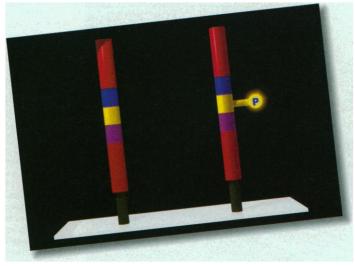
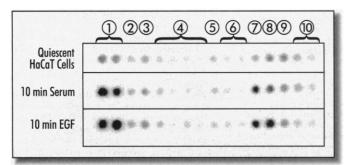
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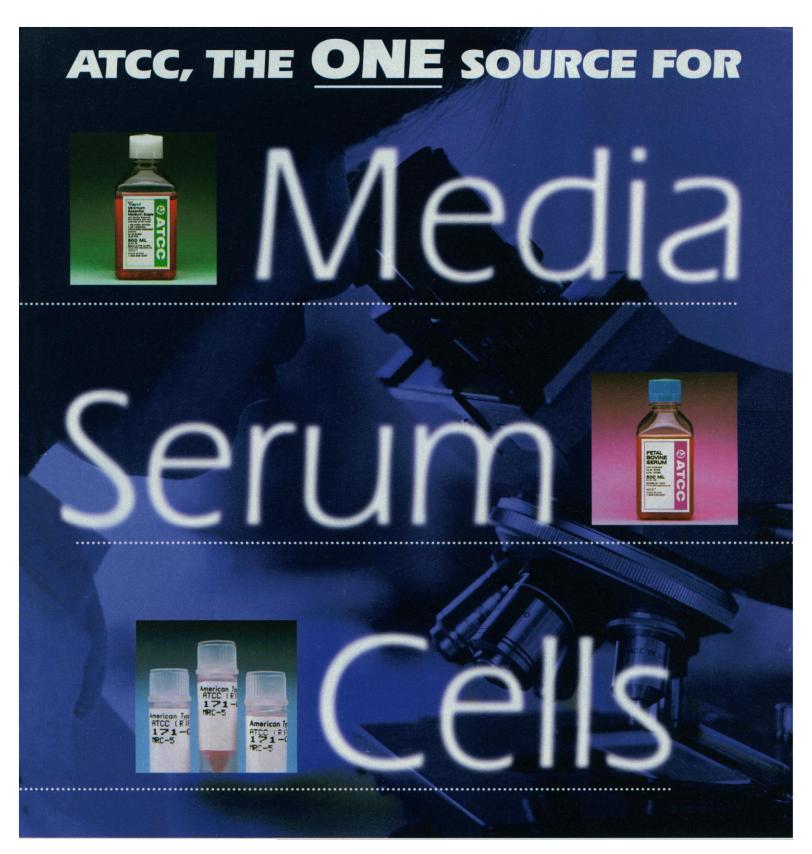
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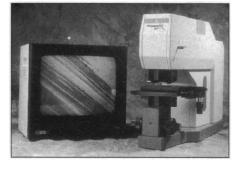
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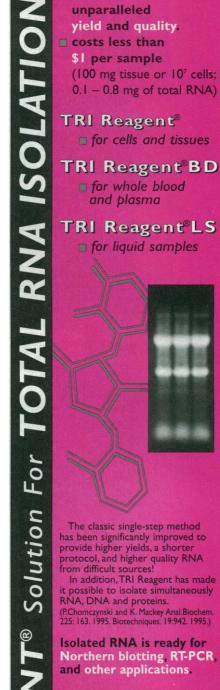
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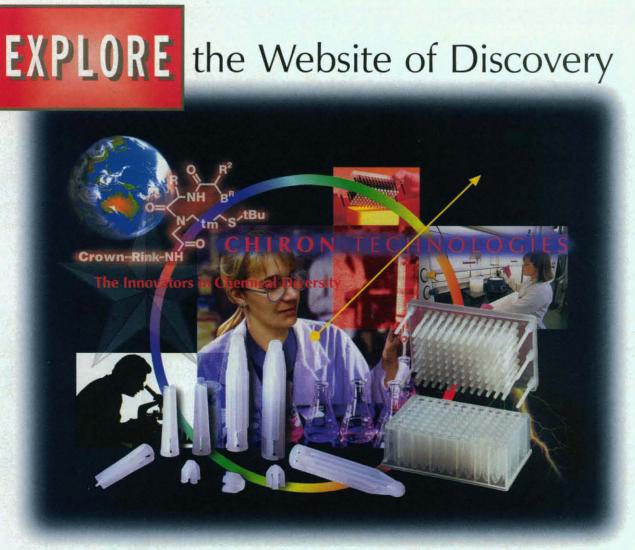
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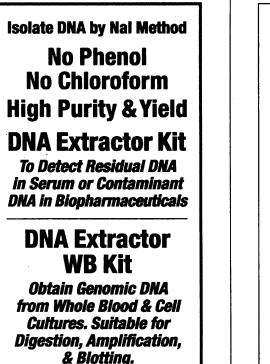
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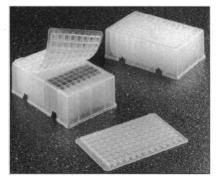
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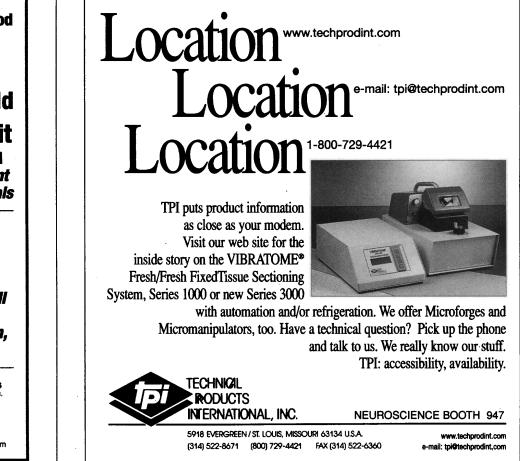
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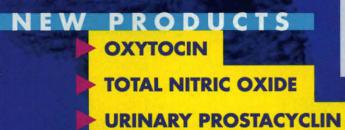
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The Virginia-Maryland Regional College of Veterinary Medicine and the Center for Agricultural Biotechnology, at the University of Maryland in College Park, Maryland, invite applications from qualified individuals for a nineand-a-half-month tenure-track Molecular Bacteriologist position at the ASSISTANT/ASSOCIATE PROFES-SOR level. The salary will be commensurate with experience. Minimum qualifications include a Ph.D. degree in molecular biology or bacteriology and experience in food safety is desirable. The position responsibilities are divided into 70 percent research, 15 percent teaching, and 15 percent service. The position will focus primarily on food safety issues and organisms found in poultry and poultry products. Candidates should demonstrate evidence of basic and applied research experience in molecular bacteriology with particular emphasis on microbial agents involved in food-borne illness. Demonstration of previous success in developing independent and collaborative research in food safety issues is desirable. Excellent oppor-tunities exist for collaboration with federal agencies (USDA, FDA, NIH) and other university departments. The successful candidate will be expected to develop an active, extramurally funded research program in food safety and work in a multidisciplinary environment.

