Candidates must have a demonstrated record of excellence in research using state-of-the-art techniques and a potential for excellence in teaching. Start-up funds and laboratory space are available for establishing a vigorous research program. A Ph.D. and postdoctoral experience are required.

Oakland University is a state-supported institution situated on a 1,400-acre campus 25 miles north of Detroit. The Department of Biological Sciences is a well-equipped, research-oriented department in the College of Arts and Sciences. The successful applicant will be expected to develop and maintain an independently funded research program with biomedical applications. Teaching responsibilities include a course each in immunology and in medical parasitology. The selected candidate is expected to participate in the departmental Master's degree program and an interdisciplinary doctoral program in Biomedical Sciences.

Applicants should submit curriculum vitae, a statement of research plans and teaching philosophy, key reprints, and names of at least three references before **January 4, 1999**, to:

**Search Committee
Department of Biological Sciences
Oakland University
Rochester, MI 48309-4476**

Oakland University is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.

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BS/MS BIOLOGISTS

Obesity

Perform experiments to identify new agents for the treatment of obesity. Use *in vitro* and *in vivo* techniques to set up screens and characterize the activity of lead compounds. Techniques used may include tissue and cell culture, molecular biology, biochemistry, and/or clinical chemistry. Job Code: 2959

Osteoporosis/Frailty

Conduct *in-vivo* skeletal studies for efficacy testing of compounds for the treatment and prevention of musculoskeletal frailty. Operate bone densitometry and pQCT scans for bone area, bone mineral content and density. Process bone samples using histological techniques and perform histomorphometric analyses. Present results and prepare study reports. Experience in bone densitometry and bone histomorphometry is preferred. Job Code: 2960

All BS/MS positions require a BA/BS degree in Cellular Biology, Molecular Biology or a related discipline. An MA/MS degree and/or at least 2 years of industry experience in a relevant therapeutic area is preferred.

Ph.D. BIOLOGIST

Obesity

Supervise a lab to identify agents which reduce body fat by mechanisms that may include decreasing appetite, increasing energy expenditure or altering adipocyte metabolism. Use experience in fat metabolism, neurobiology related to appetite control, or obesity research to validate the utility of potential anti-obesity targets, set up *in vitro* screens, and characterize lead compounds by both *in vitro* and *in vivo* techniques. Tissue culture and *in vivo* experience required. Experience in obesity research related to adipocyte metabolism, the control of appetite and/or energy expenditure preferred. Job Code: 2955

Ph.D. MOLECULAR BIOLOGISTS

Cardiovascular Diseases

Supervise a lab to understand the mechanism of cardiovascular disease by using molecular biology techniques to generate and validate novel targets, screens, and *in vitro/in vivo* models. Experience with bioinformatics, methods of gene function analysis, and signal transduction desirable. Job Code: 2956

Obesity

Supervise a lab to understand the mechanism of obesity by using molecular biology techniques to generate and validate novel targets, screens; and *in vitro/in vivo* models. Experience with bioinformatics, methods of gene function analysis, and signal transduction desirable. Job Code: 2957

Ph.D. MUSCLE BIOLOGIST

Osteoporosis/Frailty

Discover new drugs for the treatment and prevention of musculoskeletal frailty. Establish and supervise a lab focused on the identification of new therapeutic targets in aging muscle and for the evaluation of drug efficacy in models of muscle cell biology. Familiarity with skeletal muscle physiology and demonstrated experience in both *in vivo* and *in vitro* molecular biological techniques required. Job Code: 2958

All Ph.D. positions require a Ph.D. in Cellular Biology, Molecular Biology or a related discipline, with at least 2 years of postdoctoral research experience and a strong publication record. Industry experience including supervisory responsibility is desirable.

All positions require excellent oral/written communication skills and the ability to work effectively in a multi-discipline, team environment.

Pfizer is proud to offer competitive salaries, exceptional benefits, tremendous opportunities for learning and advancement, and the rewards of living only hours from Boston, Providence and New York City on the beautiful Connecticut seashore. Please send your resume in confidence to:

Employee Resources, Pfizer Inc.,
Job Code # _____
Central Research Division, Eastern Point Road,
Groton, CT 06340.

Pfizer offers a workplace rich with diversity and potential - an Equal Opportunity Employer.



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Genetics Institute's first proprietary product, BeneFIX(r) Coagulation factor IX (recombinant), for the treatment of hemophilia B, received marketing licensure from the FDA in February 1997. The product was launched by GI's U.S. Sales Force and is being prescribed by practically all hemophilia treatment centers. BeneFIX(r) has received market licensure in Europe and Canada. GI's second proprietary product is Neumega(r) (Oprelevkin), the first platelet growth factor for the prevention of severe chemotherapy-induced thrombocytopenia. Neumega received marketing licensure from the FDA in November 1997.

Throughout our history, we have demonstrated our commitment to providing our dedicated professionals with everything it takes to meet the challenges that make our environment unique.

Genetics Institute is uniquely positioned to continue its success and growth well into the next millennium. You'll find it's a great organization for building a rewarding career.

For information on exciting job opportunities at Genetics Institute, visit our web site at:

Staff Scientist - Cellular Immunology

We are seeking a Ph.D. level scientist to complement our ongoing efforts in the B7/CD28/CTLA4 pathway. Research in this area would be targeted toward an understanding of costimulatory pathways, development of therapeutics based upon these pathways and discovery of novel proteins and genes involved in costimulation. The ideal candidate will have a Ph.D. or M.D. with 2-3 years' postdoctoral experience. Applicant should have experience in human cellular immunology with expertise in CTL and NK assays. Experience in costimulatory pathways would be preferred. **Job Code: SCI-MD-353**

Staff Scientist - Structural Biochemistry

We are seeking a Ph.D. level scientist to work on development and implementation of analytical technologies for the characterization and analysis of recombinant glycoproteins. The candidate will work in a project-focused environment and will closely interact with other members of the team. Demonstrated experience with development and implementation of approaches for the analysis of glycoprotein structure is essential. Experience with chromatographic and electrophoretic separation techniques, protein sequence determination methods and other methods for protein structural analysis is required. Qualifications include a Ph.D. or equivalent in Biochemistry, Biology, Chemistry or a related field with 1-3 years of post-doctoral training. The candidate should have excellent communication and leadership skills. **Job Code: SCI-PG-670**

To be considered for these positions, please forward your resume to:

Paul Grafmuller
Job Code: _____
Human Resources Department
Genetics Institute
One Burrill Road
Andover, MA 01810-5901
Fax: (978) 623-2607
Email: pgrafmuller@genetics.com

Scannable copies should be forwarded on plain white bond paper, using standard types and fonts, with no bold or italic print. When faxing, please also mail the original copy to the above address.

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CENTER DIRECTOR

The U.S. Department of Agriculture (USDA) is seeking candidates for the position of Director of Plum Island Animal Disease Center (PIADC) at Greenport, New York. PIADC is the principal USDA laboratory for research and diagnosis of animal diseases which are exotic to the United States. Duties of the Director include direction and coordination of the research and diagnostic programs as well as the overall operation and management of the Center. Research is funded and administered through the Agricultural Research Service (ARS). The Foreign Animal Disease Diagnostic Laboratory is funded and administered through the USDA Animal and Plant Health Inspection Service (APHIS). The Director represents ARS and APHIS in communications in the veterinary and biomedical communities, representatives of other governmental agencies, congressional staff, livestock producers and commodity groups, news media, and the general public, on foreign animal diseases.

The successful candidate will have the D.V.M. or equivalent degree, demonstrated skill in organizing and leading multidisciplinary teams of scientists, and a strong record of personal research accomplishments. A Ph.D. or equivalent degree is highly desirable. This is a Senior Executive Service position with a salary range from \$108K to \$125K, depending on qualifications. *U.S. citizenship required.* For further information about the position please call Ms. Wilda Martinez at 215-233-6593. For application procedures, call Gwen Donovan at 301-504-1448 or e-mail gdonovan@ars.usda.gov. Applications must be received by January 15, 1999, to be considered.

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OPPORTUNITY EMPLOYER.**



ASSOCIATE DIRECTOR-R&D

Oncology Research SF Bay Area

Our client, a small, important business unit of a global diagnostics organization, is seeking an individual to spearhead its lung cancer program. The selected candidate will provide expertise in the areas of cell imaging and oncology research, especially in diagnostics.

You will act as a technical manager to ensure the appropriate technical decisions, drive experimental design functions and review technical data, while managing a staff of R&D personnel. Your PhD degree in Life Sciences (Biochemistry, Immunology, etc.) must be supported by 5+ years project management experience in an industrial setting with demonstrated experience in lung cancer diagnostics, cytology and cell image analysis. In addition, you will need 5 years of management experience, including the ability to manage budgets, confidently present ideas to peers and senior management, and interact effectively with academic and industrial collaborators. Your background must also demonstrate proven product development and product launch skills, along with a solid knowledge of assay development, including clinical study design and regulatory requirements.

To learn more about our client and this San Francisco Bay Area opportunity, please forward your resume in confidence to: The Hamel Group, 807 Broadway, Dept. 3438, Oakland, CA 94607. No phone calls or drops in please. Our client provides attractive salaries and a comprehensive benefits package and is proud to be an equal opportunity employer.

**NEUROSCIENCE****Improving lives, restoring hope****E**

li Lilly & Company is a global research-based pharmaceutical corporation dedicated to creating and delivering innovative pharmaceutical-based health care solutions that enable people to live longer, healthier and more active lives. Innovation at Lilly is supported by the best scientific minds and a visionary company with a 120 year reputation of constantly striving for excellence.

Lilly Neuroscience is dedicated to finding innovative solutions to nervous system disorders and helping people achieve the full measure of their potential. Eli Lilly and Company is dedicated to creating a leading Neuroscience presence in Europe and in so doing, we are looking for an Executive Leader of Neurosciences to help us achieve our vision.

Executive Leader of Neurosciences - Europe

The person selected for this role will be responsible for neuroscience discovery, research and development within Europe. This individual will participate in refining and implementing the global neuroscience strategy and will be responsible for creating a world class centre of neuroscience research at Lilly's Erl Wood facilities. This position will report to the vice president of neuroscience research and clinical development. Specific responsibilities will include; leading neuroscience discovery research within Europe and contributing to the broader Lilly neuroscience research efforts; leading the overall delivery of quality compounds into first human dose stage of development with a focus on commercial success; creating a leadership presence and a centre of excellence for Lilly neuroscience in Europe by forming alliances and partnerships with key individuals, groups, and organizations to implement strategies and achieve corporate goals.

The successful candidate will be an M.D. or Ph.D. with an outstanding track record of success and accomplishment in the areas of neuroscience and recognized as a "world class" scientific contributor. The candidate will have a European background. It would be considered favorable for the candidate to have been part of or have worked closely with the pharmaceutical or biotech industry in some manner.

Please send your inquiries and resume with CV and reprints of your most important publications to: **Elizabeth Bohn, Director, Human Resources, Lilly Research Laboratories, Erl Wood Manor, Sunninghill Road, Windlesham, Surrey GU20 6PH, United Kingdom.**

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You will play an important role in the development of high cell-density fed-batch fermentation processes for the production of human therapeutic proteins from *E. coli* and yeast. Activities will be focused on the evaluation, characterization and optimization of processes at the 5 to 20 liter scale. You will also provide some assistance with the scale-up and implementation of these processes in our on-site cGMP manufacturing facility. Additional responsibilities will include the design and organization of fermentation experiments, assistance in their execution, and documentation/analysis of the results, as well as the evaluation of new gene expression, process monitoring and process characterization technologies. This position requires a PhD in Chemical Engineering or Microbiology with 0-4 years relevant industrial experience. A solid knowledge of microbial physiology and fermentation science is necessary, in addition to extensive hands-on experience in the operation and maintenance of microbial fermentors. Excellent written and verbal communication and organizational skills are essential. Statistical experimental design and/or exhaust gas analysis experience preferred. Prior supervisory experience is a plus.

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Directors: **Greenfield Sluder** and **David Wolf**, University of Massachusetts Medical Center, Worcester.

Applications Due: March 9.

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Director: **Robert B. Silver**, Marine Biological Laboratory.

Applications Due: March 9

Optical Microscopy and Imaging in the Biomedical Sciences, October 6-14, 1999

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Director: **Colin S. Izzard**, State University of New York, Albany. Applications Due: August 3

Women and minorities are encouraged to apply. For application information, contact: **Carol Hamel**, Admissions Coordinator, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543-1015; Phone: (508) 289-7401; E-mail: admissions@mbi.edu

Forms & information are available at www.mbl.edu.



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FACULTY POSITIONS AT CHILDRENS HOSPITAL LOS ANGELES

Childrens Hospital Los Angeles is a leading academic pediatric care institution affiliated with the University of Southern California. Through the establishment of a Research Institute, which ranks among the top five pediatric research institutes in the country, the hospital is committed to fostering an environment of scientific excellence where biomedical research will lead to discoveries involving the molecular and clinical understanding of childhood development and diseases. The Research Institute is expanding its research programs in Developmental Biology, Gene Therapy, Cancer, and Molecular Genetics with the recruitment of new research faculty members. These positions are on a tenure track at the University of Southern California and are supported by endowed funds that include a minimum of three years of full support and substantial start-up funds. Four positions are currently available:

Developmental Biology: The position is for an individual with a Ph.D. with an interest in murine and human genomic information who will develop independent research in molecular and cellular signaling mechanisms in organ systems and/or will make murine developmental models simulating human developmental diseases. This individual will have the opportunity to work in an interactive research program, jointly facilitated by **David Warburton, M.D.** and **Nora Heisterkamp, Ph.D.** that focuses on molecular signaling and organogenesis.

Gene Therapy: The position is for an individual with an M.D. or M.D./Ph.D., who is Board-certified or Board-eligible in Pediatrics, and who is interested in developing new gene-based approaches to the treatment of cystic fibrosis and other chronic respiratory diseases in children. The selected individual will have a minimum of 70% protected time for research activities in one of the leading gene therapy programs led by **Donald Kohn, M.D.** and will participate in the clinical activities of the Division of Pediatric Pulmonology.

Cancer: The position is for an individual with an M.D. or M.D./Ph.D., Board-certified or Board-eligible in Pediatrics, who has a research interest in childhood brain tumors with special emphasis on glial and/or neuroectodermal tumors and therapeutic strategies based on apoptosis and angiogenesis. The selected individual will be an integral member of a leading cancer research program, lead by **Robert Seeger, M.D.** and will have a minimum of 70% protected time for research. The individual will also participate in the clinical activities of the Childrens Center for Cancer and Blood Diseases.

Molecular Genetics: The position is for an individual with a Ph.D. or M.D. interested in the genetic epidemiology of diabetes and bone diseases. The selected individual will be a member of a multidisciplinary team of researchers lead by **Francine Kaufman, M.D.**, **Vicente Gilsanz, M.D.**, and **Malcom Pike, Ph.D.**

These four faculty positions are at the Assistant/Associate Professor level, depending upon experience. Interested individuals should submit their CV, a statement of their research interest, and three letters of recommendations to: **Yves A. De Clerck, M.D., Professor of Pediatrics, Biochemistry, and Molecular Biology; Director of the Research Institute, Childrens Hospital Los Angeles, 4650 Sunset Blvd., MS #84, Los Angeles, CA 90027.** For additional information contact (323) 669-4110.

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DuPont Pharmaceuticals will be the most exciting Company to work for on the planet. Ideas, outstanding performance and the growth and the caring of our people will be at the center of our value system. We will be a top-tier Company driven with a powerful R&D engine through customer-driven marketing innovation.

SENIOR RESEARCH SCIENTISTS

Ph.D. level scientist to lead an effort in designing and implementing high throughput assays. The individual will also be responsible for supervision of a cell culture group. The position requires a strong background in biochemistry and cell biology with an emphasis on assay development **Code: KO/S1294-1**

Ph.D. level scientist to lead an effort in designing new methods for high-throughput drug development. This position requires a background in biochemistry and cell biology with a strong emphasis on assay development. This person will be responsible for development and implementing a battery of secondary assays for compounds discovered in primary screening.

Code: KO/S1294-2

STAFF SCIENTISTS

We are seeking a motivated B.S./M.S. level scientist to join in our Molecular Biology Group. The successful candidate will join a diverse group of scientists using DNA microarrays and global gene expression profiling to dissect complex biological problems. Candidates should have a strong molecular biology and genomics background with 2+ years demonstrated experience in cDNA library construction and screening, PCR, and DNA sequencing. Experience with DNA sequence analysis and database search tools is highly desirable. **CODE: RH/S1294**

This position requires a scientist with a broad knowledge of fermentation/bioreactor processes for producing recombinant proteins in microbial, yeast, and preferably other expression systems (e.g. insect or mammalian) at the plate, tube and 1-60 litre scale. The successful candidate will have experience in maintaining and adjusting lab fermentors/bioreactors and familiarity with downstream processing is desirable. B.S./M.S. degree in Biology or related field is required along with at least 3 years of work experience in microbiology, fermentation, and/or large scale cell culturing. **CODE: SR/S1294**

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Head, New Model Evaluation Coordinator Induced Mutant Resource

The incumbent will be responsible for the evaluation and acquisition of new murine disease models at The Jackson Laboratory. This will include the scientific evaluation of new strains for the Induced Mutant Resource, the national repository for genetically engineered mice. Duties will include formulating committees to recommend and evaluate new strains, coordinating the activities of these committees, presenting potential new strains to an internal review committee, entering and reviewing database information and grant writing. The incumbent will be called upon to make public presentations and will have considerable contact with the scientific community. S/he will serve as a member of a broader Technology team within the Research Resources division of the Jackson Laboratory. A Ph.D. with a background in mouse genetics is required. Experience with transgenic or targeted mutant mice is preferred.

Please forward CV to: Human Resources, The Jackson Laboratory, 600 Main St., Bar Harbor, ME 04609; Email: jobs@jax.org
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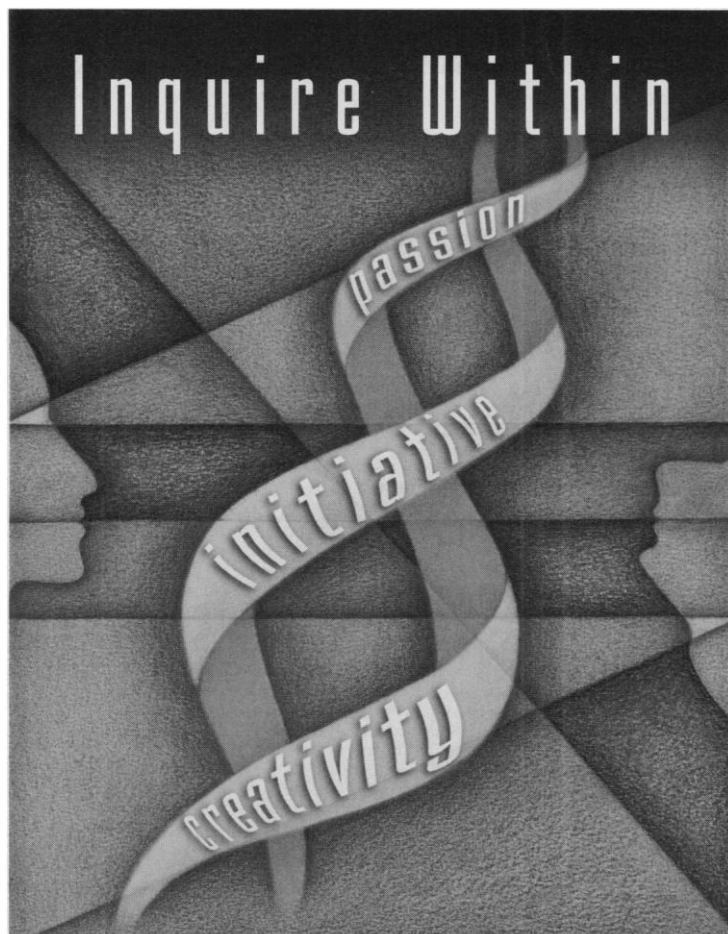
RESEARCH SCIENTIST

Working with a team that includes biochemical pharmacologists, molecular biologists, pharmacokinetic/drug metabolism experts and medicinal chemists, you will be involved in designing agonist and antagonist drugs. Requires a Ph.D. and 2 years postdoctoral/industry experience in biochemistry and molecular biology. We prefer background in cell culture and protein, DNA and RNA isolation, cloning and expression. Experience in studying gene regulation in response to drugs and second messenger signaling pathways is a plus.

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Postdoctoral Research Fellow, Tumor Biology

In this lead research position you will study genes which undergo amplification in primary tumors. You will have the opportunity to characterize amplicons, investigate the biochemistry of the encoded proteins and to pursue their potential roles in tumorigenesis (see D. Pennica et al., PNAS Dec. 1998). You should have a recent PhD in molecular biology, tumor biology, or related field, at least one first-author publication in a major journal, and preferably practical experience in the field of cancer genetics. Job Code SC0174

Postdoctoral Research Fellow, Angiogenesis

Investigate the role of integrins and disintegrins (ADAMS) in angiogenesis and inflammation. Studies will include the structural basis of integrin/ligand interactions and molecular mechanism of integrin mediated signaling. You should be capable of independently pursuing a research project and have experience in molecular and cell biology methods. A background in integrin biology would be useful (see Mol Bio Cell (1997) 8, 501-515; J Exp Med (1996) 183, 1247-52). Job Code SC1847

Postdoctoral Research Fellow, Endocrinology.

The focus of the position will be on the processes by which pancreatic beta cell development and differentiation occurs. We are identifying novel molecules that either couple receptors to the MAPK kinases, stimulate the proliferation of beta cell precursors or induce differentiation of precursors to mature insulin secreting beta cells. You must have a PhD in either cell or molecular biology and an interest in the molecular and cell biology of differentiation. Job Code SC2395

Postdoctoral Research Fellow, Neuroscience

Study development and regeneration of inner ear hair cells. We have established hair cell progenitor cultures (J. Neurosci., 1997, 17: 216-226), identified selective hair cell markers (J. Neurosci., 1997, 17: 8270-8282) and developed immortalized cell lines from the inner ear epithelium (Hear. Res., 1998, 117:13-23). We are interested in functions of specific genes during hair cell development (Development, 1998, 125:3935-3946; Mech. of Develop. 1998, 78:159-163) and discovery of novel growth factors that can stimulate hair cell differentiation/regeneration. Applicants should have a training background in molecular neurobiology, developmental biology or hearing research. Experience in tissue culture, in situ hybridization and RT-PCR would be useful. Job Code SC2948

Postdoctoral Research Fellow

Join the Departments of Bioorganic Chemistry and Immunology to explore novel strategies in protein design and small-molecule drug discovery. You must have a PhD in Chemistry or Biochemistry with emphasis in peptide and protein structural analysis. Experience in protein chemistry, biophysical chemistry, molecular biology, or peptide synthesis is desirable. Job Code SC0078

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POSITIONS OPEN

NICHOLAS CHAIR OF EARTH AND OCEAN SCIENCES DUKE UNIVERSITY

The Division of Earth and Ocean Sciences (EOS) of the Nicholas School of the Environment (NSOE) at Duke University invites applications for a distinguished, tenured, Full Professor appointment as a Nicholas Chair of Earth and Ocean Sciences. We are seeking an outstanding scientist with an established record of scholarly achievements in the earth and ocean sciences. We are particularly interested in scientists who work at a broad scale and examine the physical, chemical, or biological processes and exchanges that occur at the interfaces of the atmosphere, biosphere, hydrosphere, and lithosphere. Those with expertise in (i) climate studies on various time scales, (ii) coastal oceanography, (iii) biogeochemistry, and (iv) surficial processes are especially encouraged to apply. The successful candidate will be expected to continue to develop their existing research program, as well as play an appropriate role in educational programs within Duke University. We are also interested in candidates whose research interests will foster linkages within NSOE and with other elements of Duke University.

EOS currently includes 14 full-time faculty, and three faculty with secondary appointments from other academic units. This position is one of four Distinguished Nicholas Chairs to be appointed in the Nicholas School of the Environment and part of a series of faculty hires in EOS focusing on processes affecting the Earth's surface and oceanic realms.

Duke University offers a wide range of supporting facilities and resources, including computational equipment, analytical instrumentation, the Duke University Marine Laboratory, and the R/V Cape Hatteras (jointly operated by Duke and the University of North Carolina). Please see our website: <http://www.eos.duke.edu> for additional information.

Interested individuals should send a letter of interest and curriculum vitae to: **Chair, Nicholas Chair Search Committee, Division of Earth and Ocean Sciences, Box 90230, Duke University, Durham, NC 27708-0230.** The review of applicants will begin on February 1, 1999, and will continue until the position is filled. *Duke University is an Equal Opportunity/Affirmative Action Employer.*

The Children's Memorial Institute for Education and Research and the Department of Pediatrics of Northwestern University Medical School are looking for individuals to establish independent research laboratories within the Developmental Systems Biology Core Program as **FULL-TIME FACULTY MEMBERS.** Successful applicants will need the Ph.D. or M.D. degree or their equivalents. Rank and salary are negotiable. In order to ensure full consideration, application must be received by May 1, 1999. In order to apply for this position contact:

Philip M. Iannaccone, M.D., D.Phil.

George M. Eisenberg,

Professor of Developmental Pediatrics

Department of Pediatrics and the

**Children's Memorial Institute for Education
and Research**

Northwestern University Medical School and

Children's Memorial Hospital

2300 Children's Plaza #204

Chicago, IL 60614 USA

Telephone: 773-880-8236

FAX: 773-880-8266

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MICROBIOLOGIST. Ashland University seeks tenure-track **ASSISTANT PROFESSOR.** Ph.D. required; postdoctoral experience preferred. Candidate should have strong commitment to and experience in undergraduate teaching and a research program suitable for undergraduates. Position teaches courses in basic microbiology; also may teach in one or more of the following areas: immunology-serology, parasitology, biochemistry, forensics, histology-microtechniques, and introductory courses for both majors and non-majors. Opportunities exist for participation in environmental science and toxicology programs. Send application letter, curriculum vitae, transcripts, and three letters of recommendation to: **Chair, Microbiology Search Committee, Department of Biology/Toxicology, Ashland University, 401 College Avenue, Ashland, OH 44805.** Applications received by January 29, 1999, will be assured consideration. **Website:** www.ashland.edu. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

THREE ZOOLOGY FACULTY POSITION OPENINGS UNIVERSITY OF ALASKA ANCHORAGE

The Department of Biological Sciences seeks to fill three entry-level, tenure-track **ASSISTANT PROFESSORSHIPS** (salary approximately \$40,000 for nine months), beginning August 15, 1999. Two tripartite positions include research, teaching, and service components, and one bipartite consists of teaching and service. Minimum requirements for all positions include the Ph.D. in appropriate field, potential to offer high-quality instruction, commitment to undergraduate education, and ability to work well with others. Additional requirements of the tripartite positions include research experience, commitment to obtain extramural funding, and commitment to graduate education. The Department is research-oriented and offers Bachelor's and Master's degrees in a largely undergraduate institution, and provides instructional support to other programs including health sciences. The Department has modern laboratories; however, animal facilities are limited.

EVOLUTIONARY ECOLOGIST (PCN: 301295). Teaching duties, depending on expertise, may include general biology, comparative vertebrate anatomy, ecology, evolution, or course(s) in specialty area; preference given to applicants whose field research is applicable to Alaska.

PHYSIOLOGIST (PCN: 300320). Successful candidate will teach comparative animal physiology and general biology, as well as physiology courses in his/her area of expertise, and will develop a strong research program in vertebrate or invertebrate physiology at the cellular and/or molecular level. Research interests complementing existing departmental strengths in ion channel physiology and skeletal muscle development are particularly sought.

VERTEBRATE ANATOMIST/PHYSIOLOGIST (PCN: 301196). Teaching duties include multiple sections of human anatomy and physiology and an upper-level offering in comparative vertebrate anatomy or area of expertise. Responsibilities include lecture/laboratory coordination for human anatomy and physiology.

Information regarding positions is available through the address and website provided below. Review of applicants begins February 1, 1999, and continues until filled. Submit the following: letter of application with PCN designation; curriculum vitae; statements of teaching philosophy and experience, postdoctoral experience, and research goals; graduate transcript; reprints; other supporting documents; plus the names, addresses, and telephone numbers of three referees to: **Human Resource Services, University of Alaska Anchorage, 3211 Providence Drive, Anchorage, AK 99508-8136. Telephone: 907-786-4608; TTY: 907-786-1420; FAX: 907-786-4727; website: www.uaa.alaska.edu/uaahrs or www.uaa.alaska.edu/biohome/biology.**

Women and minorities are especially encouraged to apply. UAA is an Affirmative Action/Equal Opportunity Employer and Educational Institution. Applicants must be eligible for employment under the Immigration Reform and Control Act of 1986.

Wisconsin, La Crosse 54601. University of Wisconsin-La Crosse Department of Biology and Microbiology invites applications for an **AQUATIC SCIENTIST** at the level of **ASSISTANT PROFESSOR** (tenure-track, 100 percent, academic year) position. Must have a strong commitment to undergraduate education. Will teach courses in limnology and water quality analysis, develop a course in her/his area of expertise (phycology preferred), and participate in introductory biology courses. Ph.D. in a biological science is required. Experience with/knowledge of quality assurance procedures and Good Laboratory Practice (GLP) is desirable. Will be expected to develop an externally funded research program, direct undergraduate and graduate (M.S.) research, collaborate with environmental scientists at state and federal agencies in the La Crosse area, and be an active participant in the University's River Studies Center. Position contingent on funding. Salary competitive and commensurate with experience. Send letter of application, curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and three letters of recommendation to: **Dr. Thomas O. Clafin, Chair, Department of Biology and Microbiology, University of Wisconsin-La Crosse, 1725 State Street, La Crosse, WI 54601 by January 29, 1999. Starting date: August 30, 1999. Telephone: 608-785-8239 or 608-785-8238 (department office); FAX: 608-785-6959. Refer to recruitment #00BIO01. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

FACULTY OF PHARMACY UNIVERSITY OF TORONTO

Applications are sought for a full-time, tenure-track **ASSISTANT PROFESSOR** position in the Faculty of Pharmacy. Candidates with a background in medicinal chemistry are particularly encouraged to apply. The successful candidate is likely to be working in an area such as macromolecular chemistry, structural analysis of macromolecules, molecular modeling, transmembrane and intracellular signaling, and drug design. The selection will be based on excellence in teaching and on the quality and nature of recent and intended research. The successful candidate must establish an independent, externally funded research program, participate in the supervision of graduate students, and have a strong commitment to teaching undergraduate and graduate students.

The successful candidate must have a Ph.D. degree and relevant postdoctoral experience. Applicants will be considered by the Faculty, beginning February 1, 1999.

The University of Toronto and its affiliated institutions maintain a strong presence on the physical, biological, and medical sciences. Interdepartmental collaboration is encouraged and such activities are supported at the graduate level through cross-appointments, joint courses, and multidisciplinary programs.

Applicants should submit a curriculum vitae, reprints of important publications, an outline of future research interests, and arrange to have three letters of reference sent to: **Dr. K. Wayne Hindmarsh, Dean, Faculty of Pharmacy, University of Toronto, 19 Russell Street, Toronto, Ontario M5S 2S2 Canada. Telephone: 416-978-2880; FAX: 416-978-8511; e-mail: wayne.hindmarsh@utoronto.ca.**

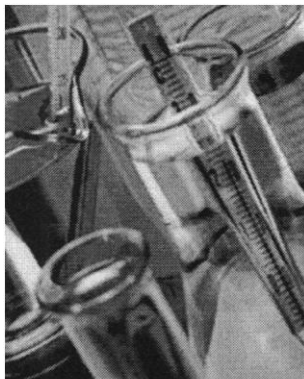
In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. In accordance with its Employment Equity Policy, The University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples, and persons with disability.

FACULTY POSITION DEPARTMENT OF MICROBIOLOGY-IMMUNOLOGY Northwestern University Medical School

Qualified candidates are sought for a full-time, tenure-track faculty position in the area of immunology or bacterial/fungal pathogenesis at the **ASSISTANT PROFESSOR** level. Candidates are expected to have completed appropriate postdoctoral training, and to be able to effectively develop an outstanding research program with extramural support. Northwestern University Medical School features interactive laboratories that study bacterial, viral, and protozoan pathogenesis and immune responses to infectious agents, in addition to numerous other aspects of immunity and autoimmune responses. There is a strong collaborative environment at Northwestern University Medical School that bridges traditional departmental lines. There are also very strong Ph.D. and M.D.-Ph.D. programs that attract excellent students and Postdoctoral Fellows. Applicants should send a statement of research goals, a complete curriculum vitae, and the names, addresses, telephone numbers, and e-mail of three references to: **Faculty Search, Department of Microbiology-Immunology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611-3008.** Applications will be reviewed upon receipt, and to ensure full consideration should be received by February 12, 1999. *Northwestern University Medical School is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply. Hiring is contingent upon eligibility to work in the United States. (P-125-99)*

ASSISTANT/ASSOCIATE PROFESSOR TOXICOLOGY

Tenure-track position beginning July 1999. A Ph.D. in toxicology or a related discipline is required. The candidates must be able to teach in the Doctor of pharmacy and toxicology graduate programs and must be in a strong position to establish an independent research program that will broaden the expertise of our toxicology program. Preference will be given to candidates who have either existing or approved extramurally funded research support. Application review will start in December 1998 and continue until the position is filled. Send curriculum vitae, names of three references, and a brief description of research interests to: **Dr. Z. A. Shaikh, Chair, Search Committee, Log# 161088, University of Rhode Island, P.O. Box G, Kingston, RI 02881.**



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PLANT BIOCHEMISTS

We seek highly motivated individuals to join our plant metabolic pathway engineering team. We are particularly interested in applicants with experience in protein chemistry, including purification and characterization of enzymes from plant and microbial sources. Candidates with strong analytical chemistry or biochemistry backgrounds, as well as those familiar with metabolic control mechanisms and/or experience in transgenic approaches to modification of plant metabolism are especially encouraged to apply. Positions are available at PhD, MS, and BS levels and require training in biological chemistry, molecular biology or allied fields; however, applicants with significant experience in related areas will also be considered. Position BIOCHEMISTS.

PLANT CELL BIOLOGISTS

The Seeds Transformation Group is expanding into new crops as well as expanding our efforts in maize transformation. Several positions are available at the BS, MS, and PhD level. Project leaders are needed to establish transformation programs in grain legumes and cucurbits. They will conduct plant transformation experiments, interact with breeders, prepare technical reports and give presentations to the Novartis vegetable business units. You are strongly encouraged to apply if you have successful experience in genetic transformation of common bean, peas, or watermelon in the last 3 years. The Maize Transformation Team is looking for scientists at all levels with experience in tissue culture and Agrobacterium-mediated transformation of monocots.

In addition, we need scientists with expertise in transgenic plant analysis. Candidates should be familiar with molecular biology techniques including PCR, Southern blot analysis, and flow cytometry. Position TRANSFORMATION.

RESEARCH ENTOMOLOGISTS

We have several openings for scientists to work with multidisciplinary research teams focused on the biology and control of insects using transgenic plants. We are looking for adaptable, innovative people with experience in artificial diet development, bioassay design and performance, data analysis, communication skills, and ability to work well in a team based research environment.

Successful candidates will have an M.S. or B.S./B.A. degree in Entomology with at least 2-3 years relevant experience in the areas of Homopteran, Thysanopteran, Lepidopteran, or Coleopteran biology, ecology, physiology or biological control. Position ENTOMOLOGISTS.

BUSINESS DEVELOPMENT ASSOCIATE IN BASEL, SWITZERLAND

Your role will be to ensure systematic and thorough evaluation of biotechnology licensing / acquisition opportunities, bringing together technology, IP and financial dimensions. You will develop thorough competitive analyses, identify & analyse areas for business development, and participate in specific task-forces regarding Agribusiness strategy. You must be an achiever and a good communicator with strong technical competence in biotechnology and an MBA. Industrial working experience and business experience (e.g. consulting, venture capital) are a 'plus'. Knowledge of European languages, agriculture or processing industries are desirable but not required. This position is based in Basel, Switzerland (German speaking area). Position BDAB.

Novartis Agribusiness Biotechnology Research, Inc. offers a competitive salary commensurate with qualifications and experience, a comprehensive benefits package, and an environment conducive to professional achievement. Qualified candidates should forward a resume and cover letter to: novartisbiotech@hiresystems.com. Indicate the Position ____ -SM-BRI in the subject area. To ensure that your information is uploaded into our HR System, please do not send your resume and cover letter as attachments. We are an Equal Opportunity Employer M/F/D/V.

For more information about Novartis, visit our website at: www.cp.us.novartis.com

For Job opportunities at Novartis visit: www.careermosaic.com Click on "Employers" and follow the alphabetized links to the Novartis site.

POSITIONS OPEN

DIRECTOR EXTRACELLULAR MATRIX RESEARCH GROUP

Department of Pathology
Louisiana State University
School of Medicine in Shreveport

The Extracellular Matrix Research Group within the Department of Pathology is seeking applicants for the position of Director of Research. This is a tenure-track appointment at the Associate or Full Professor level, depending on qualifications, and is open to individuals possessing either M.D., Ph.D., or M.D.-Ph.D. degrees. Applicants must have a track record of research excellence, current grant funding, and experience mentoring graduate students and Postdoctoral Fellows. The responsibilities of the position include the organization of departmental research activities and leading the development of multidisciplinary research endeavors. The successful candidate will have limited teaching/clinical responsibilities, primarily defined by their own personal interests and training.

The ideal candidate should have expertise in one of the following areas: cell adhesion and signaling, cell and molecular biology of extracellular matrix molecules, modulation of growth factor activity, or gene expression by matrix molecules, and/or vascular wall pathology.

Applicants should submit a curriculum vitae, list of at least three references, and a brief description of research interests and direction by February 1, 1999, to: **Guillermo A. Herrera, M.D., Professor and Chairman, Department of Pathology, Louisiana State University Medical Center in Shreveport, P.O. Box 33932, Shreveport, LA 71130.** *LSUMC is an Affirmative Action Employer.*

FACULTY POSITION AVAILABLE

The Department of Biological Sciences at Stanford University seeks applicants for a faculty appointment in the area of biochemical and/or biophysical approaches to study basic cell biological problems. We are primarily seeking candidates for a tenure-track **ASSISTANT PROFESSORSHIP**; however, outstanding candidates for appointment at the level of **ASSOCIATE** or **FULL PROFESSOR** will be considered. The successful applicant is expected to conduct a vigorous research program and to contribute to the teaching of graduate and undergraduate students.

Applicants should send a letter of application, curriculum vitae, bibliography, names of three references, and statements of research and teaching interests and teaching experience to:

Cell and Molecular Search Committee
Department of Biological Sciences
371 Serra Mall
Stanford University
Stanford, CA 94305-5020

To receive full consideration, materials should be received January 15, 1998. 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.*

Wisconsin, La Crosse, 54601. University of Wisconsin-La Crosse Department of Biology and Microbiology invites applications for a **CELL BIOLOGIST** at the level of **ASSISTANT PROFESSOR** (tenure-track, academic year, 100 percent appointment). Must have a strong commitment to undergraduate education in biology. Will be expected to teach an upper-level undergraduate course in cell biology and develop an upper-level undergraduate course in their area of specialty. Teaching duties may include other courses. Preference will be given to candidates with expertise in eukaryotic cell structure and function. They will be expected to develop an externally funded research program in their area of expertise for undergraduate and graduate (M.S.) students. Position is contingent on funding. Qualifications: Ph.D. in cell biology or related field. Salary is competitive and commensurate with experience. Submit letter of application, curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and three letters of recommendation to: **Dr. Thomas O. Clafin, Chair, Department of Biology and Microbiology, University of Wisconsin-La Crosse, 1725 State Street, La Crosse, WI 54601** by January 12, 1999. Starting date: August 30, 1999. Telephone: 608-785-8239 or 608-785-8238 (department office); FAX: 608-785-6959. Refer to recruitment #00BIO03. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

DUKE UNIVERSITY EYE CENTER

Duke University Eye Center seeks additional full-time **BASIC SCIENTIST FACULTY** and **POSTDOCTORAL FELLOWS** to join and interact with existing faculty. Minimum requirements for the positions are a Ph.D. or an M.D. Applicants must have or be capable of obtaining independent peer-reviewed research funding and are expected to establish or have outstanding vigorous research programs related to diseases of the eye. Academic title and salary are commensurate with credentials and past experience.

The existing research programs are disease-related and focus on glaucoma, as well as diseases of the cornea, retina, and lens. An Ophthalmic Genetics Center has research programs on corneal dystrophies, retinitis pigmentosa, glaucoma, age-related maculopathy, and other inherited disorders of the eye. Genetic research involves linkage studies, mutational analyses, pathobiological studies, experiments with transgenic animal models, and the development of methods for ocular gene therapy. Current research facilities are supported in part by a Core Grant for Vision Research from the National Eye Institute.

Successful candidates will have ample opportunity to interact with Investigators in a wide variety of disciplines at a highly ranked University where the Eye Center, Medical Center, and University are on the same campus. The University is close to the Research Triangle Park, which contains numerous Research Institutions that are supported by the private sector and federal government.