Submit a letter of application, curriculum vitae, statement of career goals, and names of three references to: Dr. S. K. Dutta, Chair, Search Committee, Virginia-Maryland Regional College of Veterinary Medicine, University of Maryland, College Park, MD 20742-3711. Applications will be received until 1 January 1999 or until an acceptable candidate has been identified.

The University of Maryland is an Affinnative Action/Equal Opportunity Employer.

CHAIR, DEPARTMENT OF BIOLOGY BOSTON COLLEGE, AND HOLDER OF THE DELUCA PROFESSORSHIP IN BIOLOGY

Boston College invites nominations or applications for the position of Professor and Chair of the Department of Biology. The university seeks a Senior Biologist with a distinguished record of scholarly activity, an active inter-nationally recognized program of research, and a commitment to excellence in undergraduate and graduate education to guide the future development and expansion of the department. The department's present faculty of 19 offer B.S., M.S., and Ph.D. degrees. The Chair will pro-foundly influence all aspects of the department's development, including the addition of new junior and senior faculty positions. The successful candidate also will be the first holder of the Michael E. and Salvatore A. DeLuca Professorship in biology, established in 1996 with an endowment by Dr. Salvatore A. and Lucy DeLuca. Nominations and applications with appropriate supporting ma-terial should be sent to: M. A. Smyer, Chair, Biology Search Committee, Graduate School of Arts and Sciences, McGuinn 221, Boston College, Chestnut Hill, MA 02167. Review of applications will begin December 14, 1998, and will continue until the position is filled. Women and minority group members are encouraged to apply. Boston College is an Affirmative Action/Equal Opportunity Em-ployer, rich in the Jesuit tradition.

DEAN, COLLEGE OF AGRICULTURE AND DIRECTOR, MONTANA AGRICULTURAL EXPERIMENT STATIONS Montana State University-Bozeman

Montana State University–Bozeman invites nominations and applications for the position of Dean of the College of Agriculture and Director of the Montana Agricultural Experiment Station (MAES) available July 1, 1999. The Dean is the chief administrative officer of the College of Agriculture, serves as Director of MAES, and reports to the Senior Vice President and Provost, and the President.

Nominations are due by December 15, 1998. Screening will begin January 11, 1999, and continue until the position is filled. The Vacancy Announcement and complete application information can be obtained from: Dr. David F. Gibson, College of Agriculture Dean Search Committee, c/o Cindy Bridgewater, Administrative Assistant, P.O. Box 173820, Montana State University-Bozeman, Bozeman, MT 59717-3830. Telephone: 406-994-2272; FAX: 406-994-6665; e-mail: cindy_b@coe.montana.edu; website: http://www. montana.edu/msuinfo/jobs/prof/. ADA/Equal Opportunity/Affimative Action/Veterans Preference. advertising supplement

Focus on Careers

NEUROSCIENCE

by Peter Gwynne

Industry Searches for Neuroscientists

Neuroscience represents a key frontier for fundamental research. Largely as a result of research on the human genome, the prospect for discovering new proteins and enzymes in neuroscience work is dramatic. Much basic work remains to be done to discover pathways in the brain. One hot research field focuses on the regulation of neural function. Other key areas for basic investigation include studies of the factors that control neural death and cell survival, and the promotion of neural survival.

For the biotechnology and pharmacology industries, neuroscience represents the hope of alleviating several devastating diseases, from Alzheimer's disease to depression. While some chemical treatments exist for such diseases, corporate laboratories want to develop more narrowly targeted drugs with fewer side effects.

Neuroscience already plays a role in improving the bottom lines of pharmaceutical and biotechnology companies. Pfizer Inc.'s antidepressant drug Zoloft, for example, has proved a winner. Several biotechnology companies focus their entire activity on neuroscience research.

It's hardly surprising, then, that corporate demand for neuroscientists is increasing steadily. It affects all levels of training, from individuals with newly minted Bachelor's degrees to scientists with postdoctoral experience. Pfizer is one of the companies that expects its need for neuroscientists to increase in the next few years.

> **Pfizer CNS Discovery Department** Schering-Plough Research Institute **Neurofit S.A. Preclinical Research**

Groton, CT: "We're always hiring, primarily because of the growth in our commitment to neuroscience but also because there is occasional turnover as individuals register for further education or change careers," says Jim Heym, senior executive director of Pfizer's CNS Discovery Department. This group, a significant portion of the company's CNS labs worldwide, undertakes United States-based discovery work related to the central nervous system.

Pfizer focuses on three principal areas of research in neuroscience. The Groton department studies neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease, and brain injury, and psychiatric diseases, including addiction, depression, psychosis, and schizophrenia. The company's Japanese division, meanwhile, focuses on analgesia, and a preclinical research unit in Sandwich, England, works on neurological disorders such as stroke and migraine.

Heym's department has more than 150 scientists. They include molecular scientists, chemists, neuroscience biologists, and experts in drug metabolism. About one third have Ph.D's.

"We don't necessarily hire Ph.D's based upon specific technical expertise," says Heym. Often, Pfizer seeks solid basic knowledge and clearly demonstrated abilities to design good research projects that resolve scientific questions. "People need to think of themselves as flexible in how they apply their knowledge," Heym continues. "In industry the opportunities are dynamic and project objectives or research targets may change over a period of a few years."

Ph.D's joining the department will find themselves taking on supervisory roles. "It's not easy to acquire this skill before coming to the job," says Heym. "But it's worth thinking about, as you will at some point have to guide other people's career development."

Individuals with Bachelor's and Master's degrees will quickly become key members of project teams, and they will conduct much of the laboratory work. So Heym views it as a significant advantage for candidates at this level to possess some hands-on laboratory experience. In addition, "increasing use of laboratory automation and database management make computer skills highly desirable."

Pfizer seeks more than strictly scientific skills. "Good oral communication skills are essential," Heym says, because scientists have to represent the company at scientific meetings as well as make internal presentations. The ability to express oneself on paper helps as well, because scientists will write internal reports and publish experimental results in scientific journals. Team skills are equally valuable. "It's very important in industry that any particular lab be part of a team of labs working on a shared goal," says Heym.

He offers one other piece of advice to candidates for employment: "If you're considering a career in industry, recognize that it is a different environment from the academic setting," he says. "Try to talk to people familiar with industry about what it's like to work in a company environment. And when you're interviewing, don't be afraid to ask questions about the difference between industrial and academic research."

Peter Gwynne writes about science and technology from his base on Cape Cod. 1164

HE POSSIBILITIES AT www.pfizer.com

s a company committed to innovation, Pfizer has the resources to help you realize your own definition of success. We share your goal of improving human health creative drive and professional expertise that only you can bring to our efforts. For your own part, you'll be amazed by what you can achieve when your talent, ambition and original thinking are combined with one million square feet of new lab space, an annual R&D investment of \$2 billion, and the unparalleled collaborative pharmaceutical companies.

By recognizing and responding to the unmet needs of people across the globe, Pfizer has earned a spectacular reputation for launching effective new products, attaining rapid market penetration and sustaining commercial product success. By the same token, we're working to become a true employer of choice by understanding and addressing the unique requirements and goals of the most talented professionals in the industry. Pfizer is a company committed to exceeding your expectations. The power to transform potential into reality is yours. Make it happen by contacting Pfizer today.

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CNS DISCOVERY RESEARCH SCIENTISTS

Molecular Biology

We are seeking to expand our efforts in CNS Discovery to identify drug candidates in the areas of neurodegeneration and psychotherapeutics, Responsibilities include supervising a lab that contributes to project teams by using molecular and cell biology techniques to identify and validate new targets for drug screening. Ph.D. and 2 years' postdoc experience in molecular biology and neuroscience including library construction and base searching, immunohistochemistry, heterologous protein expression, and tissue cul-ture required. Job Code: 2909DH

Biology You will supervise a lab responsible for the develop-ment of ideas for novel therapeutic approaches and evaluation of potential drugs for efficacy in psychiatric illness. Ph.D. or equivalent in neuro-science, neuropharmacology, behavioral science, molecular and cellular neuroscience or related fields with 2 users' avancience method. with 3+ years' experience required. Skills in assessment of CNS neurochemistry, neuroassessment of CNS heurocremisty, neuro-transmitter/ion channel/neuropeptide function and interactions, *in vivo* models predictive of drug effects in psychiatric disorders and pharmaceutical research experience in a drug discovery laboratory preferred. Job Code: 2910DH

Drug Metabolism Work in a project area with a multidisciplinary Work in a project area with a multidisciplinary team including chemists, biologists, and clinicians where pharmacokinetics and drug metabolism input is essential to the discovery and development of new CNS drugs. You will also supervise the activities and professional development of BS/MS level scientists. Ph.D. or equivalent in chemistry, biochemistry, or a related field in the biological sciences required. Experience in biotransformation of drugs pharmacokinstics methods to availate of drugs, pharmacokinetics, methods to evaluate CNS penetration, and/or bioanalytical chemistry (including practical experience with LC-MS) preferred. Job Code: 2911DH

CNS DISCOVERY BS/MS SCIENTISTS

Molecular Biology We are seeking a scientist to work on CNS projects with extensive molecular biology training and particular emphasis on molecular cloning, PCR and RTPCR southern and northern blotting, DNA and RNA isolation, SDS-PAGE, immunoblotting, and RNA Isolaton, 3D3-FARE, immunolottom, recombinant protein expression, and affinity purification. BA/BS with 2 years' relevant lab experience in cell culture and biochemistry required. MA/MS with 3 years' relevant experience and background in neuroscience preferred. Job Code: 29120H

BECOMES

Biology

Join a team working in development of ideas for novel therapeutic approaches and evaluation of potential drugs for efficacy in psychiatric illness. potential drugs for efficacy in psychiatric illness. BS/MS in neuroscience, neuropharmacology, behavioral science, molecular and cellular neuro-science or related fields required. Skills in the assessment of CNS neurochemistry, neurotrans-mitter/ion channel/neuropeptide function and interactions, in vivo models predictive of drug effects in psychiatric disorders and pharmaeffects in psychiatric disorders and pharma-ceutical research experience in a drug discovery laboratory preferred. Job Code: 2913DH

Drug Metabolism Conducting *in vivo* and *in vitro* drug metabolism and pharmacokinetic studies, your respon-sibilities will include utilization of *in vivo* and *in vitro* techniques, administration of drugs, collection of biological samples, and application of state-of-the art bioanalytical LC-MS methods for monitoring drugs and metabolites. BS/MS or equivalent in chemistry, analytical chemistry, or biology related fields and strong computer skills are required. Experience in LC-MS, HPLC, and *in vitro* and/or *in vivo* drug metabolism techniques preferred. Job Code: 29140H preferred. Job Code: 2914DH

See us at the Society for Neuroscience meeting. November 8-11 in Los Angeles, CA.

ompetitive salaries. Outstanding benefits. Exceptional opportunities for learning World-class professionals working at your side. And the terrific lifestyle of seacoast Connecticut, where you can enjoy four distinct seasons, local cultural attractions and a high quality of life only hours from Boston, Providence and New York City. All this -and much more - is the reality of a career with Pfizer. For immediate, confidential consideration, send your resume 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.

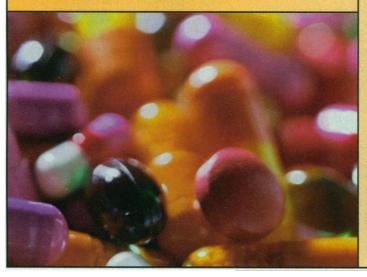


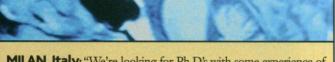
European Neuroscientists Seek Opportunities in Small Companies

European demand for neuroscientists is growing slowly, as a result of two opposing factors. The effort to understand how the brain works, and how it malfunctions in central nervous system diseases, has created a need for more neuroscientists. But megamergers among large pharmaceutical companies have caused the consolidation of some corporate research.

As a result, small and medium-sized companies have become the most likely to employ neuroscientists. The European Union is encouraging that trend, by encouraging start-ups of technologybased companies and activating neuroscience research projects under its Framework program.

Many of those projects will involve collaboration among several European laboratories. For while the continent lacks a single large research center in neuroscience, it does boast several "islands" of excellent academic and industrial research in the topic. These include Bordeaux, London, Milan, Munich, Paris, Strasbourg, Würzburg, and Zurich. Leaders of groups in two of those locations discussed their requirements for neuroscientists.





MILAN, Italy: "We're looking for Ph.D's with some experience of postdoctoral work," says Ennio Ongini, head of the neuroscience group at the Schering-Plough Research Institute, in the San Raffaele Science Park. "We would like a very good scientific grounding at university, and a minimum of experience in industry is desirable."

Ongini's laboratory, which has hired a handful of senior scientists in the past year, employs more than 25 individuals. They focus on neurodegenerative diseases, such as Parkinson's disease, and therapeutic approaches to recovery from cerebral ischemia. They collaborate with neuroscientists from the San Raffaele Institute and European research groups, as well as Schering-Plough's neuroscience team in New Jersey. Indeed, says Ongini, "the experience of working in a science park can be an interesting career opportunity for young neuroscientists."

Several employees are Italian-born scientists who have participated in what Ongini calls a "return of the brains" from work in the United States or European centers of excellence. The combination of European and American training, he finds, effectively mingles classical scholarship in neurophysiology and neuropharmacology with skills in molecular biology, genetics, and newer disciplines.