Applicants should submit a complete curriculum vitae, a description of research interests and career goals to: **Gordon K. Klintworth, M.D., Ph.D., Director of Research, Duke University Eye Center, Box 3802, Erwin Road, Durham, NC 27710.** The names of three references should also be provided with their addresses, telephone numbers, FAX numbers, and e-mail addresses. Inquiries regarding the positions can be submitted via e-mail: klint001@mc.duke.edu.

The deadline for receipt of the application is March 31, 1999. The Search Committee will start reviewing applications January 15, 1999, and will continue until the positions are filled.

Duke University is an Equal Employment Opportunity/Affirmative Action Employer and encourages applications from underrepresented groups, including minorities, women, and persons with disability.

MICROELECTROMECHANICAL SYSTEMS

The Whitaker Foundation has funded a program, Bioengineering Applications of Microfabrication, at the Department of Bioengineering of the University of Washington. The Department is recruiting a new tenure-track faculty member to greatly enhance its educational and research programs by incorporating into them the use of microfabrication techniques. Although the Department seeks individuals at the **ASSISTANT PROFESSOR** rank, an appointment may be made at the rank of **ASSOCIATE PROFESSOR** or **PROFESSOR** if the circumstances and qualifications of the individual warrant it.

The successful candidate will have a Doctorate in engineering or the physical sciences and experience in the use of microfabrication in one or more of the following fields: microelectromechanical systems (MEMS), microfluidics, micropatterning of surfaces, microensors, scanning probe microscopies, microactuators, microrobotics, or the use of microfabricated devices for electrical communication with biological tissue. In addition, the candidate will have some demonstrable past interest in biomedical research and intent to apply microtechnological expertise toward biomedical research in the future. The new faculty member will establish an active program of interdisciplinary research and innovative teaching in this area at both the graduate and undergraduate levels.

Scientists and Engineers applying for this position should provide evidence of excellence, originality, and productivity in research. Applicants should submit a statement of their objectives, a proposed initial research program, curriculum vitae, and the names and addresses of five references for this position to: **Professor Francis A. Spelman, Chair, Search Committee, Department of Bioengineering, Box 357962, University of Washington, Seattle, WA 98195 USA.** Applications must be received by February 15, 1999. Review of applications will begin March 1, 1999.

The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

IMMUNOLOGIST

The Department of Medical Microbiology and Immunology, University of Alberta, invites applications for a faculty position in immunology, at the **ASSISTANT** (\$40,638 to \$57,510 per annum) or **ASSOCIATE** (\$50,480 to \$72,152 per annum) **PROFESSOR** level. The position is an entry into the regular academic progression of the University, with the possibility of obtaining tenure. We offer an outstanding research environment and graduate training program in virology, bacteriology, and immunology (see website: www.ualberta.ca/~mmid/). We also offer state-of-the-art equipment and modern laboratory facilities. Applicants should have a proven record of research achievement and be competitive for external salary awards and research grants. The successful candidate will be expected to develop a dynamic research program and contribute to undergraduate and graduate teaching in immunology. An attractive start-up package, including three years of initial salary support, will be provided. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered.* Individuals with a Ph.D. or M.D. and appropriate postdoctoral experience should send a curriculum vitae, a brief description of research plans, and arrange to have three to five letters of reference sent on their behalf to: **Immunology Search Committee, c/o Dr. James R. Smiley, Chair, Medical Microbiology and Immunology, 1-41 Medical Sciences Building, University of Alberta, Edmonton, Alberta T6G 2H1 Canada.** The deadline for receipt of applications is January 31, 1999. *The University of Alberta is committed to the principle of Equity in Employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disability, and members of visible minorities.*

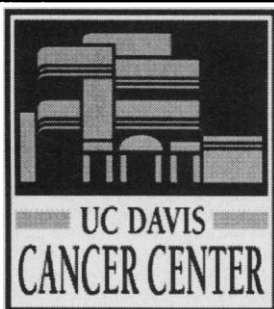
MEDICAL UNIVERSITY OF SOUTH CAROLINA

ASSISTANT PROFESSOR. The Division of Pediatric Cardiology and Department of Cell Biology and Anatomy invite applications for a tenure-track faculty position. Applicants must have a Ph.D. and/or M.D. degree with at least two years of postdoctoral research experience. Applications in any area of human or mouse molecular genetics will be considered, but we are particularly interested in candidates with experience in human molecular genetics of cardiovascular disease. The candidate is expected to participate in and successfully compete for extramural grant support involving the genetics of cardiovascular malformations. A significant start-up package will be provided. Candidates should initially provide a statement of interest and qualifications, a summary of research objectives, a curriculum vitae, and the names, addresses, and telephone numbers of at least three references. Application deadline is December 31, 1998.

All information should be addressed and sent directly to: **Dr. Woodrow Benson, M.D., Ph.D., Director of Cardiovascular Genetics, The Children's Heart Center of South Carolina, Medical University of South Carolina, P.O. Box 250915, 165 Ashley Avenue, Charleston, SC 29425.**

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

FACULTY POSITION. The Department of Physiology of the College of Medical Sciences at Nova Southeastern University invites applications for a position at the **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** level. The candidate's responsibilities will include participation in team-taught human physiology courses to health profession students, scholarship, and service. Individuals with teaching experience in human physiology at the medical school level will be given special consideration. The College of Medical Sciences is located in the new Health Professions Division facility on the Ft. Lauderdale campus. Salaries are competitive and dependent on qualifications; fringe benefits are generous and include 100 percent tuition waiver. The start date for the position is July 1, 1999, pending approval of the Board of Trustees. Please send a letter of intent stating position desired, curriculum vitae, copies of graduate transcripts, and the names, addresses, and telephone numbers of three professional references to: **Nova Southeastern University, Human Resources Department (HLF), 3301 College Avenue, Ft. Lauderdale, FL 33313.** Website: www.nova.edu. *Affirmative Action/Equal Opportunity Employer. A smoke-free campus.*



SENIOR AND JUNIOR FACULTY POSITIONS IN SIGNAL TRANSDUCTION

The University of California, Davis Cancer Center invites applications for tenure-track, State-funded faculty positions. The Cancer Center is committed to developing an outstanding signal transduction program to interact with a campus exceptionally strong in the biological sciences. Preference will be given to scientists working in the area of signal pathways related to processes such as cell adhesion, cell cycle, hormone regulation, chromatin remodeling, angiogenesis, metastasis, or viral oncogenesis.

Applicants at the assistant professor level should demonstrate outstanding research potential and will be expected to develop a robust, independently funded research program.

Appointments at associate/full professor levels require evidence of distinguished research accomplishments including stable extramural funding, national recognition, and well-documented productivity. S/he is expected to provide leadership at the Cancer Center and to the cancer research program.

We will offer successful candidates new laboratory facilities and equipment, substantial start-up funds, and excellent research support. The Cancer Center provides a growing, dynamic research milieu. The University of California, Davis affords a collaborative, interdisciplinary research culture spanning basic science, translational research, clinical research, and comparative medicine.

Applicants should submit curriculum vitae with a complete list of publications, summary of research interests and future plans, and the names of three references to **Hsing-Jien Kung, Ph.D., Director of Basic Science, Chair, STF Search Committee, UC Davis Cancer Center, Room 3003, 4501 X Street, Sacramento, CA 95817**. Applicants are encouraged to apply by March 1, 1999, although applications will be considered until April 30, 1999. *The University is an Affirmative Action, Equal Opportunity Employer.*

MIT Media Laboratory

Two Tenure Track Faculty Positions

The Media Laboratory is seeking two faculty with records of world-class creative talent, communication skill and productivity. Candidates should have demonstrated expertise in the study of interaction, expression, communication or learning and the development of technologies related to these areas. Of particular interest are human and machine learning, common sense reasoning, auditory and visual perception, design and graphics. Applicants should have a Ph.D. degree or equivalent.

Responsibilities include teaching (graduate and undergraduate), research and supervision of graduate students. Appointments will be principally at the Assistant Professor level.

Qualified candidates should submit a resume, representative materials or portfolio, the names of three references and a concise summary of their teaching and research interests by Monday, March 1, 1999 to: **Faculty Search Committee, MIT Media Laboratory, E15-218, 20 Ames Street, Cambridge, MA 02139-4307**. Inquiries should be sent to: search@media.mit.edu. For additional information about the Laboratory, see our web pages: <http://www.media.mit.edu>

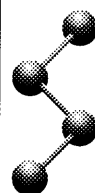
MIT is a non-smoking environment.

**Massachusetts Institute
of Technology**

Qualified women and minority candidates are encouraged to apply. MIT is an equal opportunity/affirmative action employer.

ANNOUNCEMENT

FALL 1999 Ph.D. PROGRAMS



T H E

S C R I P P S

R E S E A R C H

I N S T I T U T E

- Chemistry Program
- Macromolecular & Cellular Structure & Chemistry Program

The Scripps Research Institute will admit highly qualified students in the Fall of 1999 to two Ph.D. Programs: one integrating cell and molecular biology with structure and chemistry, and the other in chemistry.

Graduate studies at Scripps provide an exceptional training opportunity in a uniquely multidisciplinary environment with an emphasis on individualized training for each student.

Candidates must have a bachelor's degree and a strong background in biology and/or chemistry. Qualified applicants will be invited to visit the Institute. Financial support will be provided to all accepted students.

Since its establishment in 1961, the Institute has gained international recognition for its basic research in molecular biology, immunology, chemistry, neurosciences, cell biology, and plant biology.

Individuals interested in applying to either program should contact the Office of Graduate Studies for a brochure and application due by January 1, 1999: **The Scripps Research Institute, Office of Graduate Studies, 10550 North Torrey Pines Road, La Jolla, CA 92037**. Tel: (619) 784-8469. Internet: <http://www.scripps.edu>.

The graduate programs are accredited by the Western Association of Schools and Colleges. TSRI is an equal opportunity institution.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY TENURE-TRACK, FALL 1999

Ramapo College, a public, barrier-free institution offering Baccalaureate and selected Master's degrees, approximately 25 miles from New York City, is committed to global education. On-site child care is available.

We are seeking a broadly trained Biologist to teach courses in cell and molecular biology and in microbiology to undergraduates. Teaching assignments may include genetics and introductory biology courses for majors and non-majors, as well as supervision of student research. Must be willing to provide students with academic and career advice and to participate in committee and other types of governance meetings. Must engage in professional development appropriate for faculty at an undergraduate college. Required: Ph.D., college teaching experience in relevant field, and computer literacy.

Since its beginning, Ramapo College has had an intercultural/international mission. Please tell us how your background, interest, and experience can contribute to this mission, as well as to the specific position for which you are applying. To request accommodations, **Telephone: 201-684-7734**. Applications accepted until position is filled. Send letter of application, current curriculum vitae, statement of teaching philosophy and research, and the names of three references to:

Professor Edward I. Saiff, Ph.D., Biology
Ramapo College of New Jersey
Department 25
505 Ramapo Valley Road
Mahwah, NJ 07430

"New Jersey's Public Liberal Arts College."

Ramapo College is a member of the Council of Public Liberal Arts Colleges (COPLAC), a national alliance of leading liberal arts colleges in the public sector.

Equal Employment Opportunity/Affirmative Action.

ENVIRONMENTAL SCIENCES

Rutgers—The State University of New Jersey

ENVIRONMENTAL SCIENTIST/CHEMIST.

The Department of Environmental Sciences, Rutgers—The State University of New Jersey, invites applications for a tenure-track position at the rank of **ASSISTANT PROFESSOR** in the area of environmental, aquatic, and/or atmospheric chemistry. The appointment carries the responsibility to teach at both the undergraduate and graduate level and to develop a well-funded and nationally recognized research program. An earned Ph.D. at the time of appointment in environmental chemistry, engineering, or equivalent is required; postdoctoral experience is desirable. Applications should include a statement of research and teaching interests, a curriculum vitae, and names, addresses (including electronic) and telephone numbers of three to five references to: **Chair, Environmental Chemistry Search Committee, Department of Environmental Sciences, 14 College Farm Road, Rutgers University, New Brunswick, NJ 08901-8551**. Electronic submission of all requested material to e-mail: **chair@envsci.rutgers.edu** is preferred. Review of applications will begin January 1, 1999, and continue until the position is filled. For more information on the department, consult our website: <http://www.envsci.rutgers.edu>.

Rutgers University is an Equal Opportunity/Affirmative Action Employer.

CELL BIOLOGY/MOLECULAR BIOLOGY

The Biology Department at Queens College of The City University of New York seeks a tenure-track **ASSISTANT or ASSOCIATE PROFESSOR**, beginning September 1999. We seek a candidate with a Doctoral degree, postdoctoral experience, and a record of research achievement in the areas of cell biology and/or molecular biology. Established record of funded research projects is highly desirable and is expected for appointment as Associate Professor. Responsibilities will include establishment of an active research program and teaching at the undergraduate and M.A.-Ph.D. level. Salary range: Assistant Professor: \$32,062 to \$55,930, Associate Professor: \$41,780 to \$66,837. Send letter detailing research interests/future plans, curriculum vitae, and arrange for submission of three letters of recommendation. Complete applications, including letters of recommendation, must be received by March 1, 1999. Send to: **Dr. Corinne A. Michels, Chair, Search Committee, Department of Biology, Queens College of CUNY, Flushing, NY 11367-1597**.

POSITIONS OPEN

MICROBIOLOGIST. Eukaryotic or prokaryotic. Tenure-track **ASSISTANT PROFESSOR** of biology. Ph.D. and an ability to teach in content areas of microbiology at both the undergraduate and graduate levels is required. Primary teaching assignments will be in content areas of microbial genetics, introductory microbiology, and in the area of candidate's specialization. The candidate should be qualified to rotate into biology major core curriculum courses, such as introductory biology, cellular biology, genetics, and/or general education courses. Exact course assignments will depend on the candidate's qualifications and the needs of the department. The department has a biotechnology certificate program to which the successful candidate would be expected to contribute. Preference will be given to individuals with interests and research experience in virology or medical microbiology. The successful candidate must develop a research program involving undergraduate and graduate M.S. students and must seek extramural funding for their research. Teaching experience and recent research experience preferred. Appointment begins August 1999.

TERRESTRIAL PLANT ECOLOGIST. Tenure-track **ASSISTANT PROFESSOR** of biology. Ph.D. and an ability to teach in content areas of terrestrial ecology at both the undergraduate and graduate levels is required. Primary teaching responsibilities will include terrestrial plant ecology, general ecology, and graduate-level courses in the candidate's area of specialization. The successful candidate is expected to participate in the department's major core curriculum courses and/or general education courses, direct a wide range of plant ecology Master's degree projects, interact with state and federal agencies, and must seek extramural research funding. Additional assignments will depend upon the individual's area of interest/qualifications and the needs of the department. Other assignments could include courses in evolution, conservation genetics, plant taxonomy, or biometry. Teaching experience and recent research experience preferred. Appointment begins August 1999.

Request an official application and send curriculum vitae, including an e-mail address if available, three letters of reference, transcripts, and statements of both teaching interests/philosophy and research interests should be sent to: **Dr. Thomas E. Mallory, Chair, Department of Biology, California State University, Fresno, School of Natural Sciences, 2555 East San Ramon Avenue SB M/S 73, Fresno, CA 93740-8034. E-mail: tom_mallory@csufresno.edu; FAX: 559-278-3963; website: <http://erasmuc.biol.csufresno.edu>**. For fullest consideration, have application in by February 5, 1999.

Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR. Food safety microbiology. In the Department of Food Science and Technology, University of California, Davis, teaching food microbiology; advising; directing graduate students (M.S. and Ph.D.); working with campus Food Microbiologists and other scientists on program development; and developing a research program in microbial food safety. The specific research program will depend on the expertise and interests of the candidate. Requires a Ph.D. in microbiology or related field and ability and desire to develop a research program in food safety microbiology. The position is 45 percent teaching, 55 percent research. It is a nine-month, tenure-track appointment; 11-month-term employment to be offered and continued based on academic personnel review. Send statement of research and teaching interests, curriculum vitae, transcripts, list of publications and research support, and names, addresses, and telephone numbers of at least four professional references to: **David M. Ogrzydzak, Search Committee Chair, Department of Food Science and Technology, University of California, Davis, Davis, CA 95616-8598. Telephone: 530-752-8079; FAX: 530-752-4759**. Position open until filled. To assure consideration, applications should be received by January 4, 1999. The position is available beginning July 1, 1999. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

BIOLOGY FACULTY POSITION

Calvin College seeks a **MICROBIOLOGIST** (tenure-track) beginning January 2000. Applicants must be capable of teaching general microbiology and have research interests involving undergraduates. Calvin College is a liberal arts college in the Reformed tradition of Protestant Christianity. Application deadline is February 1, 1999. Please contact: **Uko Zylstra, Biology Department, Chair, Calvin College, Grand Rapids, MI 49546. E-mail: zylu@calvin.edu; Telephone: 616-957-6499**.

POSITIONS OPEN

The Department of Biological Sciences at The University of Alabama invites applications for two tenure-track **ASSISTANT PROFESSOR** positions to begin August 1999. (1) **DEVELOPMENTAL/CELL BIOLOGIST** using genetic and molecular approaches to investigate cell signaling mechanisms. Responsibilities include teaching undergraduate and graduate courses in area of expertise and designing and implementing an undergraduate, discovery-based integrated genetics course. This position and course are supported by a grant from the Howard Hughes Medical Institute Undergraduate Biological Sciences Education Program. (2) **EVOLUTIONARY/POPULATION BIOLOGIST** exploring mechanisms of evolutionary processes. Teaching includes undergraduate and graduate courses in area of specialty and participation in an introductory, organismal-based course for majors emphasizing comparative biological processes. Candidates, who must have a Ph.D. and postdoctoral experience, should complement departmental research foci in aquatic biology and developmental genetics. Appointees will be expected to develop active, externally funded research programs and to work closely with undergraduate and graduate students as advisors and directors of research. We are especially seeking individuals interested in exploring innovative instructional methods and in vigorously interacting with our growing interdisciplinary research groups, such as the Coalition for Biomolecular Products and the Center for Freshwater Studies. Each application should include a curriculum vitae, a letter of application indicating teaching philosophy and research goals, and at least three letters of reference sent to: **Search Committee, Department of Biological Sciences, Box 870344, The University of Alabama, Tuscaloosa, AL 35487**. Review of applications begins January 18, 1999, and continues until positions are filled. For more information visit our website: <http://www.as.ua.edu/biology/>. *Equal Opportunity/Affirmative Action Employer.*

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.*

COMPUTATIONAL NEUROSCIENTIST. The Neuroscience and Cognitive Science Program at The University of Maryland ([website: www.life.umd.edu/nacs](http://www.life.umd.edu/nacs)) seeks tenure-track faculty. Areas of research include sensory and motor physiology, analysis of control systems, or cognitive neuroscience. A wide range of techniques can be supported, from neural network modeling to brain mapping/imaging/EEG. Candidates who integrate theoretical with experimental research are preferred. Tenure will be held in the Departments of Psychology or Kinesiology. Teaching duties include a graduate course in computational neuroscience and undergraduate course(s). For appointment in psychology, the rank will be **ASSISTANT PROFESSOR**. For kinesiology, **RANK IS OPEN**. For best consideration send, before February 1, 1999, a curriculum vitae, addresses (including e-mails) of three references, copies of publications, and statements of both research (documenting any previous extramural funding) and teaching interests to: **Dr. Richard Payne, Neuroscience and Cognitive Science Search, 2239 Zoology/Psychology Building, University of Maryland, College Park, MD 20742**. *Women and minorities are strongly encouraged to apply. The University of Maryland is an Equal Opportunity/Affirmative Action Employer.*

COLD SPRING HARBOR LABORATORY • SCHOOL OF BIOLOGICAL SCIENCES



A New and Innovative Ph.D. Program

Cold Spring Harbor Laboratory announces a new Ph.D. program in the biological sciences to start in September 1999. An innovative Ph.D. curriculum takes advantage of the unique environment and extensive resources of Cold Spring Harbor Laboratory and includes the following features:

- a four-year program
- a first year with course work and laboratory rotations in separate phases
- continued advanced course instruction
- emphasis on scientific logic and reasoning
- a two-tier mentoring program

The training each student receives is designed to produce Ph.D. graduates who think critically and independently, and who communicate clearly and effectively.

A Varied Research Environment

The Laboratory's fields of research expertise include cancer biology, neurobiology, plant biology, molecular and cell biology, genetics, developmental biology, structural biology, virology, protein chemistry, cell cycle regulation, electrophysiology, behavior, imaging, bioinformatics, and genomics.