Ongini is also taking advantage of a growing European trend to give postdoctoral fellows and Ph.D. candidates some experience in industry. His institute has four students working on oneyear placements.

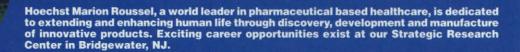
How does he advise potential recruits? "In addition to gaining excellent expertise in a key area of neuroscience," he says, "develop an enterprising spirit and a strong sense of teamwork."

ILLKIRCH, France: Formed in early 1996, Neurofit S.A. Preclinical Research carries out contract research on neurological diseases for the pharmaceutical, chemical, and biotechnology industries. "We have a number of disease models, both animal and *in vitro* for various diseases, which we use to measure the efficiency of new molecules produced by the drug industry," says Jacques Borg, Neurofit's chairman of the board and scientific director.

Clients include biotechnology companies without animal testing facilities, and pharmaceutical corporations that lack models for specific diseases. They come from the United States and throughout Europe, as well as the Strasbourg area where Neurofit is based. Neurofit also plans to set up a North American site by the end of 1998, in Montreal, New York, or San Diego.

Neurofit has seven scientists on staff. However, says Borg, "we are expanding, especially in psychiatric diseases. I expect that, one year from now, we'll have five more scientists." The company hires at the Ph.D. level and lower, and welcomes candidates with Ph.D's and M.D. or doctor of pharmacy degrees, and individuals with previous experience in industry.

In addition, says Borg, who himself has M.D. and Ph.D. degrees, "recruits need to be good in both science and writing; we do a lot of writing in projects and reports. Scientists who want to work for us need to know a little about pathology. They should have some idea of what quality assurance means, and understand statistical analysis and the timing of experiments. One of the strengths of our company is that we can set up a new project or protocol rapidly." What about language skills? "Good French certainly helps,"says Berg, "but it's not a priority. A good scientist with curiosity will be able to learn the language."



ONCOLOGY RESEARCH

BS/MS Molecular Biologist/ Oncology Research Description:

BS/MS Molecular Biologist to participate in the cloning of target genes for the Oncology Disease Group.

Requirements:

BS/MS in Molecular Biology, or recognized equivalent field with a minimum of 5 related experience, Demonstrated skills in utilization of bioinformatics/ genomics for selection of target genes including state of the art sequence analysis and database mining

background, Broad expertise in DNA and RNA molecular technologies including generation of cDNA libraries, epitope and affinity tagging of proteins, cloning and expression of genes in a variety of prokaryotic and eukaryotic cell types including mammalian and insect cells,

Software and data management skills required, Excellent verbal and written communication skills.

BS/MS Biochemist -Oncology Research Description:

Position is responsible for protein purification and high through-put assay design.

Requirements:

BS/MS in Biochemistry, Cell Biology or recognized equivalent discipline,

3 to 5 years of related experience (pharmaceutical experience, highly desirable),

Demonstrated technical skills in tissue culture and protein biochemistry including experience in in vitro enzyme assays,

Experience with cell-based assays, highly desirable, Excellent communication skills, Ability to work in a team based environment.

Ability to work in a team based environment.

BS/MS Biochemist (Protein Expression) Oncology Research

Description: Position is responsible for recombinant protein expression in heterologous systems.

Requirements:

BS/MS in Biochemistry, Cell Biology or recognized equivalent discipline, 3 to 5 years of related experience (pharmaceutical

experience, highly desirable), Demonstrated technical expertise in insect cell

culture/baculovirus expression system are essential, Experience in scale-up production using fermenters,

highly desirable,

Excellent communication skills,

Ability to work in a team based environment.

MS Biologist -Oncology Research Description:

Position involves work in a multifunctional group responsible for treatment of human tumor xenografts with experimental new anti-cancer agents and standard cytotoxics/cytostatics to define limits of efficacy.

Requirements:

vond Medicine

MS in Molecular Biology, Pathology, Biochemistry, Cell Biology or recognized equivalent discipline, Minimum of two years experience with in situ hybridization, immunohistochemistry, tissue preparation/

sectioning/staining and histology, Experience with HPLC and other analytical techniques, highly desirable,

Experience with tumors, highly desirable. Excellent communication skills,

Ability to work in a team based environment.



BS/MS Cellular Immunology Associate - Respiratory

Hoechst Marion Roussel, a world leader in pharmaceutical based healthcare, currently has opportunities available within our Respiratory Diseases therapeutic diseases research department at our North American Strategic Research site in Bridgewater, NJ.

Description

We are seeking a BS/MS Cellular Immunologist, Pharmacologist, or Biochemist. Their primary responsibility will be to conduct in vitro immunological and biochemical

studies to investigate the mechanism of action of compounds discoverede in

asthma research program.

This individual will also be involved in the identification of novel drug targets and development of in vitro primary and secondary assays for them.

Requirements

OUL

BS/MS in immunology with 3-10 years of experience in

the pharmaceutical industry,Experience with in vitro immunological assays (human and mouse T cells, cytokines, FACS) as well as RIA, ELISA, intracellular Ca++, signal transduction pathway analysis, apoptosis, and receptor binding), Brefeisert in the use of

Proficient in the use of computers in the analysis and management of data.

CNS RESEARCH

Postdoctoral Ph.D Molecular Biologist - CNS Diseases Research

Description:

The incumbent will utilize cutting-edge genomic technologies to identify and characterize novel therapeutic targets for the CNS Diseases Research Group. Areas of research interest include signal transduction mechanisms, the control of neuronal apoptosis, and disease genes.

Requirements:

Ph.D. in Molecular Biology, or recognized equivalent field,

0 to 3 years experience including research background and interest in the areas as indicated above.

Strong background and expertise in Molecular and Cell Biology.

Excellent verbal and written communication skills.

Attracting and retaining top talent is a high priority at Hoechst Marion Roussel. That is why we offer one of the most outstanding and comprehensive compensation and benefits packages in the pharmaceutical industry. Our total rewards package includes competitive compensation and bonus programs, flexible medical and dental plans, tuition assistance, income protection plans, and generous retirement plans that have been cited as the best in the industry.

For consideration, mail your resume (suitable for scanning) including salary history/requirements, to: Staffing Manager, B-103H, Ref 1998BW0027, Hoechst Marion Roussel, Routes 202-206, P.O. Box 6800, Bridgewater, New Jersey 08807-0800, U.S.A., or e-mail: jobs@hmrag.com. For additional company information and available positions, we invite you to visit our website: www.hmri.com. An affirmative action employer M/F/D/V.