Student Support

The School of Biological Sciences will provide students with free tuition, a stipend, health insurance, subsidized housing, and research support. Students from around the world are encouraged to apply; we particularly welcome applicants from underrepresented minorities.

WHY COLD SPRING HARBOR LABORATORY?

- A tradition of excellence
- A world leader in biological research
- A global meeting place for scientists
- An innovative four-year Ph.D. program designed for exceptional students

How to Apply

Application forms and information about the program and its faculty are available from:

School of Biological Sciences
Cold Spring Harbor Laboratory
One Bungtown Road
Cold Spring Harbor, NY 11724, USA.
Tel. 516-367-6890, Fax: 516-367-6919
e-mail: gradschool@cshl.org.

Also visit our Web site at: www.cshl.org/gradschool.
The deadline for receipt of completed applications is **February 1, 1999**; late applications may be considered.

A GRADUATE SCHOOL UNLIKE ANY OTHER

...AT A PLACE UNLIKE ANY OTHER



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.

FRAMINGHAM STATE COLLEGE

ASSISTANT PROFESSOR, BOTANY

The Biology Department at Framingham State College seeks applicants for a tenure-track position as Assistant Professor for the Fall semester 1999. The successful applicant will be a broadly trained biologist with expertise in vascular plant biology. Teaching responsibilities will include vascular plant taxonomy, other advanced courses in the candidate's speciality (plant physiology preferred), participation in general biology courses for majors and non-majors, and supervision of undergraduate research. Minimum qualifications include a Ph.D. in a relevant field of biology and teaching experience. Ability to supervise student teachers (secondary school) preferred.

Please send CV, Transcripts, statement of research and teaching interests, and the names of three references by January 4, 1999 to: **Dr. Richard Beckwitt, Chair, Biology Department, Framingham State College, P.O. Box 9101, Framingham, MA 01701-9101.**



Framingham State College is an Affirmative Action/Equal Opportunity Employer. Applications are especially invited and encouraged from women, people of color and persons with disabilities.

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Headquartered in Cambridge, Massachusetts, EPIX Medical, Inc. is a leader in the development of targeted injectable imaging agents which facilitate the detection of disease by Magnetic Resonance Imaging. The research environment at EPIX is highly interdisciplinary and is supported by state-of-the-art instrumentation. We have the following opportunity available in our research team:

Cellular Biologist

You will be required to expand on the current in vitro toxicology (and pharmacology) program to study the cellular effects of new chemical entities and organo-metallic complexes. The successful candidate should have at least 3 years of working experience developing assays in one or more of the following areas: cell/tissue culture; ELISA/RIA; and enzymatic activity. The position involves working with biohazard materials and radioisotopes. ABT certification and previous supervisory experience a definite plus. A Ph.D. degree in cell biology (or a related discipline) and 3 or more years of postdoctoral research experience in an area of in vitro toxicology is required. Strong interpersonal and communication skills are essential. Job Code CB.

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POSITIONS OPEN

The Department of Ophthalmology at the University of Oklahoma Health Sciences Center (OUHSC) invites applications for a 12-month tenure-track position at the **ASSISTANT to ASSOCIATE PROFESSOR** level. Special consideration will be given to individuals with expertise that complements the activities of members of the Molecular Pathogenesis of Eye Infection Research Center ([website: http://w3.uohsc.edu/MPEIR/](http://w3.uohsc.edu/MPEIR/)); however, outstanding scientists in all areas of vision research are encouraged to apply. A Ph.D. or equivalent degree with at least two years of postdoctoral training are required. The successful candidate will be expected to develop a robust, extramurally funded research program in their area of study. Limited teaching responsibilities include participation in resident training, and additional limited responsibilities that may be assumed through potential joint appointments in a basic science department. The Department of Ophthalmology has one of the most rapidly growing research programs on the rapidly expanding OUHSC campus ([website: http://www.uohsc.edu](http://www.uohsc.edu)).

Submit a curriculum vitae, description of research interests and teaching experience, and names of three references to: **Michael S. Gilmore, Ph.D., Chair of the Search Committee, Department of Ophthalmology, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190.** Applications will be reviewed beginning January 15, 1999, until the position is filled. *The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer. Applications from women and ethnic minorities are strongly encouraged.*

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](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.*

Biochemistry. Berea College invites applications for a tenure-track position in biochemistry. Applicants should have a Ph.D. in biochemistry and an interest in developing a biochemistry laboratory program. The appointment will begin in the fall of 1999 and will be at the **ASSISTANT PROFESSOR** level. In addition to teaching biochemistry, responsibilities will include other areas of chemistry and participation in the College's General Studies program. Applicants must have a strong desire to provide research experiences for undergraduates. Commitment to the purposes of the College and to superior teaching at the undergraduate level is essential. Applicants should submit a letter of application in addition to a statement of teaching philosophy, a description of future research plans, curriculum vitae, undergraduate and graduate transcripts, and three letters of recommendation by January 31, 1999, to: **Dr. Lee Roecker, Chair, Department of Chemistry, CPO 1642, Berea College, Berea, KY 40404.** *In keeping with the College's inclusive Christian tradition and its emphasis on the dignity and worth of all people, Berea embraces and values diversity through encouragement of applications from women and members of minority groups.*

Fitchburg State College. **ASSISTANT PROFESSOR.** Genetics. Tenure-track, begins September 1, 1999. Teach general biology, introduction to genetics, electives in area of expertise, life science for non-majors, supervise independent studies; committee work; undergraduate academic advising. Requires Doctoral degree. Application review begins late January 1999. Questions: **Chair, e-mail: rzottoli@fsc.edu.** Send letter of application, résumé, and statement of teaching philosophy to: **Human Resources Department, Fitchburg State College, 160 Pearl Street, Fitchburg, MA 01420.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF MICROBIOLOGY THE UNIVERSITY OF IOWA Bacterial Pathogenesis

The Department of Microbiology at The University of Iowa is seeking applicants for a tenure-track faculty position at the Assistant or Associate Professor level in the research area of bacterial pathogenesis. Investigators with interests in the bacterial inflammatory response and/or intracellular mechanisms of infection are encouraged to apply. The Department of Microbiology consists of faculty with research efforts in diverse areas, including bacterial pathogenesis, bacterial physiology and genetics, immunology, and virology. Applicants should possess a Ph.D. or M.D. and have several years of postdoctoral experience. The successful candidate will have a record of productivity and peer-reviewed publications and the potential to develop a strong extramurally funded research program. The selected applicant will participate in graduate, undergraduate, and health professions teaching of microbiology. Competitive salary and start-up funds will be provided. Applicants should submit a current curriculum vitae, statement of research plans, and names of three references to:

**Dr. Brad Jones
Chair, Search Committee (F1653)
Department of Microbiology
University of Iowa College of Medicine
Iowa City, IA 52252-1109**

For best consideration, please send materials by February 15, 1999. *The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and minorities are strongly encouraged to apply.*

The Department of Psychology at The University of Pennsylvania intends to hire a tenure-track **ASSISTANT PROFESSOR** in the area of behavioral neuroscience. We are especially interested in individuals whose research integrates behavioral and systems neurobiological approaches in animal models. Research areas of particular interest include, but are not limited to, neural mechanisms of sensory perception, learning and memory, neural plasticity, the control of motor systems, appetitive behavior, addiction, emotion, and stress. In addition to assessment of behavior, research methodology may include electrophysiology, molecular biology, genetics, or pharmacology. The successful applicant must demonstrate the capacity to establish a vigorous research program and a commitment to both graduate and undergraduate education. Please provide a curriculum vitae including the names and addresses (including e-mail, FAX, and telephone) of four references, and a statement of research and teaching interests. Send materials to: **Behavioral Neuroscience Search, Department of Psychology, University of Pennsylvania, 3815 Walnut Street, Philadelphia, PA 19104** by January 1, 1999. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. The University of Wisconsin—River Falls invites applicants for a tenure-track position beginning August 1999. The successful applicant will teach weed science, plant biotechnology, plant physiology, and integrated pest management. Applicants must have a Ph.D. in agronomy or closely related area with emphasis in weed science or other area of pest management and a strong background in plant biotechnology and physiology. Submit a résumé and letter of interest specifying area(s) of teaching interest, qualifications, statement of experience, including ability to contribute to the enhancement of student awareness and appreciation of diverse cultures. Include an unofficial transcript and the names, addresses, and telephone numbers of at least three professional references by January 15, 1999, to: **Dr. Dennis R. Cosgrove, Search and Screen Committee, Plant and Earth Science Department, University of Wisconsin—River Falls, 410 South Third Street, River Falls, WI 54022.** E-mail: dennis.r.cosgrove@uwrf.edu; [website: www.uwrf.edu](http://www.uwrf.edu). *The University of Wisconsin—River Falls is an Equal Opportunity/Affirmative Action Employer.*

BOTANIST/ARBORETUM DIRECTOR. Hillsdale College seeks full-time, tenure-track **ASSISTANT PROFESSOR** of biology, for fall 1999. Requires strong commitment to teaching in a small liberal arts college, and ability to interact with a variety of people and colleagues. Prefer a Ph.D. in botany or horticulture with related experience. Send letter of application, three letters of reference, and curriculum vitae to: **Dr. Donald Toczek, Biology Department, Hillsdale College, Hillsdale, MI 49242.** Deadline February 26, 1999. *Equal Opportunity Employer.*

POSITIONS OPEN

PLANT PHYSIOLOGIST SOUTHERN ILLINOIS UNIVERSITY CARBONDALE Department of Plant Biology

Applications are invited for a tenure-track position as an **ASSISTANT PROFESSOR** in the Department of Plant Biology. We are seeking a broadly trained individual who utilizes one or more combinations of traditional, genetic, biochemical, and molecular techniques to investigate fundamental problems in plant physiology. Candidates must have a Ph.D. in plant biology/botany or related field (by August 15, 1999) and a strong record of research accomplishments. Postdoctoral research experience, previous teaching experience, and evidence of grantsmanship are preferred. Teaching responsibilities may include CORE plant biology/biology, introductory and advanced plant physiology, and graduate seminar courses. The candidate is expected to develop a strong, externally funded research/graduate program. Information about the Department can be found at [website: http://www.science.siu.edu/plant-biology/index.html](http://www.science.siu.edu/plant-biology/index.html). Submit curriculum vitae, graduate transcripts, detailed statement of teaching and research interests; representative publications; and names, telephone numbers, and e-mail addresses of three references to: **Dr. Andrew J. Wood, Chair, Plant Biology Physiology Search Committee, Department of Plant Biology, Southern Illinois University, Carbondale, IL 62901-6509.** The Search Committee will begin deliberations on January 15, 1999. *Southern Illinois University Carbondale is an Affirmative Action/Equal Opportunity Employer.*

LECTURER IN BIOLOGY EMORY UNIVERSITY

The Department of Biology, Emory University, seeks applicants with a Ph.D. for a non-tenure-track position of Lecturer for the fall semester 1999. The appointment will be made for a period of three years with the possibility of renewal for an additional three years. The primary responsibility of the position is teaching undergraduate ecology and introductory biology courses as well as participating in advising students. It is expected that the Lecturer will contribute to the academic life of the department and the university through faculty committees and other forms of academic service. Please send a curriculum vitae, a detailed statement of your teaching philosophy and the subject areas you would be qualified to teach, and three letters of recommendation to: **Lecturer Search, Department of Biology, Emory University, Atlanta, GA 30322.** Evaluation of candidates will begin on January 4, 1999, and will proceed until the position is filled. *Emory is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

ASSISTANT/ASSOCIATE PROFESSOR OF BIOCHEMISTRY

The Morehouse School of Medicine seeks an excellent and experienced Teacher and Researcher for the biochemistry program. Rank will be based on background and experience. The successful candidate will teach in the team-taught medical biochemistry course for first-year medical students. Preference will be given to individuals whose research complements areas of current investigation, which includes neurosciences, cardiovascular, space biology, cancer, infectious disease/HIV, and disorders that disproportionately affect minority populations. Send a letter of interest describing teaching experience and a summary of research plans and interests, curriculum vitae, and names and addresses of three references to: **Dr. Martha L. Elks, M.D., Ph.D., Associate Dean for Educational Affairs, Morehouse School of Medicine, 720 Westview Drive S.W., Atlanta, GA 30310-1495.** Anticipated appointment July 1, 1999. *Morehouse School of Medicine is an Equal Opportunity Employer and women and minorities are especially encouraged to apply.*

Tenure-track, twelve-month, animal physiology. **ASSISTANT PROFESSOR.** Department of Animal Science, University of Minnesota. Responsibilities: teach undergraduate reproductive physiology; initiate graduate course in area of expertise; develop independent reproductive physiology research program emphasizing cell signaling. Requirements: Ph.D.; postdoctoral experience; ability to communicate effectively. Contact: **Dr. William Dayton, Department of Animal Science, Room 305 Haecker Hall, 1364 Eckles Avenue, St. Paul, MN 55108.** [Website: http://www.animal.agri.umn.edu/](http://www.animal.agri.umn.edu/). Application deadline is February 15, 1999. *The University of Minnesota is an Equal Opportunity Employer.*

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Gilead is an independent biopharmaceutical company that seeks to provide accelerated treatment solutions for patients and the people who care for them. We discover, develop and commercialize proprietary therapeutics for important viral diseases. We currently have the following opportunities available in the San Francisco Bay Area.

RESEARCH SCIENTIST

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Develop molecular and cellular assays adaptable to high-throughput screening format to help identify/optimize novel lead compounds to treat viral/bacterial infections. Requires PhD in Biochemistry, Molecular Biology, Cell Biology, or Microbiology with 2+ years drug discovery experience. Experience with automated screening a plus. Job Number: SCI-046

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Medicinal Chemistry

Design and synthesize novel organic molecules with potential biological activity. Master's or PhD in Synthetic Organic Chemistry with experience in multi-step organic synthesis and current spectroscopic techniques required. Job Number: SCI-047

RESEARCH SCIENTIST

Structural Chemistry

Perform small molecule modeling and quantitative structure activity relationship analysis for our Medicinal Chemistry group. Requires PhD and 3+ years related experience, including knowledge of conformational analysis of small molecule, QSAR techniques, and statistical analysis. Job Number: SCI-050

RESEARCH SCIENTIST

Research

Identify/characterize membrane transport proteins in kidney and other human tissues involved in the absorption/excretion of therapeutics with subsequent development of specific inhibitors. PhD in Molecular/Cell Biology, Biochemistry or Physiology and 2 years post-doctoral experience in membrane protein research required. Job Number: SCI-165

RESEARCH SCIENTIST

Drug Delivery & Metabolism

Support clinical pharmacokinetic studies, including management of external contracts for clinical sample analysis, transfer of bioanalytical technology, pharmacokinetic analysis of clinical data, and generation of reports for regulatory filing. Requires a related degree in Pharmaceutical Sciences, Biochemistry, or Analytical Chemistry and 4-6 years directly related industrial experience. Job Number: SCI-125

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For more details on these opportunities, our current programs, and our unique corporate culture, we invite you to visit our website. Interested candidates may also send a resume, indicating the appropriate Job Number, to: Human Resources, Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404, fax (650) 573-4800. We are proud to be an equal opportunity employer.

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S C I E N C E S

Postdoctoral Positions in Vascular Biology, Blood Cell Mechanics, Microvascular Regulation

We are searching for up to four postdoctoral fellows to participate in a collaborative research study. The participating laboratories provide a rich training environment in the context of a long-established Program Project.

The emphasis of the program is on understanding fundamental mechanical and chemical events that mediate normal and pathological mechanisms underlying peripheral vascular function, particularly with regard to inflammation and microvascular perfusion. Research areas include microvascular flow and flow-induced signal transduction, blood cell mechanics and cell adhesion, leukocyte and endothelial cell biology including regulation of adhesive ligand expression, and intracellular ion content. Individuals with doctoral training in vascular biology, endothelial cell culture, cell adhesion and mechanics, microcirculatory function, cell physiology, or leukocyte biology are particularly encouraged to apply. Further information can be obtained from **Dr. R. E. Waugh** (waugh@seas.rochester.edu), **Dr. I. H. Sarelius** (ih@pharmacol.rochester.edu), or **Dr. P. A. Knauf** (philip_knauf@urmc.rochester.edu). Interested applicants should send their CV and the names of three individuals who could supply letters of reference to:

R. E. Waugh, Ph.D.

Department of Pharmacology and Physiology
University of Rochester Medical Center
601 Elmwood Ave., Box 711
Rochester, NY 14642-8711

RESEARCH POSITIONS IN MOLECULAR CARDIOPULMONARY MEDICINE

Positions are available to study signaling in cardiac hypertrophy/failure and asthma. Our laboratories utilize integrated molecular and biochemical techniques in tissue and transgenic models to investigate basic mechanisms of G protein-coupled receptor signaling with particular relevance to disease (*PNAS* 94:8121-8126, 1997; *PNAS* 95:10140-10145, 1998; *JBC* 272:7338-7344, 1997; *Mol. Pharm.* 54:44-49, 1998). Postdoctoral candidates should have a Ph.D. or M.D. with a strong background in molecular biology or biochemistry. A Research-Track Assistant Professor position is also available.

The University of Cincinnati, an Equal Opportunity Employer, is an outstanding environment for biomedical research and the Principal Investigators' NIH-funded laboratories provide exceptional environments for scientific achievement and career development. Stipend and benefits are highly competitive.

Candidates should send a letter of interest, curriculum vitae, and names of three references to: **Gerald W. Dorn II, M.D.** and **Stephen B. Liggett, M.D.**, University of Cincinnati, Cardiopulmonary Molecular Pharmacology, 231 Bethesda Avenue, ML 0590, Cincinnati, OH 45267-0590. (Fax: 513-558-3060) E-mail: dornwg@ucmail.uc.edu.



**UNIVERSITY of
PENNSYLVANIA**

Center for Cancer Pharmacology

Postdoctoral Positions

Two postdoctoral positions available immediately in the Center for Cancer Pharmacology to study 1) the molecular basis for chemotherapeutic drug resistance in ovarian cancer, and 2) the role of hypoxia in conferring resistance of colorectal cancer cells to chemotherapeutic drugs.

Applicants must have a strong background in molecular and cell biology. Experience in signal transduction and/or transcription regulation preferred.

Please send a cover letter, curriculum vitae and the names and addresses of three references to:

Steven W. Johnson, Ph.D.
Center for Cancer Pharmacology
University of Pennsylvania
302 Abramson Bldg.
Civic Center Blvd. & Osler Circle
Philadelphia, PA 19104-4318

Affirmative Action, Equal Opportunity Employer

POSITIONS OPEN

Faculty position at Johns Hopkins University. The Department of Earth and Planetary Sciences invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level beginning July 1, 1999, or later.

We seek outstanding candidates who would strengthen our teaching and research program on processes involved in climate change. Possible areas of research include, but are not limited to, physical and chemical interactions between the ocean and the atmosphere, atmospheric chemistry, remote sensing, and the interrelationships between climate and tectonics or the biosphere. Applicants should have rigorous training in quantitative aspects of the geosciences and broad interests that would complement one or more existing Departmental research groups. Collaborative relationships with research programs in other Departments such as Environmental Health Sciences, Geography and Environmental Engineering, and Sociology are also encouraged. Candidates whose research integrates combinations of field, laboratory, and theoretical approaches will be particularly favored.

We expect the successful applicant to develop a vigorous, independent research program and to participate fully in undergraduate and graduate teaching. A Ph.D. is required. Interested persons should send a résumé, a couple of reprints or preprints, statements of teaching and research interests, plus the names, mail and e-mail addresses, and telephone numbers of at least three persons from whom the Department may request letters of recommendation. Application materials should be addressed to: **Dr. David R. Veblen, Chair, The Morton K. Blaustein Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, MD 21218.** The search will close March 1, 1999, but later applications may be considered.