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THE NEUROSCIENCES INSTITUTE SAN DIEGO, CALIFORNIA

The Neuroscience Institute is an independent, not-for-profit organization at the forefront of research on the brain. Research at the Institute spans levels from the molecular to the behavioral and from the computational to the cognitive. The Institute has a strong tradition in theoretical neurobiology and has recently established experimental facilities; it is also the home of the Neuroscience Research Program and serves as an international meeting place for neuroscientists. For additional information see http://www.nsi.edu. The Institute invites applications for the following positions: ASSOCIATE FELLOW, NEUROPHARMACOLOGY

Applicants should have a strong background in central nervous system pharmacology and should be at the advanced postdoctoral or Assistant Professor level. Successful candidates will be capable of developing an innovative research program and will be expected to take advantage of opportunities for scientific interactions with Fellows in Experimental and Theoretical Neurobiology

POSTDOCTORAL FELLOW IN EXPERIMENTAL NEUROBIOLOGY

A current focus of the Institute is on the action and pharmacological manipulation of neuromodulatory systems with diffuse projections, such as the noradrenergic, serotonergic, cholinergic, dopaminergic, and histaminergic systems. Another focus of the Institute is on gene networks that affect the development and function of the nervous system. Other research areas include systems neurophysiology, Drosophila genetics, neural development, and the functions of sleep. Applicants should have a strong background relevant to ongoing research in the above-mentioned areas. Ph.D. or equivalent required at time of employment.

JUNIOR FELLOW IN THEORETICAL NEUROBIOLOGY

Since 1987 the Institute has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include largescale simulations of neuronal networks and analysis of functional interactions among brain areas using approaches based on information theory. Advanced computing facilities are available. Applicants should be at the postdoctoral level with a strong background in mathematics, statistics, and computer modeling.

JUNIOR FELLOW, NEURAL BASIS OF CONSCIOUSNESS

The Institute has a strong tradition in the theoretical and experimental study of consciousness. Applicants interested in collaborating on experimental and theoretical studies of the neural correlates of conscious perception should have a background in cognitive neuroscience and neuroimaging (including MEG, EEG, and fMRI). Experience with designing visual and auditory stimulation paradigms and with the statistical analyses of imaging data is especially desirable. All Fellows receive stipends and research support commensurate with qualifications and experience. Positions are now available. Applications should contain a short statement of research interests, a curriculum vitae, and the names of three references and should be sent to: Research Director, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121.



Faculty Opportunities in Neuroscience at the University of California, Davis

The University of California, Davis, has embarked upon a major recruiting campaign in Neuroscience to be completed over the next few years. Many new opportunities have opened up in the fields of Cellular/Molecular and Systems/Cognitive Neuroscience, to be filled at all levels from Assistant to Full Professor.

The University of California, Davis is home to a large number of faculty engaged in research in the biological sciences and located in the School of Medicine, the College of Agriculture and Environmental Sciences, the School of Veterinary Medicine, The College of Letters and Science, and the Division of Biological Sciences. Outstanding research facilities are provided by associated programs and facilities, including the Center for Neuroscience, the California Regional Primate Center, the Protein Structure Laboratory, the Center for Comparative Medicine, the Center for Image Processing and Integrated Computing, and the Research Imaging Facility.

The Center for Neuroscience with faculty drawn from most of the departments and sections of the University and several affiliated organizations, anticipates recruiting more than ten new faculty in association with the School of Medicine, the School of Veterinary Medicine, the Division of Biological Sciences, and the Division of Social Sciences. Emphasis will be placed on continuing to enhance the existing strengths of the Center in Systems and Cognitive Neuroscience, while building new programs in Cellular and Molecular Neuroscience.

New initiatives are being planned in the Mind Sciences and a new Institute with its focus on neurodevelopmental disorders has recently been established, with a substantial initial endowment from state and private sources.

Attention is drawn to three advertisements appearing in this issue of Science describing ongoing searches. Further information can be obtained from the Center for Neuroscience, 1544 Newton Court, University of California, Davis, Davis, CA 95616, or through the Center's web page @ http://neuroscience.ucdavis.edu. The University of California is an Equal Opportunity Employer.

Center for Neuroscience University of California, Davis

ALBANY MEDICAL COLLEGE

Neuroscientist

Applications are invited for a tenure-track assistant professor position (Ph.D. and/ or M.D.) in neuroscience. Specialization in any area of neuroscience will be considered. The selected candidate will join an interdisciplinary neuropharmacology and neuroscience research group whose interests include molecular neuropharmacolgy, neurodegenerative and neuropsychiatric diseases, nervous system development, synaptic plasticity, ischemic brain injury, and the neurobiology of drug and alcohol addiction. The new faculty member will be expected to develop a funded independent research program and to have graduate and medical student teaching responsibilities depending on personal interests and training. Applicants should submit curriculum vitae, three letters of reference, and a brief research summary to: Stanley D. Glick, Ph.D., M.D. or Harold K. Kimelberg, Ph.D., Directors, Neuropharmacology and Neuroscience Research Group, MC-136, Albany Medical College, Albany, NY 12208. An Equal Opportunity/ Affirmative Action Employer. Women and minorities are encouraged to apply.

Faculty Opportunity School of Medicine University of California, Davis

The University of California, Davis, School of Medicine invites applications for a full-time Full Professor (with tenure) to serve as The Tsakopoulos-Vismara Professor and Director of the UCD Institute for the Medical Investigation of Neurodevelopmental Disorders. This individual must possess an M.D. or Ph.D. and have superior research, teaching, and clinical skills. The individual must also have outstanding academic credentials and extensive administrative experience.

A successful candidate must have a national and/ or international reputation established through scientific publications and academic accomplishment. This individual should also have extensive experience in administrative positions, such as research program director or chair of a clinical department. The individual selected for this position should have experience working in a community mental health system and have significant experience working with managed care organizations. Ability to collaborate with multidisciplinary health and allied health professionals is essential

Send curriculum vitae and the names and addresses of five references to: University of California, Davis, Medical Center, Thomas F. Anders, M.D., Acting Director, UCD MIND Institute, c/o Department of Neurology, Ellison ACC Bldg., 4860 Y Street, Sacramento, CA 95817. Reference Search #2288 on all correspondence. In conformance with applicable law and University policy, the University of California, Davis, is an Equal Opportunity/Affirmative Action Employer. The search for this position is Open Until Filled. but will close no later than June 30, 1999.

MARINE, BIOLOGICAL, LABORATORY

WOODS HOLE, MASSACHUSETTS

1999 Course Offerings

Analytical and Quantitative Light Microscopy

(May 6 - May 14) Directors: Greenfield Sluder and David Wolf, University of Massachusetts Medical Center, Worcester

Microinjection Techniques in Cell Biology (May 18 - May 25) Director: Robert B. Silver, Marine Biological Laboratory

Frontiers in Reproduction Research: Molecular and Cellular Concepts and Applications (May 24 – July 4) Directors: Joan Hunt, University of Kansas Medical Center; Kelly Mayo, Northwestern University; and Gerald Schatten, Oregon Health Sciences University

Medical Informatics - sponsored by the National Library of Medicine (*May 30 - June 5*) and again, (October 3 - 9) Director: Daniel R. Masys, University of California, San Diego, School of Medicine

Biology of Parasitism: Modern Approaches

(June 10 - August 13) Directors: Edward J. Pearce, Cornell University, and Christian Tschudi, Yale University

Embryology: Concepts and Techniques in Modern Developmental Biology (June 13 - July 24) Directors: Marianne Bronner-Fraser and Scott E. Fraser, California Institute of Technology

Microbial Diversity (June 13 - July 29) Directors: Edward R. Leadbetter, University of Connecticut, and Abigail Salyers, University of Illinois

Neural Systems & Behavior (June 13 - August 6) Directors: Janis Weeks, University of Oregon, and Harold Zakon, University of Texas

Neurobiology (June 13 - August 14) Directors: Gary Banker, Oregon Health Sciences University, and Daniel V. Madison, Stanford University School of Medicine

Physiology: The Biochemical & Molecular Basis of Cell Signalling

(June 13 - July 24, with postcourse research July 26 - August 9) Directors: David Garbers, University of Texas Southwest Medical Center, and Randall Reed, Johns Hopkins University

Admission to MBL Courses is competitive; student selection is determined by review committees appointed for each individual course. Substantial financial assistance is available for many programs.

Methods in Computational Neuroscience

(August 1 - August 28) Directors: William Bialek and Rob de Ruyter van Steveninck, NEC Research Institute

Workshop on Molecular Evolution (August 1 - August 13, with special topics session August 14 - 20) Directors: Mitchell L. Sogin, Marine Biological Laboratory, and Daniel Davison, Bristol-Myers Squibb

Neurobiology and Development of the Leech

(Dates to be announced.) Directors: Martin Shankland, University of Texas at Austin, and Chris Sahley, Purdue University

Molecular Mycology: Current Approaches to Fungal Pathogenesis (August 8 - August 28)

Directors: J. E. Edwards, Harbor/UCLA Medical Center; P.T. Magee, University of Minnesota; and Aaron P. Mitchell, Columbia University

Pathogenesis of Neuroimmunologic Diseases

(August 16 – August 27) Directors: Celia F. Brosnan, Albert Einstein College of Medicine, and Jack Rosenbluth, New York University School of Medicine

Neural Development and Genetics of Zebrafish

(August 15 - August 27) Directors: John E. Dowling, Harvard University, and Nancy Hopkins, Massachusetts Institute of Technology

Optical Microscopy and Imaging in the Biomedical

Sciences (October 6 - October 14) Director: Colin S. Izzard, SUNY, Albany

Molecular Biology of Aging



(August 10 – 27) Directors: Leonard Guarente, Massachusetts Institute of Technology, and Douglas Wallace, Emory University

Modeling of Biological Systems (October 18 - November 23) Director: Robert B. Silver, Marine Biological Laboratory



FOR FURTHER INFORMATION CONTACT: Carol Hamel, Admissions Coordinator, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543-1015; e-mail: admissions@mbl.edu; phone: (508) 289-7401 www.mbl.edu (Research & Education button)

Neuroscience Research

The University of Calgary Neuroscience Research Group invites applications from outstanding scientists for three full-time academic positions. These positions offer excellent opportunities to develop an independent research program within a multidisciplinary research environment comprising 25 laboratorybased neuroscientists (see our website: <u>www.ucalgary.ca/~neuro</u>). While duties also include teaching and graduate student supervision, 75% of time will be protected for research. Calgary is a vibrant, multicultural city (pop. 800,000) located close to Banff National Park and the Rocky Mountains.

- Cellular and/or Molecular Neuroscientist We are seeking a candidate with an interest in cellular neurobiology, using innovative molecular imaging and/or electrophysiological techniques, although other areas will be considered. Calgary has considerable strength in this area and the installation of a two-photon laser scanning confocal microscope this fall will further enhance the potential of this position. Appointment will be held in the Department of Physiology & Biophysics.
- Autonomic Neuroscientist or Neuroimmunologist We are seeking a candidate with an interest in interactions of the brain with peripheral homeostatic processes, although other areas will be considered. This position will link emerging and established research excellence within the group, i.e. cellular biologists, virologists and autonomic scientists working on central and peripheral inflammatory responses, fever, etc. Appointment will be held in an appropriate academic department.
- Auditory Neuroscientist We are seeking a candidate with an interest in central auditory physiology and/or cognitive neuroscience. Expertise in brainstem or thalamo-cortical slice techniques, or optical recording techniques would complement existing strength in auditory cortical neurophysiology. The availability of functional MRI allows a cognitive neuroscientist with experience in event related potentials to combine these two techniques into an exciting new avenue. Initial salary support and start-up funds are available for this position, which will be held in an appropriate academic department.

Qualifications for these positions include a PhD, MD or equivalent, an established record of publications, and demonstrated expertise in the applicable areas. Generous start-up and salary support will be provided through successful application to the Alberta Heritage Foundation for Medical Research and/or the Medical Research Council of Canada.

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

We invite applications from all interested persons. Please submit a curriculum vitae and a statement of research interests, and arrange to have three letters of reference sent directly, by December 15, 1998, to:

Dr. Keith Sharkey, Chair Neuroscience Research Group Faculty of Medicine 3330 Hospital Drive N.W. Calgary, Alberta, Canada T2N 4N1



UNIVERSITY OF

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Predoctoral Fellowships in Neuroscience University of Cincinnati

The Neuroscience Graduate Program at the University of Cincinnati is an interdisciplinary Ph.D. program consisting of over 50 faculty members from 15 departments in the Colleges of Medicine, Pharmacy, and Arts and Sciences. Research interests of the faculty are diverse and reflect a variety of state-of-the-art approaches toward understanding the brain and nervous system. Many faculty have research programs that focus on mechanisms of clinical disorders such as stroke, neurodegenerative diseases, brain tumors, substance abuse, schizophrenia, and obesity in addition to fundamental basic neuroscience research.

The University of Cincinnati is located only 10 minutes from a vibrant downtown area and riverfront. The city offers lively fun and affordable living, big city excitement and easy access to rural charm and hospitality.

The Program provides students with up to \$17,500 in an annual stipend, full-tuition scholarship, and travel support to scientific meetings. Outstanding candidates who are U.S. citizens or permanent residents may be offered distinguished graduate fellowships supported by our NIH training grant, funded through the Jointly Sponsored NIH Predoctoral Training Program in the Neurosciences.

For further information, please contact the Program Director,

> Dr. Michael Lehman (michael.lehman@uc.edu)

or Linda Moeller (linda.moeller@uc.edu) University of Cincinnati College of Medicine P.O. Box 670521 Cincinnati, OH 45267-0521 tel: 513-558-1703 fax: 513-558-4343 http:neuroscience.med.uc.edu

Please feel free to come by and visit. We look forward to seeing you in Cincinnati!