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

ASSISTANT/ASSOCIATE PROFESSOR of veterinary nutrition (small animal), Department of Molecular Biosciences, School of Veterinary Medicine, University of California, Davis. Tenure-track position with a 30 percent clinical commitment to the Veterinary Medicine Teaching Hospital and shared responsibility for the Nutrition and Pet Care Center available July 1, 1999. Salary dependent on qualifications and experience. D.V.M. or equivalent; Board certification or eligibility in the American College of Veterinary Nutrition; research record or high potential to develop research in nutrition; demonstrated competence (by training or experience) in clinical nutrition of companion animals; demonstrated experience or aptitude in teaching nutrition; excellent interpersonal and communication skills; and a demonstrated ability to work with others in a team atmosphere. Send letter outlining interest, qualifications, experience, and career goals related to the position, curriculum vitae, and names, addresses, and telephone numbers of three references to: **Dr. Alan Buckpitt, Chair, c/o Ms. Joan Learned, Department of Molecular Biosciences, School of Veterinary Medicine, University of California, One Shields Avenue, Davis, CA 95616-8741.** Applications accepted through February 8, 1999, or until candidate identified. *The University of California, Davis is an Affirmative Action/Equal Opportunity Employer.*

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE

RESEARCH PLANT MOLECULAR GENETICIST position, Plant Gene Expression Center, Albany, California. The Center consists of a consortium of Agricultural Research Service (ARS) and University of California-Berkeley (UCB) scientists. Successful applicant will conduct basic research in plant molecular biology/plant genomics. Ph.D. in plant genetics or molecular biology is highly desired. Demonstrated ability to design, conduct, and communicate research in plant genetics is required. The applicant will be considered for appointment as an Adjunct Professor by the Department of Plant and Microbial Biology-UCB. *Must be U.S. citizen.* Salary (\$58,468 to 89,817, GS-13-14) based on qualifications and experience. For information on the research program and/or position contact: **Dr. Barbara Baker, Telephone: 510-559-5900; e-mail: bbaker@socrates.berkeley.edu.** For general information on application procedures and forms contact: **Area Personnel Office, Telephone: 510-559-6014.** Applications must be postmarked by January 25, 1999. *USDA is an Equal Opportunity Provider and Employer.*

POSITIONS OPEN

The University of North Carolina (UNC) at Charlotte is seeking applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level in (1) molecular biology in the Department of Biology and (2) biochemistry in the Department of Chemistry, beginning July 1, 1999. UNC-Charlotte is a rapidly expanding university committed to research and teaching excellence. Participation and collaboration with faculty in a newly established interdisciplinary Ph.D. program in biology (biomedicine and biotechnology) will be required (see website: <http://www.bioweb.uncc.edu/dictorial/index.htm>), as well as participation in graduate (M.S.) and undergraduate (B.S., B.A.) programs. Research efforts are supported by shared Biotechnology Program core facilities, and by the Regional Analytical Chemistry Laboratory. Applicants should submit a complete résumé, a description of research interests, and names of at least three references to the appropriate Search Committee:

Molecular biology. The successful applicant is expected to develop and maintain a vigorous research program supported by extramural funding; while outstanding individuals will be considered in any area of molecular biology research, individuals examining the control of gene expression are especially encouraged to apply. A Ph.D. with postdoctoral experience is required. Address applications to: **Molecular Biology Search Committee, Department of Biology, The University of North Carolina at Charlotte, 9201 University City Boulevard, Charlotte, NC 28223-0001.**

Biochemistry. The successful candidate is expected to establish a competitive, externally funded research program in biological chemistry; individuals with research interests in molecular biochemistry (familiarity with experimental techniques in molecular biology) are especially encouraged to apply, but applicants in all areas of biological chemistry will be considered. A Ph.D. in chemistry or biochemistry and appropriate postdoctoral experience is required. Address applications to: **Biochemistry Search Committee, Department of Chemistry, The University of North Carolina at Charlotte, 9201 University City Boulevard, Charlotte, NC 28223-0001.**

Consideration of applications will begin January 10, 1999, and will continue until the positions are filled. *UNCC is an Affirmative Action/Equal Opportunity Employer.*

Wisconsin, La Crosse 54601. University of Wisconsin-La Crosse seeks a **VIROLOGIST/MICROBIOLOGIST** at the level of **ASSISTANT PROFESSOR** (tenure-track academic year, nine months, 100 percent appointment). Must have a strong commitment to undergraduate education. Will be expected to teach a lecture course in virology, develop a virology laboratory course, and participate in other microbiology courses. Will be expected to develop an externally funded research program and direct undergraduate and graduate (M.S.) research. Position is contingent on funding. Qualifications: Ph.D. with emphasis in virology required. Salary is competitive and commensurate with experience. Submit letter of application, curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and three letters of recommendation to: **Dr. Thomas O. Clafin, Chair, Department of Biology and Microbiology, University of Wisconsin-La Crosse, 1725 State Street, La Crosse, WI 54601** by January 29, 1999. Starting date is August 30, 1999. Telephone: 608-785-8239 or 608-785-8238 (department office); FAX: 608-785-6959. Refer to recruitment number 00BIO02. *Affirmative Action/Equal Opportunity Employer.*

RESEARCH ASSOCIATE LIFE SCIENCES PURDUE UNIVERSITY

The Purdue Rare Isotope Measurement Laboratory (PRIME Lab) is looking for a Research Associate to lead pilot research projects in life sciences and medicine involving the use of accelerator mass spectrometry (AMS). Candidates should have a Ph.D. in biology, chemistry, or pharmacology and experience in trace analysis in biological systems, isotope labeling, or mass spectrometry. The successful candidate will act as an interface person between the AMS instrumentation and biomedical (including pharmaceutical) applications. Send curriculum vitae and three letters of reference to: **Prof. David Elmore, Director, Purdue Rare Isotope Measurement Laboratory, Purdue University, 1396 Physics Building, West Lafayette, IN 47907-1396.** E-mail: elmore@purdue.edu; website: <http://primelab.physics.purdue.edu>. *Purdue University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

SCHOOL OF NATURAL SCIENCE AND MATHEMATICS SCIENCE EDUCATION PROGRAM California State University, Fullerton

The Science Education Program at California State University, Fullerton has openings for two tenure-track positions: an **ASSISTANT PROFESSOR** and an **ASSOCIATE PROFESSOR** beginning fall 1999. Teaching responsibilities include science education courses for K-12 Preservice Teachers, supervising Teacher Interns, supervising graduate students, and teaching introductory courses in one of the science disciplines (biology, chemistry/biochemistry, Earth/space science, and physics). Preference will be given to individuals who have successful records of teaching at the precollege and/or college levels, and a strong record of proposal development and publication in science education. Demonstrated excellence in teaching and scholarly and creative activities will be given extra consideration. The Science Education Program offers a Master's of Arts in teaching science degree for both elementary and secondary teachers. The University has an active Center for Excellence in Science and Math Education that brings faculty from the Schools of Natural Science and Mathematics and Human Development and Community Service together with educators from our surrounding community to work collaboratively on projects of common interest. Salary commensurate with qualifications and experience. A curriculum vitae, research plans, two-page summary of teaching philosophy, and the names and addresses of three references should be sent to: **David Fromson, Chair of Search Committee, School of Natural Science and Mathematics, California State University, Fullerton, P.O. Box 6850, Fullerton, CA 92834-6850.** Application deadline is February 26, 1999. *Cal State Fullerton is an Affirmative Action/Equal Opportunity/Title IX/ADA Employer. Minorities and women are encouraged to apply.*

ASSISTANT PROFESSOR UNIVERSITY OF PENNSYLVANIA

The Department of Animal Biology at the University of Pennsylvania is soliciting applications for a tenure-track faculty position at the Assistant Professor level. The department has a strong commitment to basic biomedical research and is located at the heart of Penn's Philadelphia campus in an interactive scientific environment. Scientists with research interests in the areas of cell signaling and signal transduction are encouraged to apply, but all outstanding candidates in the fields of cell biology, cancer biology, genetics, functional genomics, and molecular pharmacology will be considered. Applicants must have a Ph.D., M.D., V.M.D., or equivalent degree along with postdoctoral training, and should be prepared to establish an independent extramurally funded research program. Applicants can also expect to participate in teaching in the department and in University-wide graduate programs.

Interested candidates should submit a curriculum vitae, a statement of research interests, and three letters of reference to: **Dr. Erika Holzbaur, Search Committee Chair, University of Pennsylvania School of Veterinary Medicine, 3800 Spruce Street, Philadelphia, PA 19104-6046.** We will begin reviewing applications January 30, 1999. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

RESEARCH POSITIONS AT DARTMOUTH MEDICAL SCHOOL

Two to four appointments will be made in the Electron Paramagnetic Resonance (EPR) Center for the Study of Viable Biological Systems at the **RESEARCH ASSISTANT PROFESSOR** or **RESEARCH ASSOCIATE** level, depending on the education and experience of the applicant. The openings/skills needed include **EPR SCIENTIFIC LAB MANAGER** to manage the projects and to work with visitors; **EPR SPECTROSCOPIST** with expertise in free radicals, stable and reactive; **MAMMALIAN CELL BIOLOGIST** for studies to elucidate the mechanism for the occurrence of gradients of oxygen between the extracellular and intracellular compartments; **EPR INSTRUMENTALIST** for development and improvement of instrumentation in the EPR center, with emphasis on *in vivo* EPR. All positions require a relevant Ph.D. or equivalent. Submit curriculum vitae, statement of pertinent experience, and request three references be sent to: **Harold M. Swartz, M.D., Ph.D., Dartmouth Medical School, 702 Vail, Hanover, NH 03755.** FAX: 603-650-1717; e-mail: harold.swartz@dartmouth.edu. *Equal Opportunity/Affirmative Action Employer.*

Graduate/Predoctoral Fellowship In Molecular Therapeutics

This is a unique program within the Graduate Program of Molecular Genetics and Microbiology of the Graduate School of Biomedical Sciences of UMDNJ (Piscataway Division at Robert Wood Johnson Medical School, Piscataway, NJ) to train students in an interdisciplinary industry/university environment. This program is a collaboration of one of New Jersey's premier academic institutions and Novartis, one of the largest life sciences companies in the world. The program will provide predoctoral students an integrated research training experience at UMDNJ and at the Novartis Research Institute for Biomedical Research.

The program encompasses cutting-edge research in areas including cell cycle regulation, transcriptional control, signal transduction, cell-cell interactions, structural biology, functional genomics and NMR spectroscopy with applications to transplantation, oncology, cardiovascular disease, arthritis, lipid metabolism, gene and stem cell therapy. It is ideal for highly motivated and innovative students who have obtained a Bachelor's degree with a strong academic record, and who plan for an academic or industrial career.

Please send inquiries to: **Dr. Sidney Pestka, Department of Molecular Genetics and Microbiology, UMDNJ-Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5665.** Final applications are due by **March 15, 1999.** Applications and information about the graduate program can be found at <http://www2.umdj.edu/mgm/grad.html>.



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- bioremediation • chemical analysis
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- standard remedial technologies/corrective actions
 - case studies on any of the above

SPECIAL SESSIONS

- brownfields • heavy metals • MTBE
- contamination at military installations
- chlorinated hydrocarbons, pesticides
- diesel fuel contamination and railroad cleanups • ecological risk assessments
- jet fuel contamination • phytoremediation
 - risk based cleanups/RBCA
- state regulatory programs • sediments

Deadline for submissions is FEBRUARY 1, 1999

Submit your abstract online: www.aehs.com
or Email to dleonard@schoolph.umass.edu

CONFERENCE DIRECTORS:

Paul Kostecki, PhD • Edward Calabrese, PhD
Phone: (413) 545-3164 • FAX (413) 545-4692

FACULTY POSITION

THE CELL AND MOLECULAR BIOLOGY PROGRAM AT ALBANY MEDICAL COLLEGE

The Cell and Molecular Biology (CMB) Program invites applications from qualified candidates for a full-time, tenure-track faculty position at the rank of Assistant Professor. A Ph.D. or M.D.-Ph.D. degree, substantive postdoctoral experience, and a record of publication in quality journals are required. Candidates will be expected to develop an independent, extramurally funded research program. Individuals with expertise in molecular mechanisms of eukaryotic cell differentiation, growth control, gene regulation, cell motility and invasion, and cytoskeletal biology are especially invited to apply. Competitive salaries, newly renovated laboratory space, excellent core facilities, and start-up packages are available to successful candidates. Applicants should submit a current curriculum vitae with a statement of research interests and three letters of references by January 30, 1999, to: **Paul J. Higgins, Ph.D., c/o Ms. Sarah Perrotte (Mailcode 165), Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208.**

Faculty Position

Department of Pharmacology The University of Michigan

The Department of Pharmacology is seeking applications for a tenure-track position at the ASSISTANT or ASSOCIATE PROFESSOR level. Applicants should have a Ph.D. and/or M.D., significant postdoctoral experience, and a record of excellent research accomplishment. We are seeking outstanding individuals with research experience and interests that augment current departmental programs in the areas of cancer pharmacology, cardiovascular pharmacology, drug metabolism and pharmacogenetics, endocrinology and receptor pharmacology, signal transduction/neuropharmacology, and addiction research. The successful candidate will be expected to establish and maintain an active, externally funded research program and to participate in teaching medical students and other health professionals, as well as graduate and postdoctoral students. An attractive start-up package including excellent facilities and generous start-up funds will be available. Send curriculum vitae, a brief description of current and future research directions, and request three letters of reference be sent to: **Dr. Paul F. Hollenberg, Chair, Department of Pharmacology Search Committee, Department of Pharmacology, The University of Michigan Medical School, 1150 West Medical Center Dr., Ann Arbor, MI 48109-0632.** The University of Michigan is an Affirmative Action/Equal Opportunity Employer. Applications from qualified women, minorities, and/or disabled individuals are encouraged.

POSITIONS OPEN

FIELD STATION MANAGER/ STAFF BIOLOGIST

The University of Wisconsin-Milwaukee (UWM) Field Station (30 miles north of Milwaukee) has almost 2,000 acres of state-owned natural areas, including a wide variety of habitats, available for research and teaching. The Field Station is seeking an Ecologist, Botanist, Zoologist, or Environmental Scientist with experience in field research, teaching, and program management to assist the Director with management and administration of our natural areas and our research and educational programs. The Manager will also teach field courses and conduct research. This is a Scientist position on the Academic Staff of UWM. M.S. or Ph.D. required. Applicants should submit a curriculum vitae with a research plan, a statement of teaching interest, and the names of three references by 31 January 1999, to:

Dr. James A. Reinartz, Director
University of Wisconsin-Milwaukee Field Station
3095 Blue Goose Road
Saukville, WI 53080

For more information, Telephone: 414-675-6844; e-mail: jimr@uwm.edu. UWM is an Equal Opportunity/Affirmative Action Employer.

TRANSGENIC/GENE TARGETING SPECIALISTS. The Transgenic and Gene Targeting Facility at University of Kansas Medical Center is looking for two highly motivated individuals with experience in production of transgenic and/or knockout mice. The qualified candidate for an ES Cell Specialist should have extensive experience pertinent to ES cell culture and manipulation. The qualified candidate for a Microinjectionist must have experience with all phases of transgenic mouse production including colony maintenance and animal husbandry. One year of relevant experience is desired, but candidates at all levels of experience and education (Ph.D., M.S., and B.S.) are invited to apply. Salary will be commensurate with experience. Interested individuals should send their curriculum vitae along with contact information for three references to: Wenhao Xu, Ph.D., Transgenic and Gene Targeting Facility, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160. FAX: 913-588-7440; e-mail: wuxu@kumc.edu. Equal Opportunity Employer.

GENETICIST. One-year position at the ASSISTANT PROFESSOR level. Responsibilities include helping in a genetics course for majors, and teaching advanced courses in microbiology, microbial genetics, virology, or a comparable area of specialty. An active research program in which undergraduate students participate is essential. Send statement of teaching and research interest, curriculum vitae, recent reprints, list of relevant courses, and transcript. Please arrange to have three letters of recommendation sent by January 4, 1999, to: Dr. Diana B. Stein, Department of Biological Sciences, Mt. Holyoke College, South Hadley, MA 01075. E-mail: biology@mt-holyoke.edu. Mount Holyoke College is committed to fostering cultural diversity and multicultural awareness in its faculty, staff, and students and is an Affirmative Action/Equal Opportunity Employer. Women and minorities are especially encouraged to apply.

Tenure track, twelve months, quantitative and molecular genetics. ASSISTANT PROFESSOR. Department of Animal Science, University of Minnesota. Responsibilities: develop quantitative trait loci in cattle or swine; design algorithms; apply work to livestock industry breeding programs; develop databanks to detect gene-disease-resistance correlations; teach graduate and undergraduate courses. Required: Ph.D. with emphasis on quantitative genetics; training and experience in molecular aspects of genetics essential; effective communications. Contact: Search Committee Chair, Animal Science, 305 Haacker Hall, 1364 Eckles Avenue, St. Paul, MN 55108. Website: <http://www.animal.agri.umn.edu/>. Application deadline is January 31, 1999. The University of Minnesota is an Equal Opportunity Employer.

FACULTY RESEARCH ASSISTANT/ RESEARCH ASSOCIATE IN CONSERVATION GENETICS

The Department of Forest Science at Oregon State University seeks to hire a Forest Geneticist to evaluate genetic conservation priorities for Pacific Northwest trees. Closing date, December 31, 1998. For a copy of the complete announcement, Telephone: 541-737-2244; website: <http://osu.orst.edu/admin/hr/jobs/academic/002.htm>. OSU is an Affirmative Action/Equal Employment Opportunity Employer.

POSITIONS OPEN

MANAGER CONFOCAL MICROSCOPY AND DIGITAL IMAGING FACILITY

The Department of Organismal Biology and Anatomy has an immediate opening for an individual to manage a new core facility that will provide optical microscopy and digital image analysis services to faculty in the Biological Sciences Division (BSD) at The University of Chicago. The Confocal and Digital Imaging Facility (CDIF) is centrally located on the main campus and will provide services to all members of the BSD including the Pritzker School of Medicine. The CDIF was established by funds from the National Science Foundation and the BSD.

A Doctorate degree is required for this non-tenure-track position. Expertise in fluorescence, digital, and confocal microscopy are also requirements of this position. Knowledge of Unix, PC, and Macintosh digital image analysis, storage, and networking is also essential. The skill to work effectively with researchers from a wide range of backgrounds and interests is extremely important.

The successful candidate, in consultation with the Principal Investigator, will oversee the daily operation and maintenance of the CDIF and provide training, assistance, and advice to users. The position will be administered through the Department of Organismal Biology and Anatomy.

Salary and title are competitive and commensurate with expertise and training. The position includes basic health care and retirement benefits. Screening of applications will begin November 1, 1998, and continue until a suitable candidate is identified. Further information about the Facility can be obtained at website: <http://pondside.uchicago.edu/oba/Faculty/Karr/CDIF>.

To apply, send a letter of application, résumé, and the names and addresses (including e-mail addresses) of three references to:

Dr. Timothy L. Karr, Principal Investigator
Department of Organismal Biology and Anatomy
The University of Chicago
1027 East 57th Street
Chicago, IL 60637
Telephone: 773-702-8599
FAX: 773-702-0037
E-mail: tkarr@midway.uchicago.edu

ASSOCIATE PROFESSOR/PROFESSOR position. The Department of Physiology and Biophysics at the School of Medicine of the University of Louisville's Health Sciences Center invites applications for a tenure-track faculty appointment at the rank of Associate Professor or Professor. The University of Louisville is a state-supported institution that has embarked on a well-funded Challenge for Excellence to significantly increase research opportunities and activities in focused areas. The Department has an emphasis in cardiovascular physiology and offers excellent opportunities for collaboration in the areas of hypertension, heart failure, ischemia/reperfusion injury, shock, diabetes, and microvascular controls. Applicants with research interests in molecular cardiovascular/circulatory physiology are sought. Candidates must have a Ph.D., M.D., or equivalent degree. The successful applicant is expected to have and maintain a nationally recognized research program, extramural funding, and experience in graduate and professional student training. Applications will be accepted through January 31, 1999, or until a suitable candidate is identified. Send a curriculum vitae including past and current research funding, a statement of research interests and career goals, and the names of at least three references to: John T. Fleming, Ph.D., Search Committee, Department of Physiology and Biophysics, Health Sciences Center A-1115, University of Louisville, Louisville, KY 40292. Equal Opportunity Employment/Affirmative Action. Women and minorities are encouraged to apply.

CAREER IN OPTOMETRY, OPTOMETRIC RESEARCH, OR TEACHING

The New England College of Optometry offers a unique program for those with a doctorate in the sciences: biology, chemistry, physics, psychology, etc. Candidates have the opportunity to obtain the Doctor of Optometry (O.D.) degree in 27 months. The program begins annually in June. Employment opportunities exist in private practice, industry, education, and research. Contact: The Admissions Office, New England College of Optometry, 424 Beacon Street, Boston, MA 02115. Telephone: 800-824-5526; e-mail: admiss@ne-optometry.edu. Additional information, website: www.ne-optometry.edu. Application deadline March 1, 1999.