Science & Technology. At Lilly, They Serve One Cause:

Eli Lilly & Company is a global researchbased pharmaceutical corporation dedicated to creating and delivering innovative pharmaceutical-based health care solutions that enable people to live longer, healthier and more active lives. Eli Lilly & Company is focusing research in five major areas: **endoarmology**, oncology, neuroscience, cardiology and infectious diseases. In diabetes therapy, Lilly was the first to start industrial insulin production in 1923, first to manufacture human insulin with DNAtechnology in the early 80's and the first to introduce an insulin analogue (insulin lispro or Humalog®) with specific pharmacokinetic characteristics for mealtime therapy of diabetic patients. The company has over 31,000 employees worldwide. Out of them, 18% are engaged in the Research and Development activities.

ENDOCRINE RESEARCH LEADERSHIP ROLE Head of Endocrine Research Hamburg, Germany

Lilly Research Laboratories in Hamburg are focusing on the basic research on beta cells with a goal to develop compounds which will improve insulin secretion and beta cell survival. We are currently building new fully equipped laboratory facilities which will be opened in the summer 1999. Our research group in Hamburg consists of over 40 chemists, biochemists, pharmacologists and molecular biologists.

In addition, we are collaborating on beta cell research with leading European academic centers. To lead our beta cell research effort in Hamburg, we are looking for a highly qualified scientist (PhD, MD or both) with at least 5 years experience on beta cell research and capability for leadership. We can offer a stimulating work environment with good opportunities and a competitive salary and other benefits.

Please send your inquiries and application with CV and reprints of your 5 most important publications to: Dr. Veikko A. Koivisto, Director of European Endocrine Research and Clinical Investigation, Wiesingerweg 25, D-20253, Hamburg, e-mail: Koivisto_Veikko@Lilly.com



We are an equal opportunity employer dedicated to diversity and the strength it brings to the workplace. Visit our website at www.lilly.com.

ALLELIX NEUROSCIENCE INC.

Allelix Neuroscience Inc. is the U.S. subsidiary of the integrated neuroscience business unit of Allelix Biopharmaceuticals, Inc. of Mississauga, Ontario, Canada—an established biopharmaceutical company. With a strong technology platform underlying a balanced pipeline of innovative product candidates, Allelix Neuroscience is poised to be a leader in the neuropharmaceuticals marketplace.

DRUG DISCOVERY BEHAVIOR NEUROPHARMACOLOGY

You will play a key role in the characterization of drug candidates at the behavioral level. Complementing your Ph.D. is an established background in learning and memory, reinforcement and conditioning and neuroanatomy. A minimum of two years of postdoctoral training required. Industry experience is desirable.

We offer a competitive salary and benefits package, as well as excellent potential for career growth. Send your resume along with salary history and references to:

Allelix Neuroscience Inc. 40 Cragwood Road, South Plainfield, NJ 07080; Attn: Human Resources

Building a winning team

IMAGINE a place where people are dedicated to a singular goal. **IMAGINE** a company intensely focused on building and supporting its **PEOPLE**.

IMAGINE

Pharmacia & Upjohn.

We are among the world's largest pharmaceutical companies, employing over 30,000 professionals around the globe. At our Kalamazoo, Michigan research facility we are discovering innovative therapeutic agents to treat Central Nervous System and Infectious diseases. In all of these areas, our objective is to help people live longer and fuller lives.

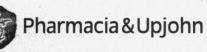
NeuroScientist

We are seeking a scientist with a good knowledge of neural circuits and pharmacotherapy of psychiatric diseases. Candidates should have a strong desire and ability to apply creative, multidisciplinary approaches and cutting-edge technologies to discover therapeutic agents that modulate the pathophysiology of psychiatric diseases.

Candidates should have completed at least 3 years of postdoctoral training, preferably with a Ph.D. in the neurosciences. Demonstrated expertise in the understanding of neurotransmitter interactions within functionally defined circuits is a requirement, as is a record of publication and individual accomplishment. We work in a multidisciplinary team environment, so the ability to work successfully with a group is a desired quality.

At Pharmacia & Upjohn you can make a difference. Not only for the sake of your career, but also for the millions of people around the world whose lives will be enhanced by the solutions you help provide. For confidential consideration, please send your resume to: Pharmacia & Upjohn, Ad#980219, Recruiting, 5045-88-81, 7000 Portage Rd. Kalamazoo, MI 49001.

Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com. We are an equal opportunity employer with a commitment to workplace diversity.





POSTDOCTORAL POSITION

Postdoctoral position is available immediately to study the regulation of cell membrane synthesis. The cDNAs for several phospholipid biosynthetic isozymes have recently been identified and will be used to study the structure and biochemical function of regulatory domains and specific antibodies are available to examine their cellular localization. Both cell culture systems and knockout mice will be used to investigate the important biological roles of these enzymes. For an overview of the area, see the mini review: Cell Cycle Regulation of Membrane Phospholipid Metabolism, 1996, J. Biol. Chem. 271:20219. Candidates with a recent Ph.D. should apply by sending a curriculum vitae, a short statement of research interests, reprints and the names of three references to: Dr. Suzanne Jackowski, Department of Biochemistry, St. Jude Children's Research Hospital, 332 N. Lauderdale, Memphis, Tennessee 38105. E-mail: suzanne.jackowski@stjude.org

An Affirmative Action/Equal Opportunity Employer.

Neuroscience

Developmental Neurobiologists University of Colorado Health Sciences Center School of Medicine Denver, Colorado

The Neuroscience Program and Center at the University of Colorado Health Sciences Center seeks two developmental neurobiologists at the Assistant Professor level in tenure-eligible positions. Successful candidates will have a strong record of pre- and postdoctoral research using molecular and genetic approaches to neural development. Model systems may be vertebrate or invertebrate.

The Neuroscience Program has 29 faculty in four basic science and four clinical departments. The Program awards a Ph.D. in Neuroscience. There are currently 17 students in the graduate program. Please see our web page: http://www.uchsc.edu/sm/neuroscience.

Appointment will be in a department appropriate for the background and interests of the candidates and participating departments. The Department of Cellular and Structural Biology and the Department of Biochemistry and Molecular Genetics are particularly interested in these recruitments. Candidates will be expected to develop an independent research program with peer-reviewed funding and to participate in teaching of graduate students and medical students.

Application review is underway. Candidates should send curriculum vitae, names of references, and a one-page summary of research goals to: Curt R. Freed, M.D., Director, Neuroscience Program and Center, University of Colorado Health Sciences Center, Box B138, 4200 E. Ninth Ave., Denver, CO 80262.