POSITIONS OPEN

PROFESSOR OF GEOBIOLOGY

The Department of Earth, Atmospheric, and Planetary Sciences at MIT invites qualified candidates to apply for a new faculty position in geobiology. The level of the appointment will depend on qualifications. We seek an outstanding Biologist deeply interested in both research and teaching who has specific expertise in the interactions between biological organisms and/or systems and geologic, hydrologic, oceanic, or atmospheric processes. Of special interest is the evolution over time of organisms and ecosystems through the joint action of biological and environmental dynamics. One or more current programs at MIT in the earth, atmospheric, hydrologic, oceanic, biological, climatic, and planetary sciences are expected to provide a significant and welcome resource to the new faculty member for interdisciplinary studies. Interested scientists should send a curriculum vitae, a one-page description of research plans, and arrange for three letters of professional reference to: Professor Ronald G. Prinn, Head, Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology, Building 54-918, Cambridge, MA 02139-4307. E-mail: rgp@mit.edu; FAX: 617-253-8298. MIT is an Equal Opportunity/Affirmative Action Employer. MIT is a non-smoking environment.

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 SW, 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.

SENIOR POSTDOCTORAL POSITION IN THE CELLULAR MECHANISMS OF WOUND HEALING University of Southern California

Join newly formed wound healing laboratory investigating basic mechanisms of human wound healing. Research is directed toward understanding the relationship between cellular and humoral inflammatory events and the initiation of epidermal and fibroblast activities necessary for healing. Candidate should have an established research record of transitional research and possess independent functional competence in molecular biology and protein quantitation. Previous exposure with growth factor and/or cytokine biochemistry and quantification useful. Ph.D. or equivalent required with additional postdoctoral training expected. Salary range from \$30,000 to \$45,000 based on previous experience. FAX curriculum vitae to: Warren Garner, M.D., FAX: 323-442-6481.

ADVANCED AIDS CLINICAL RESEARCH FELLOWSHIP

Beginning January 1999, two- to three-year privately funded combined clinical and laboratory Research Training Fellowships at the Center for AIDS Research at Stanford University. The bench research program will have a focus on antiviral therapy and/or viral resistance in HIV infection whereas the clinical work will be on antiviral therapy. M.D. trainees will already be trained in clinical infectious diseases whereas Ph.D. trainees should already have experience in relevant HIV research. The Center is affiliated with the NIAID AIDS Clinical Trials Group. Interested applicants contact: Thomas C. Merigan, Jr., M.D., Director, Center for AIDS Research at Stanford, S-156, Stanford Medical Center, Stanford, CA 94305-5107. Stanford University is an Equal Opportunity Employer and welcomes applications from women and minorities.

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

POSTDOCTORAL FELLOW

Applications are invited for a postdoctoral research position in the laboratory of Dr. Razqallah Hakem. The successful candidate will investigate DNA damage repair and apoptosis in animal models. To succeed in this post, you will need a Ph.D. in molecular biology and/or biochemistry with a broad background in cancer biology. Good written and verbal communication skills, strong organizational and interpersonal talents, and the ability to work independently are also important attributes for this role.

For confidential consideration, please send a complete copy of your curriculum vitae, together with the names and addresses of three referees, by January 15, 1999, to: **Dr. Razqallah Hakem, Amgen Institute, 620 University Avenue, Suite 7-706, Toronto, Ontario, Canada, M5G 2C1.**

AMGEN. INSTITUTE

Affiliated with Ontario Cancer Institute / University of Toronto

GLOBAL OPPORTUNITY



岡山大学医学部
生化学教授
募集

岡山大学医学部では日本語で生化学の講義が可能で、しかも卓越した研究プロジェクトと実行力をお持ちの教授候補者を募集しています。発令は1999年7月1日予定です。希望される方は応募要領に従って、推薦状、履歴書、研究業績リスト、主要論文20編の別刷、研究概要および教育方針概要(各々2000字程度)、取得研究費のリスト等を〒700-8558岡山市鹿田町2-5-1岡山大学医学部長産賀敏彦教授宛御送りください。締切は1999年1月18日です(消印有効)。詳細は二宮(Fax: +81-86-222-7768又はE-mail: yoshinin@cc.okayama-u.ac.jp)まで問い合わせ下さい。

SYSTEMIX, a Novartis company, is developing cell and cell-based gene therapies for the treatment of cancer, genetic disorders and AIDS, focusing on the transplantation of hematopoietic stem cells. We are currently seeking a Postdoctoral Researcher with expertise in molecular biology, virology or immunology. You will be involved in research projects focusing on HIV gene therapy to develop and evaluate antiviral inhibition strategies. Experience with retroviral vectors and HIV infection assays is desirable.

Postdoctoral Researchers

SyStemix encourages an environment for postdoctoral researchers to develop their careers through active participation in our scientific research, publications, and relevant meetings and conferences.

This position includes paid interview expenses and relocation allowance, as well as health/life insurance, paid vacation time and paid holidays. Applicants should submit a current CV or resume with a brief statement of research interests as well as three letters of recommendation to: SyStemix, Inc. Human Resources, Dept. SCI/1298, 3155 Porter Drive, Palo Alto, CA 94304; or email to hr.systemix@pharma.novartis.com. FAX: (650) 813-4121. EOE. Visit our website at www.stem.com.



SYSTEMIX

POSITIONS OPEN

PLANT GENOMICS UNIVERSITY OF GEORGIA

Positions are available to study the organization, function, and evolution of the genomes of major crops and selected botanical models, as part of new National Science Foundation-sponsored initiatives on sorghum, rice, sugarcane, maize, and cotton. We will occupy a 4,800-square foot genomics facility in 1999, and expand into a new biotechnology center in early 2000. The following positions are available immediately:

ASSISTANT RESEARCH SCIENTIST (one), or **SENIOR RESEARCH COORDINATORS** (two): postdoctoral experience, outstanding publication record in molecular genetics, proven personnel management skills and grantsmanship. Must be eligible to hold U.S. federal grants.

POSTDOCTORAL SCIENTISTS (four): Ph.D. with excellent publication record and strong credentials in modern molecular genetics/genomics. Research areas include positional cloning, integration of genetic and physical maps, comparative and functional genomics.

RESEARCH COORDINATORS (two): M.S. and relevant experience in molecular genetics/genomics, excellent organizational skills, personnel and data management capabilities.

GRADUATE RESEARCH ASSISTANTS (one to two): strong undergraduate academic record, commitment to career development. Laboratory skills and publication record a plus.

Competitive salaries commensurate with credentials, excellent benefits. Submit curriculum vitae, selected reprints, and telephone numbers plus e-mail addresses of at least three professional references to: **Dr. Andrew H. Paterson, c/o Office of the Vice-President for Research, University of Georgia, Athens, GA 30602. E-mail: htucker@arches.uga.edu. Equal Opportunity Employer.**

MOLECULAR CELL BIOLOGIST

The University of Nebraska at Omaha announces a tenure-track position beginning August 1999. The position requires an earned Ph.D., postdoctoral experience, teaching undergraduate/Master's courses in molecular cell biology, a productive research program, and shared coordination of the biotechnology B.S. degree program. The research area is open; a renovated laboratory for tissue culture and molecular biology is available. For department information, see website: www.unomaha.edu/~wwwbio. Screening begins January 15, 1999, and will continue until position is filled. Send curriculum vitae, statements of research and teaching objectives, and three reference letters to: **Chair, Biology Department, University of Nebraska at Omaha, Omaha, NE 68182-0040. UNO is an Equal Opportunity Employer.**

ZOOLOGIST/GENETICIST NORTH PARK UNIVERSITY, CHICAGO

Tenure-track position beginning August 1999. Ph.D. in biology (ABD considered). Rank and salary negotiable. Must have demonstrated ability as a teacher, and scholarly and professional promise. Teach introductory classes in zoology and genetics and possibly advanced courses in zoology. North Park is owned and operated by the Evangelical Covenant Church. It is also affiliated with AuSable Institute, Shedd Aquarium, the ACCA Consortium, and The Illinois Natural History Survey. Send letter of application and résumé by February 1, 1999, to: **Alice Iverson, North Park University, 3225 West Foster Avenue, Chicago, IL 60625-4895. E-mail: aiverson@northpark.edu. Women and minorities encouraged to apply. Equal Opportunity Employer/Minorities/Females.**

RESEARCH ASSOCIATESHIPS IN LUNG MOLECULAR AND CELLULAR BIOLOGY

Long-term, NIH-funded positions are available (rank based upon qualifications) to study airway epithelial cell and matrix ultrastructure, biochemistry, and function in health and disease.

Candidates with advanced experience in cell and molecular biology, cell culture, and immunocytochemistry are encouraged to apply. Opportunities to interact with a variety of basic scientists at this and neighboring Chicago universities exist and are encouraged. Please submit résumé, including description of research interests, to: **Recruitment and Career Services—GM, Rush Presbyterian—St. Luke's Medical Center, 729 South Paulina, Chicago, IL 60612. E-mail: cmurfas@rush.edu. Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.**

POSITIONS OPEN

GRADUATE FELLOWSHIPS CENTER FOR THE STUDY OF EVOLUTION AND THE ORIGIN OF LIFE UCLA

Origin of the Universe...
Formation of the Earth...
Beginnings of Life...
Evolution of the Biosphere...
Advent of *Homo Sapiens*...

Center for the Study of Evolution and the Origin of Life (CSEOL) invites applications for five Graduate Fellowships for 1999–2000. In addition to support provided Fellows by UCLA departments, CSEOL will grant each Fellow a stipend of \$5,000 per year, for each of the first two years of graduate study, with no teaching or other duties. Stipends may be used for any purpose the Fellow deems appropriate—travel, lodging, attendance at scientific meetings, purchase of books, computers, research equipment—for any purpose, without restriction. Fellows are included in a select group of graduate students invited to interact with Center faculty in a weekly dinner/seminar/discussion series. Applicants should be planning to carry out Doctoral research under the direction of a CSEOL faculty member in a subject area relating to virtually any aspect of evolution—the cosmos, of the solar system, of Earth, of the environment, of life, of humans. Areas of particular interest for 1999–2000 include (1) origin and early evolution of life; (2) biochemical evolution and molecular phylogeny, and (3) planetary evolution and astrobiology. Faculty are members of the UCLA Departments of Anthropology, Atmospheric Sciences, Biology, Chemistry and Biochemistry, Computer Science, Earth and Space Sciences, Economics, Geography, History, Microbiology, Philosophy, Physics and Astronomy, Psychology, and Sociology; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute. Fellowship applicants must apply (preferably, by 17 February 1999) both to an appropriate academic department and to CSEOL. For application forms and a list of CSEOL members, contact:

**Center for the Study of Evolution and the
Origin of Life Fellows Committee
Geology Building, Room 5687
University of California, Los Angeles
Los Angeles, CA 90095-1567
Telephone: 310-825-1170
FAX: 310-825-0097
E-mail: mantonya@ess.ucla.edu**

USDA-GRADUATE FELLOWSHIP-FOOD ANIMAL BIOTECHNOLOGY Molecular Veterinary Biosciences Graduate Program University of Minnesota College of Veterinary Medicine

The University of Minnesota is conducting a national search for highly qualified students who wish to pursue Doctoral degrees in the area of food animal biotechnology. The purpose of our graduate Fellowship program is to provide state-of-the-art training in cellular and molecular mechanisms of animal health and disease. Agriculture faces worldwide challenges in food safety, emerging diseases, and the need to improve the overall animal production. Our program is designed to graduate Fellows with the knowledge base, communication skills, and advanced research training essential for careers as Independent Investigator in current animal agriculture-based science enterprises.

Applications are being accepted for three-year Fellowships, funded at \$17,000 per year. This is a prestigious award granted by the United States Department of Agriculture as part of the National Needs Graduate Fellowship Program. Applicants must be U.S. citizens and possess a strong background in the biological sciences with appropriate Bachelor's, D.V.M., or Master's degrees. Screening of applicants will begin February 1, 1999. For more information contact: **Carolyn Ellenberg, Telephone: 612-624-2700; e-mail: ellen003@tc.umn.edu. Please visit our website: <http://gopher.cvm.umn.edu/vetbio/hb-vbiol.htm>. The University of Minnesota is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

RESEARCH ASSOCIATE (POSTDOCTORAL). Oregon State University (OSU). As part of the U.S. Earth Observing System, we are developing coupled physical/biological models of the Southern Ocean ecosystem. We seek a person who will actively collaborate with our interdisciplinary team of researchers. We are especially interested in the impacts of mesoscale ocean processes on ocean ecosystems and biogeochemistry. This position requires the design, implementation, and testing of one- and three-dimensional models of the coupled physics and biology of the ocean and comparison with observations. Data assimilation techniques are used to estimate model parameters, and a wide variety of visualization tools are used to study model output. The position requires publication in the scientific literature and participation in science team meetings.

The successful applicant should have a Ph.D. in oceanography or other relevant Earth science. Extensive experience in numerical modeling is required. Applicants must have experience with coupled models and plankton processes, and experience with data assimilation is helpful. Applicants should have excellent communication and presentation skills. Applicants must be able to work independently and integrate efforts with a larger research team; willing and able to travel and participate in oceanographic research meetings; willing and able to participate in oceanographic cruises.

Statement of interest, curriculum vitae, and names, addresses, and telephone numbers of three references must be received by January 31, 1999, for first applicant screening. Position will remain open until filled. Send to: **Dr. Mark R. Abbott, College of Oceanic and Atmospheric Sciences, 104 Ocean Admin, Oregon State University, Corvallis, OR 97331-5503. Questions about the position may be directed to: Dr. Abbott, Telephone: 541-737-4045; e-mail: mark@oce.orst.edu; FAX: 541-737-2064. OSU is an Affirmative Action/Equal Opportunity Employer and has a policy of being responsive to the needs of dual-career couples.**

BIOINFORMATICS RESEARCH ANALYST GENE LOGIC

This position requires an experienced Biologist with strong computer skills to perform sequence analysis on DNA fragments from differential display gels and full-length sequences derived from those fragments. Responsible for all bioinformatics liaison, sequence analysis, data curation, and sequence annotation for one or more corporate partners. Must have expertise in the application of sequence and genome analyses to biological problems and be able to develop new analysis tools and systems specific to genomic research.

A Ph.D. in molecular biology or other life sciences with two to five years of postdoctoral experience is required. Communication skills and the ability to function effectively in a multidisciplinary environment are essential. Knowledge of Unix, Perl, relational databases, and object-oriented concepts is necessary. Programming skills in HTML, CGI, SQL, or other languages are a plus. Industrial and project management experience is preferred.

At Gene Logic, you'll enjoy a comprehensive salary and benefits package. To apply, please send a résumé and cover letter to: **Gene Logic, Inc., 708 Quince Orchard Road, Gaithersburg, MD 20878. FAX: 301-987-1805; e-mail: hr@genelogic.com.**

Equal Opportunity Employer.

The Departments of Psychology, Chemistry, and Civil Engineering and Operations Research at Princeton University are seeking an individual with technical training and extensive experience in functional magnetic resonance imaging, for the position of **MR PHYSICIST** in a new program in functional neuroimaging currently under development. Responsibilities will include oversight of technical operations for a new MR-based imaging center, including supervision of hardware maintenance and software development. Preference will be given to individuals with a strong record of independent research, and experience in one or more of the following areas: pulse sequence programming, coil design, and the development of new methods for image acquisition, processing, and analysis. A strong interest in neuroscience applications are also desirable. Opportunities will be available for training and supervision of students. Applicants should send a curriculum vitae, a research statement, representative publications, and three letters of reference to: **Search BVUI, Department of Psychology, Green Hall, Princeton University, Princeton, NJ 08544-1010. Princeton University is an Equal Opportunity/Affirmative Action Employer.**

As a major Pharmaceutical Company well established at an international level, our success depends upon the dynamism of our research directed towards the discovery of novel drugs.

In our Research Center located in the Paris area, we seek to recruit a young scientist for a :

post-doctoral position

The successful candidate has a PhD and will be involved in studies in the following fields :

Vascular reactivity

Electrophysiology of vascular smooth

muscle : function of the endothelial cells, interaction endothelium/smooth muscle, patch clamp, microelectrode.

The position is vacant for 18 months.

Applications with curriculum vitae, photograph and handwritten letter are to be sent to **PUBLIVAL/11023**
27 Route des Gardes - 92190 MEUDON (FRANCE)



Max-Planck-Institute

of Cognitive Neuroscience, Leipzig

The Max-Planck-Institute of Cognitive Neuroscience offers the opportunity to set an

Independent Junior Research Group (Selbständigen Nachwuchsgruppe)

The ideal candidate is younger than 35 years, has a proven research record, and international reputation in the area of

Neurocognition of phonology/prosody

The contract is for a group leader position at the Assistant/ Associate Professor level (German University scale C2/C3) and limited to 5 years, starting 1 April 1999. Appropriate laboratory space, equipment, and running costs, as well as the positions for one additional scientist, one graduate student, and one technician will be provided.

Preference will be shown for equivalently qualified candidates with disabilities.

Applications, including curriculum vitae, list of publications, and an outline of previous and future research objectives as well as names of referees should be sent by 31 December 1998 to

**Max-Planck-Institute of Cognitive Neuroscience
- Verwaltung -
P.O. Box 500355, 04103 Leipzig, Germany**

Bayer is a globally active, research-based company in the fields of chemicals and life-sciences, headquartered in Leverkusen/Germany. With total annual sales of DM 55 billion and an annual R&D budget of DM 4 billion in 1997, we can offer a very attractive working environment for highly-motivated people. (For more details refer to <http://www.bayer.com>).

Our central research division in Leverkusen/Germany is offering a position in the field of functional genomics.

Research Scientist

You will be working in a functional genomics project in the area of pharmaceutical research. In a young and multidisciplinary team you will be responsible for the target identification and the setup of high-throughput screening systems.

As a research scientist with a Ph.D. in biological sciences you have several years of postdoctoral experience (preferentially in the pharmaceutical industry) in the following areas:

- Molecular and cellular biology
- Heterologous protein expression and purification
- Experience with enzymatic and cell based assays

For this high-profile task you possess excellent communication skills and enjoy working in a multidisciplinary team.

We offer excellent conditions and the opportunity to work as a member of a dynamic and highly motivated team in one of the largest chemical-pharmaceutical companies.

If your background and personal experience fits this profile, please send your complete application (including a CV, a brief description of research experience, a list of publications, names of referees) and ref.no. 689 to:

Bayer AG, Personalmarketing, Frau Redmer
Hauptstrasse 119, D-51368 Leverkusen, Germany

Bayer

POSITIONS OPEN

POSTDOCTORAL POSITIONS CANCER GENETICS AND CANCER MUTATION DETECTION

Positions available as part of multi-institutional NCI-funded Program Project Grants for (i) identification of mutations and new cancer genes associated with tumor development, and (ii) multiplex analysis of human tumors using DNA chips. Applicants should have a Ph.D., preferably with experience in cancer genetics, genomics, and/or automation in DNA and PCR technology. Competitive salary commensurate with experience. Send curriculum vitae and names of three references to: **Professor Francis Barany, Programs of Biochemistry, Structural Biology, and Molecular Biology, Box 62, Cornell University Medical Center, 1300 York Avenue, New York, NY 10021. FAX: 212-746-8587. Or to: Philip Paty, M.D., Department of Surgery, Box 453, Memorial Sloan Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. FAX: 212-717-3678. Equal Opportunity Employer.**

CENTER FOR THEOLOGY AND THE NATURAL SCIENCES

The Center for Theology and the Natural Sciences at the Graduate Theological Union in Berkeley, California announces openings for five full-time positions of **REGIONAL DIRECTOR** for the Science and Religion Course Program. Candidates should hold a Ph.D. in theology, philosophy, ethics, or one of the natural sciences, as well as possess strong communication skills. Apply by January 15, 1999, to: **Center for Theology and Natural Sciences, 2380 Ellsworth Street, Berkeley, CA 94704 USA.** For a complete announcement, visit our website: www.ctns.org; Telephone: 510-665-8141; FAX: 510-665-1589; e-mail: srcourse@ctns.org.

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.**

Vanderbilt University is an Equal Opportunity Employer.

STAFF ASSOCIATE COLUMBIA UNIVERSITY

Database management, statistical programming for study of severe head trauma. SAS and good writing skills. Prefer M.P.H./M.S. degree in epidemiology or biostatistics. Contact: **Dale C. Hesdorffer, Ph.D., Columbia University, P&S Box 16, 630 West 168th Street, New York, NY 10032.**

We take Affirmative Action toward Equal Employment Opportunity.

POSTDOCTORAL POSITION available to study the neural and behavioral mechanisms of cross-modality (i.e., multisensory) integration. Experience with either electrophysiological, behavioral, anatomical, or psychophysical techniques preferred. Send curriculum vitae and three letters of recommendation to: **Barry E. Stein, Ph.D., Department of Neurobiology and Anatomy, Wake Forest University School of Medicine, Winston-Salem, NC 27157-1010. Affirmative Action/Equal Opportunity Employer.**

FACULTY and POSTDOCTORAL FELLOW positions are available immediately to study the molecular aspects of neurodegeneration of inherited diseases. Applicants should be skilled in molecular biology/cellular biology/biochemical techniques. Send curriculum vitae and names of three references to: **Inderjit Singh, Ph.D., Medical University of South Carolina, Department of Pediatrics, 171 Ashley Avenue, 316 CSB, Charleston, SC 29425.**

EXECUTIVE DIRECTOR. The California State Board of Education seeks energetic and entrepreneurial Director for the newly established California State Summer School for Math and Science (CSSSMS). Responsible for policy development and management of CSSSMS. Send/FAX cover letter and résumé to: **Mr. Bill Lucia, Executive Director, California State Board of Education, 721 Capitol Mall, Room 530, Sacramento, CA 95814. FAX: 916-653-7016.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOWSHIP/JUNIOR FACULTY POSITIONS VASCULAR CELL BIOLOGY RESEARCH

Positions available for Postdoctoral Research Fellows or junior faculty in a NIH-funded laboratory at Baylor College of Medicine. The laboratory is engaged in basic research in vascular cell biology, including vascular smooth muscle and endothelial cell metabolism, gene expression, and cell cycle regulation. Studies are conducted in cell culture and in mouse and rat models of vascular injury. Qualified candidates should have a Ph.D. or equivalent Doctoral degree. One position requires a strong background in cell cycle regulation and the other in small animal surgery, preferably with experience with vascular injury models. Extensive opportunities available for collaborative interactions with basic scientists at Baylor, The University of Texas, and Rice University. Positions will be available in July 1999, although start times are flexible. Interested applicants should send a curriculum vitae and the names of three references to: **Andrew I. Schafer, M.D., Chairman, Department of Medicine, Baylor College of Medicine, 6550 Fannin, Suite 1425, Houston, TX 77030. Baylor College of Medicine is an Equal Opportunity/Affirmative Action and Equal Access Employer.**

AUTOIMMUNITY POSTDOCTORAL FELLOWSHIPS Medical University of South Carolina

Two positions are available for two- to three-year funded Postdoctoral Fellowship positions (M.D. or Ph.D.) studying mechanisms of autoimmunity and the interplay of immunotoxicology in disease. Specific projects include defining mechanisms and effects of nitric oxide production in autoimmunity and determining the effect of environmental agents on autoimmunity. Molecular, genetic, cellular, and structural immunologic approaches will be utilized in these studies. Studies will be performed in new laboratory space equipped with state-of-the-art equipment. Both positions will involve interaction with collaborating Investigators, mentorship committees, and educational opportunities. MUSC is a growing, vibrant research university located in historic Charleston, South Carolina. If interested please submit a curriculum vitae to: **Gary S. Gilkeson, M.D., Medical University of South Carolina, 96 Jonathan Lucas Street, 912 CSB, Charleston, SC 29425. E-mail: gilkeson@musc.edu. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITIONS

Three Postdoctoral positions (one Protein Crystallographer, one NMR Spectroscopist, and one Combinatorial Chemist) are immediately available for studying the structural basis of substrate/inhibitor specificity and structure/dynamics of protein tyrosine phosphatases (PTPases). Projects include analysis of PTPase-substrate, PTPase-inhibitor, and mutant PTPases structures; investigation of the relationship between dynamics and PTPase catalysis; and design and synthesis of potent and selective nonpeptide PTPase inhibitors. Candidates must have previous experience in one of the following areas: protein crystallography, computational chemistry/molecular modeling, multidimensional NMR, and combinatorial/parallel synthesis. Send curriculum vitae, names and telephone numbers of three references to: **Dr. Zhong-Yin Zhang, Department of Molecular Pharmacology, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: 718-430-8922. Equal Opportunity Employer.**

POSTDOCTORAL POSITION HARVARD UNIVERSITY MASSACHUSETTS GENERAL HOSPITAL

A Postdoctoral position is available in the Immunobiology Laboratories. The projects involve transcription studies and biochemistry of intracellular processing pathways in human lymphoid cells in normal and diseased states. Specific areas of investigation include transcription studies of genes (e.g., NF- κ B), apoptotic pathways, and biochemistry of protein degradation.

Send curriculum vitae and the names, telephone numbers, and e-mail addresses of three references to:

**Dr. Denise Faustman
Associate Professor of Medicine
Massachusetts General Hospital-East
Immunobiology Laboratories
Building 149, 13th Street, Room 3602
Charlestown, MA 02129**

POSITIONS OPEN

POSTDOCTORAL POSITION GONOCOCCAL PATHOGENESIS

Position in the Department of Medical Microbiology and Immunology, Creighton University School of Medicine available immediately to study *Neisseria gonorrhoeae*/host interaction in the human fallopian tube organ culture model. Work will involve use of molecular techniques, confocal microscopy, and computerized image analysis. Previous experience with molecular biology and infectious diseases pathogenesis preferred. PC and microscopy skills considered a plus. Funding is from a NIAID grant through September 2000. Opportunity for VA career development awards exists in VA-based laboratory. Please send curriculum vitae, brief statement of research interests, and names and addresses of three references to: **Dr. Gary Gorby, Omaha VA Medical Center, 4101 Woolworth Avenue, Omaha, NE 68105. FAX: 402-977-5601; e-mail: gorby@omaha.va.gov.** Applications will be accepted through January 10, 1999. *Creighton University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL SCIENTIST CORIELL INSTITUTE FOR MEDICAL RESEARCH Differentiated Cell Cultures

Immediate position for a Postdoctoral Scientist with experience, and publications, in the field of growth and characterization of differentiated cell cultures and the study of differentiation *in vitro*, to join scientists at Coriell responsible for the NIGMS Human Mutant Cell Genetic Repository and the NIA Aging Cell Repository. The successful candidate will also assume responsibility for the human and animal cell lifespan studies for the National Aging Repository and will have a strong background in cell and molecular biology. Excellent benefit package. Please send curriculum vitae and at least three reference letters to: **C. Tule, Director, Human Resources, Coriell Institute for Medical Research, 401 Haddon Avenue, Camden, NJ 08103. FAX: 609-964-0254. Affirmative Action/Equal Opportunity Employer/Minorities/Females.**

POSTDOCTORAL MOLECULAR BIOLOGY

Corixa Corporation is a biotechnology company dedicated to the development of T cell vaccines and therapies for cancer and infectious diseases. Corixa is seeking a Ph.D. and/or M.D. Postdoctoral Scientist with a molecular biology background and experience in cDNA library construction to join the tumor antigen discovery effort. Skills in full-length cloning and bioinformatics are preferred. Competitive salary and benefits. Please send curriculum vitae, statement of research interests and experience, and names of three references by January 11, 1999, to: **Corixa Corporation, Attn: Job #1998-20, 1124 Columbia Street, Suite 200, Seattle, WA 98104. FAX: 206-754-5715; website: <http://www.corixa.com>. An Equal Opportunity Employer.**

POSTDOCTORAL FELLOW. Eukaryotic mRNA function (translation and stability) study using the IRE (iron responsive element) model. Available spring-summer 1999. Well-established project recently moved to Children's Hospital Oakland Research Institute (CHORI); Children's is a University of California, San Francisco Moffitt Hospital Satellite. CHORI, devoted to studying the molecular basis of disease and to facilitating translation of the results to clinical research, is undergoing expansion of space and staff in new facilities two miles from the University of California-Berkeley campus. Applicants with a strong background in molecular/cell biology should send curriculum vitae and references to: **Elizabeth C. Theil, Ph.D., Children's Hospital Oakland Research Institute, 747 52nd Street, Oakland, CA 94609-1809. FAX: 510-597-7131; e-mail: etheil@mail.cho.org. Equal Opportunity Employer.**

POSTDOCTORAL POSITION is available immediately in a NIH-funded project to study the regulation of growth factor receptor protein and gene expression during ovarian follicular development. Recent Ph.D. and strong background in reproductive biology with working knowledge in protein and nucleic acid is required. Send curriculum vitae and the names and telephone numbers of three references to: **S. K. Roy, Departments of Obstetrics/Gynecology and Physiology/Biophysics, University of Nebraska Medical Center, 984515 Nebraska Medical Center, Omaha, NE 68198-4515. UNMC is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**



PROFESSORSHIP OF MOLECULAR GENETICS KAROLINSKA INSTITUTET

At a department at Huddinge University Hospital, Stockholm, Sweden. An independent scientist will be appointed in medical molecular genetics with experience in supervising postgraduate and doctoral students and competent in leadership and organization. The qualifications will be systematically assessed according to the Qualifications Portfolio for academic appointments available on request from the Registrar, phone +46-8-728-65-95 or on Internet at the homepage of the Institute (<http://www.ki.se/ki/merit.se.html>). For further information, please contact Professor Ingemar Björkhem, Head of the Clinical Research Center, phone +46-8-585-812-35, fax +46-8-585-838-10, e-mail: ingemar.bjorkhem@chemlab.hs.sll.se. Deadline for applications is January 13, 1999.

Curriculum vitae, details of the applicant's scientific career, a list of publications, reprints of 20 selected publications, and an outline of plans for future research should be sent in 4 sets before February 10, 1999, to: Registrar, Karolinska Institutet, S-171 77 Stockholm, Sweden.

Website: <http://www.ki.se> and http://info.ki.se/news/job_opportunities/index_en.html.

E-mail: miriam.rock@admin.ki.se.

Royal Holloway University of London

School of Biological Sciences

Professor of Environmental/Population Biology

As part of a major expansion of research in environmental biology in the School of Biological Sciences, we are seeking to appoint a Professor of Environmental Biology. Candidates should have an outstanding international research reputation and will be expected to lead a major research programme within the School's Environmental Biology Group. The appointee will be encouraged to initiate collaborative work with other staff in the School and in related departments. The successful candidate will be provided with substantial technical and financial assistance towards start up and will play a leading role in appointing two new Lecturers in Environmental/Population Biology. One of the Lectureships will be in plant ecology.

Preference may be given to applicants having complementary interests to existing research activities in the School, including behavioural ecology and conservation, microbial ecology, ecotoxicology, parasitology, multitrophic interactions and entomology, but candidates in other areas of research in ecology, population genetics, biodiversity and evolutionary biology are also strongly encouraged to apply. Applications from individuals with expertise in the use of molecular biological techniques and/or mathematical modelling are particularly welcome. The appointee will be expected to contribute to undergraduate and postgraduate teaching appropriate to their expertise and to supervise research students.

Royal Holloway is one of the five multifaculty sites of the University of London, situated in the Surrey Green Belt, close to Windsor and Heathrow, with ready access to central London. In the 1996 Research Assessment Exercise, almost half our departments scored 5 or 5*.

The salary will be in the Professorial range (minimum currently £37,304 per annum inclusive of London Allowance). The closing date for receipt of applications is 15 January 1999, but the search will continue until an appointment is made. We anticipate the successful candidate will take up the appointment during 1999. Please quote reference MHA/755.

Informal enquiries about the post may be made to Professor John Bowyer, tel: +44(0)1784 443803, e-mail: j.bowyer@rhbnc.ac.uk. Information about the College and the School is available at <http://www.rhbnc.ac.uk> and <http://www.bl.rhbnc.ac.uk/> respectively.

Further details and application forms are available from the Personnel Officer, Royal Holloway University of London, Egham, Surrey TW20 0EX, UK. Tel +44(0)1784 443030; fax +44(0)1784 473527; e-mail s.brewell@rhbnc.ac.uk.

We positively welcome applications from all sections of the community.

MEETINGS



8th Biennial International Congress on
Liver Development, Gene Regulation, and Disease
Palazzo del Popolo, Orvieto, Italy - June 2-5, 1999

Organizers: G. Ciliberto (IRBM) and M. Tripodi (Università di Roma "La Sapienza")

Sessions and Speakers:

Signalling and Transcription: R. H. Costa (Chicago), A. Kahn (Paris), M. Karin (La Jolla), V. Poli (Dundee), M. Yaniv (Paris)

Control of Cell Cycle & Liver Mass Homeostasis: G. J. Darlington (Houston), A.M. Diehl (Baltimore), N. Fausto (Seattle), G. K. Michalopoulos (Pittsburgh), J. R. Nevins (Durham), R. Taub (Philadelphia), M. Tripodi (Rome)

Organogenesis: R. Di Lauro (Naples), S.A. Duncan (Milwaukee), P. Gruss (Göttingen), M. C. Weiss (Paris), K. Zaret (Providence)

Molecular Biology and Immunology of Viral Hepatitis: R. De Francesco (Rome), F.V. Chisari (La Jolla), M. G. Katze (Seattle), A. Nicosia (Rome)

Metabolism: R. W. Hanson (Cleveland), G. Schütz (Heidelberg), H. Towle (Minneapolis)

Gene Therapy: G. Ciliberto (Rome), M. Kay (Seattle), F. Mavilio (Milan), I. Verma (La Jolla)

Deadline for Applications, Accommodation and Poster Presentations: March 2nd, 1999

Registration Fee: 900.000 Italian Lira

For further information, depending on the specific needs:

the Organizing Secretariat
CITTA' IDEALE
tel. and fax:
+39-075-8743 643 / 8748 439
e-mail: ideale@tour-in-italy.com
<http://www.tour-in-italy.com>

the Scientific Secretariat
IRBM P. ANGELETTI
Mrs. Tiziana Gobbi
tel. +39-06-91093 655
fax. +39-06-91093654
e-mail:
liverorvieto@irbm.it
<http://www.irbm.it>

Charité

MDC

**MEDICAL FACULTY of the HUMBOLDT-UNIVERSITY BERLIN and
MAX DELBRÜCK CENTER FOR MOLECULAR MEDICINE (MDC)
BERLIN-BUCH.**

invite applications for the following position in molecular medicine:

Full Professorship (C4 BBesG) in Molecular Genetics and Genome Analysis

The applicant is a scientific member of the Humboldt-University, Medical Faculty, and of the MDC. The position is affiliated to the MDC. We are seeking applications from outstanding individuals with research interest in molecular genetics or genome analysis. Applicants should have a strong background in Molecular Biology and Molecular Medicine, an international reputation in the fields of genetics of human disease, genetics of relevant model organisms, or of bioinformatics.

Appropriate space, positions, and funds for laboratory set-up and operation will be provided by the MDC. In addition, the successful applicant will be expected to apply for extramural funding and is specifically encouraged to engage in collaborative research programs with the two University clinics (Franz Volhard Clinic for Cardiovascular Diseases and the Robert Rössle Cancer Clinic) on the Berlin-Buch campus.

Applications (including CV, list of publications, and an outline of their research plans) should be sent until January 15, 1999,

either to

Prof. Dr. Manfred Dietel
Dekan der Medizinischen
Fakultät Charité
Humboldt-Universität zu Berlin
Schumannstr. 20/21
10117 Berlin Germany

or to

Detlev Ganten, M.D. Ph.D.
Max Delbrück Center for
Molecular Medicine (MDC)
Berlin-Buch
Robert-Rössle-Str. 10
13125 Berlin Germany

Applicants with disabilities will be given preferential consideration if all other qualifying factors are equal. The Humboldt University Hospital Charité and the MDC are equal opportunity employers and welcome applications from women in order to increase the proportion of the female staff in University research and teaching.

MDC is a member of the Hermann von Helmholtz-Association of National Research Centers supported by the Federal Government of Germany and by the Berlin Regional Administration. For further information about the MDC or the CHARITÉ, please visit our web site (<http://www.mdc-berlin.de> or <http://www.charite.de>).

POSITIONS OPEN

POSTDOCTORAL FELLOW POSITIONS AT THE OREGON HEALTH SCIENCES UNIVERSITY

(1) Molecular neurobiology. Investigation of the post-transcriptional regulation of the beta 1-adrenergic receptor gene, and identification of transactivating factors critical for central nervous system expression. Expertise in RNase protection assays, DNA/RNA mobility shifts, yeast cloning systems, site-directed mutagenesis, nuclear run-on, and PCR is desirable.

(2) Molecular virology/gene therapy. Identify simian retroviral nuclear export factors and packaging signals, cloning of virus receptor and entry cofactors, development of retrovirus vectors. Expertise in yeast cloning systems, sequence analysis, site-directed mutagenesis, and other recombinant DNA methods is desirable. Both positions require Doctorates in molecular biology, neurobiology, biochemistry, or microbiology. Salaries commensurate with experience. Send curriculum vitae and three references to: **Dr. Curt Machida, Oregon Regional Primate Research Center, Oregon Health Sciences University West, 505 N.W. 185th Avenue, Beaverton, OR 97006. FAX: 503-690-5384. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIPS

Human/mammalian genetics. Immediate openings for Ph.D.'s in basic human and/or mammalian genetics. Research emphasis on disease gene identification, linkage, positional cloning, and molecular genetics/biochemical pathophysiological mechanisms and mouse models of human disease. Send curriculum vitae and reference letters to: **Gregory A. Grabowski, M.D., Director, Division and Program in Human Genetics, Children's Hospital Medical Center, 3333 Burnet Avenue, Pav 3-52, Cincinnati, OH 45229-3039. CHMC is an Equal Opportunity Employer.**

A **POSTDOCTORAL RESEARCH** position is available immediately to study cellular and molecular effects of ethanol in liver and endothelial cells. The focus is on tyrosine kinase and MAP kinase cascades. A strong background in cell signaling and molecular techniques is essential. Project also involves animal studies. Please send curriculum vitae, summary of research experience, and names of three references to: **Dr. Shivendra D. Shukla, Department of Pharmacology, University of Missouri School of Medicine, One Hospital Drive, Columbia, MO 65212. E-mail: shuklas@missouri.edu; FAX: 573-884-4558. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL POSITION. A Postdoctoral position is available immediately to carry out overexpression and enzymatic assays of proteins involved in polyketide biosynthesis in *Pseudomonas*. Previous experience in protein expression and enzymatic assays is required. A strong chemical background is preferred. Send résumé and the names of three references to: **Dr. Ronald J. Parry, Rice University, Department of Chemistry MS-60, 6100 Main Street, Houston, TX 77005. E-mail: parry@rice.edu.**

POSTDOCTORAL POSITIONS in environmental toxicology at the University of California, Davis to work on biochemical toxicology under supervision of **Dr. Fumio Matsumura**. Knowledge and skills in research on signal transduction, protein kinases, and cell biology are needed. Send curriculum vitae and two letters of reference to: **R. Morrison, Environmental Toxicology, 1 Shields Avenue, Davis, CA 95616. Telephone: 530-752-2732; FAX: 530-752-3394; e-mail: rlmorrison@ucdavis.edu. Open until filled.**

POSTDOCTORAL POSITION available in the Jonsson Cancer Center at UCLA to study the role of signaling pathways linked to apoptosis in the immune system. Candidate should be skilled in molecular biology, immunology, and signal transduction, and a U.S. citizen or permanent resident. Please forward curriculum vitae, career statement, and names of three references to: **Dr. Andre Nel, Professor of Medicine, UCLA, e-mail: anel@med1.medsch.ucla.edu.**

POSTDOCTORAL POSITION available to study the function and regulation of cell matrix interactions mediated via the expression CD44 and hyaluronan on chondrocytes. Send curriculum vitae and statement of research interest to: **Warren Knudson, Ph.D., Department of Biochemistry, Rush Medical College, 1653 West Congress Parkway, Chicago, IL 60612. FAX: 312-942-3053; e-mail: wknudson@rush.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN CELL AND MOLECULAR BIOLOGY

Rochester Institute for Biomedical Sciences

Several Postdoctoral positions available to join interdisciplinary group studying the mechanisms that regulate expression, targeting, and functions of the enzyme family that initiates O-glycosylation.

Successful applicants will have demonstrated expertise in one or more of the following areas: cell biology (cellular fractionation/organelle reconstitution; ion or pH measurement in organelles); enzymology (kinetics and chemical mechanisms of enzyme: substrate [inhibitor] interactions); gene regulation (expression analysis, *in vivo*); or developmental models (*Drosophila*, mice, zebrafish).

Appointment can be made at junior or senior level. Opportunity to develop independent projects.

Application, including a full curriculum vitae, a statement of research interests, and the names of two references, should be sent to: **Dr. Lawrence A. Tabak, Rochester Institute of Biomedical Sciences, Medical Center Box 611, Rochester, NY 14642. E-mail: lawrence_tabak@urmc.rochester.edu.**

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

POSTDOCTORAL ASSOCIATE HORMONE AND NEUROTRANSMITTER SIGNALING

A Postdoctoral position is available to join an energetic team investigating the regulation of hormone and neurotransmitter signaling by RGS proteins (*Nature* 383:172) in cultured cells and transgenic mice. Requires recent Ph.D. in the biological sciences and a record of productivity. Send curriculum vitae and three references to: **Kendall J. Blumer, Ph.D., Department of Cell Biology and Physiology, Box 8228, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, MO 63110. E-mail: kblumer@cellbio.wustl.edu.**

POSTDOCTORAL FELLOW. University of Pennsylvania. A Postdoctoral position is available for studies on male germ cell genetic modification. The project involves culture and expansion of male germ line stem cells (spermatogonia), followed by transfection and introduction of the transformed cells into the testis. (*Nature* 381:418; *Nature Medicine* 2:693). A background in molecular biology and an interest in cell biology is preferred. Send curriculum vitae, names of three references, and a letter describing research skills and interests to: **Dr. R. L. Brinster, School of Veterinary Medicine, University of Pennsylvania, 3850 Baltimore Avenue, Philadelphia, PA 19104.**

Two **POSTDOCTORAL POSITIONS** are available to study (1) the role of cytoskeletal proteins in signal transduction and tumor suppression pathways using gene knockout technology and (2) the interactions of malaria parasite proteins with the host erythrocyte membrane. Candidates with a recent Ph.D. in cell biology, molecular biology, protein chemistry, and parasitology are encouraged to apply. Please send curriculum vitae and names of references to: **Dr. Athar H. Chishti, Director, Laboratory of Tumor Cell Biology, St. Elizabeth's Medical Center, Tufts University School of Medicine, 736 Cambridge Street, Boston, MA 02135 USA. E-mail: achishti@semc.org or achishti@opal.tufts.edu.**

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 are available immediately to study protein-protein interactions in lipoprotein secretion. Experience in molecular biology techniques is essential. Knowledge of eukaryotic gene expression using baculoviruses and site-directed mutagenesis is desirable. Send curriculum vitae and referrals to: **Dr. M. Mahmood Hussain, Associate Professor, Biochemistry, MCP Hahnemann University, 2900 Queen Lane, Philadelphia, PA 19129. E-mail: hussaim@auhs.wpo.edu.**

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Two Postdoctoral positions are available immediately, the first in the area of synthetic carbohydrate chemistry and the second in carbohydrate biochemistry/glycobiology. The first position will involve the chemical synthesis of acidic oligosaccharides and their C-glycosides for study as novel therapeutic agents and cancer vaccines. Applicants for this position should have experience in synthetic carbohydrate chemistry and NMR spectroscopy. The second position will involve the sequencing of complex polysaccharides and biophysical studies on oligosaccharide-protein interactions. Applicants for this position should have experience in carbohydrate biochemistry, biophysical chemistry, and analytical biochemistry. Both positions require a Ph.D. in organic, medicinal, or biochemistry and an interest and ability to work across disciplines. Send curriculum vitae and three letters of reference to: **Prof. Robert J. Linhardt, PHAR-S 328, University of Iowa, Iowa City, IA 52242. E-mail: robert-linhardt@uiowa.edu; website: www-heparin.pharmacy.uiowa.edu.**

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

POSTDOCTORAL POSITIONS. To study regulation of gene expression during fat synthesis and adipocyte differentiation. Research includes (1) characterizing and cloning nuclear factors that interact with hormone response elements for lipogenic enzyme genes and (2) studying mode of action of an inhibitor of adipogenesis and its down-regulation during adipocyte differentiation. Send curriculum vitae and names of references to: **Dr. Hei Sook Sul, Department of Nutritional Sciences, University of California Berkeley, Berkeley, CA 94720-3104. E-mail: h.sul@nature.berkeley.edu. The University of California is an Equal Opportunity/Affirmative Action Employer.**

SELENIUM BIOCHEMISTRY

THRESSA STADTMAN, PH.D.

ENTRY ID: PD-827

A **POSTDOCTORAL POSITION** is available in the Laboratory of Biochemistry of the National Heart, Lung, and Blood Institute specializing in selenium biochemistry. Applicants must have a Ph.D. and less than five years of postdoctoral experience. U.S. citizen or permanent resident required. **Laboratory of Biochemistry, NHLBI, 3 Center Drive, MSC 0320, Building 3, Room 108, Bethesda, MD 20892-0320.**


POSTDOCTORAL POSITION available immediately to study mechanisms of action of TGF receptors, particularly interactions with the extracellular matrix. Applicants must have a Ph.D. or M.D. degree; experience with molecular and cell biological techniques would be helpful. Please send letter, curriculum vitae, and the names of three references to: **Dr. Rebecca G. Wells, Assistant Professor of Medicine and Pathology, Yale School of Medicine, P.O. Box 208019, New Haven, CT 06520-8019. E-mail: rebecca.wells@yale.edu.**

A **POSTDOCTORAL POSITION** is available to study neural mechanisms involved in apnea, the coordination of deglutition and respiration, and the interactions between respiratory and cardiovascular systems. Experience in animal neurophysiology is preferred. Send curriculum vitae to: **David Paydarfar, M.D., Department of Neurology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655. E-mail: david.paydarfar@banyan.ummdd.edu. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION PROGRAMMED CELL DEATH UNIVERSITY OF NORTH CAROLINA

A Postdoctorate with knowledge of PCD and proteases, and with excellent communication skills, is sought to study the role of regulatory proteases in tracheal element differentiation. Send applications to: **Dr. Alan Jones, e-mail: alan_jones@unc.edu.**

Carnegie Mellon has **POSTDOCTORAL OPENINGS** for Social and Physical Scientists and Engineers to work in human dimensions of global change and in the study and improvement of regulation. For details see website: www.epp.cmu.edu/home.html. Contact: **Granger Morgan, Department of Engineering and Public Policy, Carnegie Mellon, Pittsburgh, PA 15213 USA.**



New scientific discoveries are based on innovation, sharing knowledge and synergy of skills. This philosophy is a priority for the Institut de Recherche Jouveinal, one of the European Pharmaceutical Research Centres of Parke-Davis located in the southern region of Paris. In our research centres, in Ann Arbor (USA), Cambridge (UK) and Fresnes (FRI), scientists are working on a broad range of mechanistic approaches to discover and develop new drugs for important human diseases. Our present goal is to expand and build new teams at IRJ, in France, working closely with our international teams. We are currently recruiting a

l'alliance ouvre les portes de la découverte

Senior Scientist
Functional Genomics

This position has been established to join a team, within the Cell and Molecular Biology Department which will use functional genomics to understand the processes that control inflammation and immune response. The applicants should have a PhD, with minimum 2 years of postdoctoral experience, with theoretical and practical proficiency. The ideal candidate will have experience in Molecular Techniques relevant to functional genomics and/or immunology relevant to inflammation, hands on experience with one or more of the following technologies: cDNA cloning, cDNA selection, exon trapping, DNA sequencing, computational genomics. Additional experience in gene expression, expression cloning, basic mammalian tissue culture techniques, YAC, BAC, PAC analysis, would be preferred.

The selected candidate will have sense of innovation, independence in short range project planning and ability to work in a team environment.

For confidential consideration, please send your resume and your references, quoting reference GEN, to Marie-Aude Julien, Institut de Recherche Jouveinal/Parke-Davis, Human Resources Department, 3/9 rue de la Loge, BP 100, 94265 Fresnes Cedex, France. Fax: (33.1) 40 96 77 32

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A postdoctoral position is available at the Department of Medical Microbiology & Immunology, University of Göteborg, Sweden. The department is a research center of excellence for the development of mucosal vaccines and vaccine adjuvants. It has a long-standing tradition in mucosal immunology and is recognized worldwide for basic and applied science in this field. The aim of the research program, funded by the EC, NIH, and the Swedish Medical Research Council, is to develop and explore a novel concept for targeted immunomodulation based on the ADP-ribosylating ability of cholera toxin. The research will generate basic understanding of immune regulation at mucosal membranes with special focus on B cells and signal transduction. The research will generate novel vaccine adjuvants to be evaluated in the mouse *Chlamydia trachomatis* or *Helicobacter pylori* models. The successful applicant will join a research team of 8–10 people involved in the study of B and T cell responses to conventional or infectious disease relevant antigens. You should have a Ph.D. in molecular biology/biochemistry or in cellular/molecular immunology with a minimum of two years of postdoctoral experience. The main research responsibility will be to study signal transduction by ADP-ribosylating gene fusion proteins in different immune cells *in vivo* and *in vitro*. Evaluate cellular interactions and mechanisms of action of the fusion proteins. Design novel and modified gene fusion proteins with targeted action. Important skills include experience in methods for analysis of gene expression profiles and biochemical analysis of signal transduction, including protein phosphorylation/dephosphorylation, etc. Knowledge of mechanisms of B and T cell recognition and activation and skills in techniques to study lymphocytes and antigen-presenting cells at the cellular and molecular level. Applications with full CV, names of referees, and a short letter outlining the suitability for the relevant post should be sent to: **Dr. Nils Lycke, Department of Medical Microbiology & Immunology, University of Göteborg, S-413 46 Göteborg, Sweden, E-mail: nils.lycke@microbio.gu.se; FAX: 46-31-827647.**

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Applications are invited for the position of

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in the **Department of Physiology**, Hannover Medical School (MHH).

The successful applicant is expected to conduct research in sports physiology and to teach human physiology. Cooperation with other departments of the Medical School and the Department of Physical Education of the University in Hannover and the Landessportbund Niedersachsen is desirable. Participation in one of the local Sonderforschungsbereiche of the Deutsche Forschungsgemeinschaft (Program Projects) would be welcome.

Applicants (preferably MD) should possess international scientific reputation, teaching experience in human physiology, and experience in the general area of sports medicine.

Female scientists of equal qualification will be given preference. Physically handicapped of equal qualification will also be preferred. Details on formal requirements and further information can be obtained through the Rektor at the address given below (Fax +49-511-532-5576).

Applications should include CV, research plans, list of publications and selected reprints. Deadline for application is **January 31, 1999**. Please send your application to:

**Rektor der Medizinischen Hochschule Hannover
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POSITIONS OPEN

RESEARCH TRAINING IN THE BIOLOGY OF AGING AND AGE-RELATED DISEASES

POSTDOCTORAL and PREDOCTORAL FELLOWSHIPS are available at the University of Wisconsin-Madison. Funded by the National Institute on Aging, the training program focuses on basic mechanisms of aging, preventive interventions, and clinical problems encountered by older adults. Training is available in mitochondrial DNA abnormalities (Aiken), lipoprotein metabolism (Artie), osteoporosis (Binkley), muscular aging (Cartee, Schultz), Alzheimer's disease (Hell, Malter), energy metabolism (Kemnitz, Schoeller), ocular disease (Mares-Perlman), glutathione metabolism (Mulcahy), immune response (Muller, Watkins), oxidative stress (Ji, Oberley, Weindruch), DNA repair (Prolla), swallowing (Robbins), vitamin K (Suttie), caloric restriction (Weindruch), and prostate cancer (Wilding). *Traineeships are limited to U.S. citizens and permanent residents.* To apply, send all of the following: letter stating research interests, curriculum vitae, transcripts of all college work, GRE and/or MCAT scores, three letters of recommendation, and proof of U.S. citizenship or permanent residence to: **Dr. Richard Weindruch, Institute on Aging, University of Wisconsin-Madison, 1300 University Avenue, Room 2245, Madison, WI 53706.** The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

The University of Pittsburgh Cancer Institute Lung Cancer Program has immediate openings for Postdoctoral Fellows to work on projects in respiratory epithelial biology, orthotopic models of lung cancer growth, growth factors in lung cancer, and gene therapy. Applicants should possess the Ph.D. degree in cell biology/molecular biology/biochemistry/ or a related field. Experience in gene expression, gene transfer, cell culture, and animal models helpful. *Applicants who are U.S. citizens or permanent residents may qualify for a position on a Pulmonary Medicine Training Grant.* Send curriculum vitae and names of three references to: **Dr. Jill M. Siegfried, Ph.D., Director, Lung Cancer Program, University of Pittsburgh Cancer Institute, E1340 Biomedical Science Tower, Pittsburgh, PA 15261.** E-mail: siegfrie@server.pharm.pitt.edu.

POSTDOCTORAL POSITION DUKE UNIVERSITY MEDICAL CENTER DURHAM, NORTH CAROLINA

Joint appointment in Division of Urology and Center for Aging. Candidate will join cadre of NIH-funded Postdoctorates in long-standing program to develop independent research career. Assume responsibility for ongoing feeding study in transgenic mice and develop own research in related area. Experience in nutrition, veterinary science, biology, and/or molecular biology preferred. *Candidates must be a U.S. citizen or have permanent residency status.* FAX or e-mail application letters and curriculum vitae to: **Wendy Demark, Ph.D., FAX: 919-684-9990; e-mail: demar001@mc.duke.edu.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the requirements for maintenance of T cell self-tolerance. Molecular/cellular/transgenic approaches utilized to understand thymic development and establishment of peripheral tolerance. Related projects examine the MHC requirements for the development of diabetes. Training in cellular/molecular immunology/transgenic mouse experience preferred. Send curriculum vitae and three references to: **Terri Laufer, M.D., Division of Rheumatology, 913 Stellar Chance, University of Pennsylvania, Philadelphia, PA 19104.** E-mail: claufer@mail.med.upenn.edu; FAX: 215-349-5572. The University of Pennsylvania is an Equal Opportunity Employer and is actively recruiting minorities.

POSTDOCTORAL POSITION immediately available to investigate factors that regulate the glucocorticoid receptor (GR). The candidate will help characterize the impact of cytokines and antidepressants on GR function and apply relevant findings to samples from patients with depression. Requirements are a Ph.D.; experience in molecular endocrinology, steroid biochemistry, and/or receptor pharmacology; and fluency in English. Send curriculum vitae and three references by e-mail to: **Andrew Miller, M.D., Department of Psychiatry, Emory University School of Medicine, Atlanta, GA 30322.** E-mail: amill02@emory.edu. Emory University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS

NIH-funded Neurovirology-Molecular Biology Training Program, at the University of Colorado Health Sciences Center, offers Postdoctoral Fellowships in the laboratories of:

Jeffrey Bennett: neurotrophins and eye development. **Randall Cohrs and Donald Gilden:** molecular mechanisms of herpesvirus latency in human ganglia. **Paul Hagerman:** mitochondrial DNA defects and neurodegenerative diseases. **Anthony Hayward:** cell-mediated immune responses to HSV and VZV. **Kathryn Holmes:** molecular pathogenesis of coronavirus infection. **Ravi Mahalingam:** animal model of VZV latency. **Donald Gilden, Gregory Owens, and Mark Burgooon:** identification of an antigen in multiple sclerosis. **David Patterson:** chromosomal abnormalities and neurodegenerative diseases. **Jerome Schaack:** virus transcription. **Roderic Smith:** modification of neuronal excitation by viral mediated gene transfer. **Kenneth Tyler:** virus-induced apoptosis in the nervous system.

For more information, please contact: **Dr. Donald Gilden, Department of Neurology, University of Colorado Health Sciences Center, 4200 East 9th Avenue, Box B182, Denver, CO 80262.** Telephone: 303-315-8281; FAX: 303-315-8720; e-mail: don.gilden@uchsc.edu.

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POSTDOCTORAL FELLOWSHIPS PENN STATE COLLEGE OF MEDICINE

Positions available to study a regulated protein targeting pathway in yeast. The main goal of this project is to identify important molecules involved in targeting cytosolic proteins to the yeast lysosome for degradation. Applicants with backgrounds in molecular biology techniques, subcloning, yeast two hybrid screening, Western blotting, PCR, bacteria and yeast cultures are strongly encouraged to apply. Send curriculum vitae and three names of references to: **Hui-Ling Chiang, Ph.D., Department of Cellular and Molecular Physiology, Pennsylvania State University College of Medicine, 500 University Drive, H166, Hershey, PA 17033.** E-mail: hlchiang@psu.edu. Applications will be accepted until the position is filled. *Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its work force.*

Two **POSTDOCTORAL FELLOW** positions are available immediately in the Division of Infectious Diseases, Tufts University School of Veterinary Medicine. One position addresses cell-mediated immune responses to *Cryptosporidium parvum* using murine models. Candidates should have a recent Ph.D. with a strong background in immunology. Experience in molecular biology is also desired. The second position addresses the molecular biology of *C. parvum*. Candidates should have a recent Ph.D. with a strong background in molecular biology. Interested candidates should send their curriculum vitae, a summary of their research experience, and the names and addresses of three references to: **Dr. Donna Akiyoshi, Tufts University School of Veterinary Medicine, Building 20, 200 Westboro Road, North Grafton, MA 01536.** E-mail: dakiyoshi@infonet.tufts.edu.

POSTDOCTORAL POSITIONS available immediately at Duke University Medical Center. Research involves radioiodination and radioassay of biomolecules and their application as cancer therapeutics. One project involves labeling strategies for proteins and peptides reactive with the mutant epidermal growth factor receptor variant III, the other, pretargeting approaches utilizing streptavidin/biotin. Interested candidates should send curriculum vitae and names of three references to: **Professor Michael R. Zalutsky, Department of Radiology, Box 3808, Duke University Medical Center, Durham, NC 27710.**

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POSTDOCTORAL SENIOR SCIENTIST or RESEARCH TECHNICIAN position available immediately at New England Medical Center/Tufts University Medical School to investigate (1) signal transduction and viral-cellular interactions involved in HIV neural injury or (2) genetics of neurodegenerative disorders. Experience in molecular biology/tissue culture preferred. Send curriculum vitae and names of three references to: **Bradford Navia, M.D., Ph.D., Research Laboratories in Psychiatry, P.O. Box 1007, 750 Washington Street, Boston, MA 02111.** E-mail: bradford.navia@es.nemc.org.

POSITIONS OPEN

POSTDOCTORAL POSITIONS AT THE NATIONAL CANCER INSTITUTE

Research will focus on the control of hematopoietic stem cell by Transforming Growth Factor- β , studying the molecular mechanisms involved using *in vivo* and *in vitro* assays, TGF- β -deficient mice, and mechanisms of chemoprotection of bone marrow cells. Candidates should have a strong background in molecular and/or cell biology. Candidates must have less than five years of postdoctoral experience. Correspondence, names of references, and curriculum vitae should be sent to: **Dr. Francis Ruscetti, Laboratory of Leukocyte Biology, Building 567, Room 254, NCI-Frederick Cancer Research and Development Center, Frederick, MD 21701-1201.** E-mail: ruscettif@mail.ncifcrf.gov.

TULANE UNIVERSITY

POSTDOCTORAL POSITION available to study the molecular aspects of peptide hormone action and structure-function of membrane receptors. Strong background in one or more of the following areas is highly desirable: molecular cloning, gene expression, site-directed mutagenesis, and/or gene transfer technology. Individuals having strong background in protein chemistry and signal transduction will also be considered. Qualified candidates (Ph.D. or M.D.) should send curriculum vitae and two references to: **Dr. K. N. Pandey, Department of Physiology SL-39, Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112.** An Equal Opportunity/Affirmative Action Employer.

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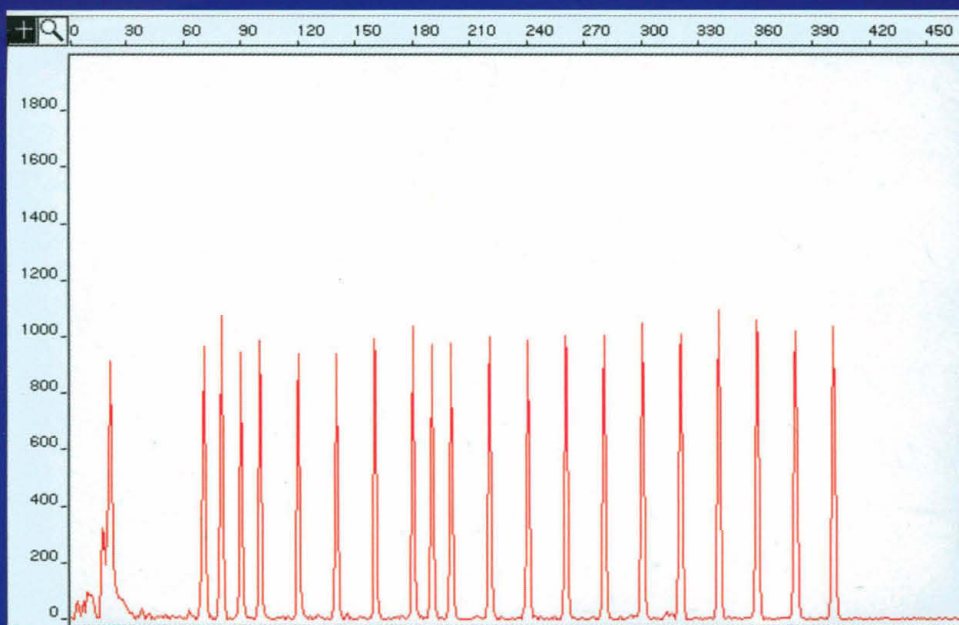
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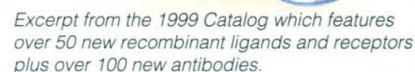
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