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

ASSISTANT/ASSOCIATE PROFESSORSHIPS NEUROSCIENCE/NEUROPHARMACOLOGY

THE GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER

The Department of Pharmacology has several tenure-track positions available in the NEUROSCIENCES in association with new leadership and expansion of the Department. The successful applicants will have outstanding records of research accomplishments using modern techniques to explore the molecular and/or functional aspects of the nervous system. An interdisciplinary approach to research is encouraged, with opportunities for collaboration with colleagues who are using state-of-the-art methodologies in neurophysiological, neuropharmacological, molecular genetic, and developmental studies of the brain. There are a number of extramurally funded neuroscientists at the Medical Center which is situated five blocks from the White House. Other research scientist members of the George Washington University Institute for Biomedical Science are located at the Children's Research Institute of the Children's National Medical Center and the Holland Laboratory of the American Red Cross. The successful candidates will participate in the teaching of medical and graduate students, and will provide training opportunities for students and postdoctoral fellows in the interdepartmental Ph.D. programs in Neuroscience and Pharmacology. Candidates will be expected to develop a strong, extramurally funded research program. Competitive salaries and start-up funds are available for these positions. Faculty rank and salary will be commensurate with prior experience. Applicants with a Ph.D. and/ or M.D. degree and substantial postdoctoral experience should submit a letter of intent, a detailed statement of research accomplishments and future research plans, teaching experience, a curriculum vitae, and the names, addresses, and telephone numbers of three to five references to: Prof. Vincent A. Chiappinelli, Chair of the Search Committee, Department of Pharmacology, 2300 Eye Street N.W., Washington, DC 20037. Review of applications will continue until all positions are filled. The George Washington University is an Equal Opportunity/Affirmative Action Employer.

EUROPEAN OPPORTUNITIES

EISAI LONDON RESEARCH LABORATORIES

Neuroscientist

Eisai London Research Laboratories Limited is located in central London on the campus of University College London. The stateof-the-art laboratories were constructed in 1992. All positions are completely supported by Eisai Co. Ltd., a major Japanese pharmaceutical company, which has recently brought Aricept (for the treatment of Alzheimer's disease) and Pariet (for the treatment of peptic ulcer) to the market. Eisai London Research Laboratories is committed to searching for novel therapeutic strategies in the treatment of major diseases of the nervous system.

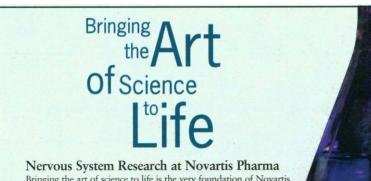
We currently have a scientific staff of approximately 35 people and now wish to recruit a Ph.D.-level neuroscientist, preferably with 2–3 years of postdoctoral experience. The ideal candidate will be highly motivated and creative, with a strong scientific background and interest in the drug discovery process. Knowledge of neurodegenerative disease and molecular approaches to its investigation is preferred.

An excellent salary and benefits package is offered. Interested parties should send their curriculum vitae and names of three professional referees to Dr. Joanne Taylor, Eisai London Research Laboratories Limited, Bernard Katz Building, University College London, Gower Street, London WC1E 6BT UK, or by e-mail to joannet@elrl.co.uk. The closing date for receipt of applications is 18th December 1998.

Position in Cognitive Neuroscience Center for Neuroscience Department of Psychology University of California, Davis 1998–99 Recruitment

The Center for Neuroscience and the Department of Psychology at the University of California, Davis, invite applications for a Cognitive Neuro scientist at the associate or full professor level, to begin July 1, 1999. Specialization within the area of cognitive neuroscience is open; however, we are particularly interested in faculty who work on some aspect of human neurophysiology and can utilize newly established functional brain imaging facilities. Applicants are expected to demonstrate lead ership in their research specialty, ability to obtain extramural funds, and ability to teach cognitive neuroscience courses at both graduate and undergraduate levels. Candidates must possess a Ph.D degree. The successful applicant will have the opportunity to participate in the recruitment of two assistant professors in cognitive neuroscience

The University of California, Davis, is an Affirmative Action/Equal Opportunity Employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences. Applicants should send a letter describing research and teaching interests, a curriculum vitae, copies of representative publications, and at least five letters of recommendation to: Edward G. Jones, Director, Center for Neuroscience, 1544 Newton Court, University of California, Davis, CA 95616-8686. All materials must be received by February 1, 1999, to be assured consideration. The search will continue until this position is filled. The University of California is an Equal Opportunity Employer.



Bringing the art of science to life is the very foundation of Novartis Pharma, where we are making significant strides in Nervous System Research. We currently employ over 300 scientists from a wide range of disciplines focused on the search for novel treatments for Alzheimer's and Parkinson's disease, stroke, epilepsy, pain,

learning disorders, schizophrenia, anxiety and depression. Academic alliances and an impressive number of high-impact articles in scientific journals have distinguished us among the major groups engaged in pharmaceutical neuroscience research.

Drug discovery projects are the backbone of Nervous System Research. Accordingly, the scientists leading these projects have the opportunity to pursue ideas and visions and to make an immediate and major impact at Novartis Pharma.

We are seeking individuals who have a viable concept for a new drug discovery project and are capable of leading it from basic evaluation to full implementation. The concept must be capable of providing Novartis with a competitive advance. In addition, you will have expertise at the Ph.D. level in one of the life sciences and be able to work in a teamoriented environment.

If your spirit of discovery matches ours, and if you find this challenge worth pursuing, send a brief outline of your idea and your background in the life sciences to: Dr. T. Honore, Nervous System Research, Novartis Pharma AG, S-386.316, CH 4002 Basel, Switzerland. Incoming ideas will be screened and selected candidates will be invited to elaborate on their proposal.

Visit us at http://www.novartis.com

UNOVARTIS The Spirit of Discovery

PsychoGenics

PsychoGenics, a dynamic new biotechnology company located in the northeast U.S., will employ functional genomics strategies to validate targets for and develop novel models of CNS disorders. The company's goal is to integrate molecular biology and behavioral science in order to bring CNS drug discovery into the postgenomic era. The company has several exciting opportunities for scientists to join its initial scientific team.

DIRECTOR OF MOLECULAR BIOLOGY

Will develop and supervise the use of existing molecular technologies and the discovery of novel molecular tools and strategies. Preference will be given to candidates with experience with knockout or transgenic design, viral vectors, and gene expression analysis. This is a critical and highly visible leadership position, reporting directly to the V.P. Research, and requires a demonstrated record of scientific accomplishment as well as strong interpersonal and communication skills. An academic appointment at a major local university engaged in leading research in these areas is possible, given the right credentials.

RESEARCH ASSOCIATES-BEHAVIORAL SCIENCE

Will play major roles in building and maintaining a highly sophisticated behavioral research program employing standard in vivo models of CNS disorders and developing novel models. Should have a B.S. or M.S. degree with a minimum of 2-3 years' relevant animal experience. Preference given to candidates with experience with behavioral research in mice.

At PsychoGenics you'll enjoy a competitive compensation package while working in an environment that fosters scientific and personal development. Interested candidates should send or email their CV along with the names of three references to: Daniel Goodman, MD, MBA, The Falconwood Corporation, 565 Fifth Avenue, 3rd Floor, New York, NY 10017, email dgoodman@interport.net.

Neuroscientist

Interesting opportunity to study the molecular mechanisms of pain. This position will involve gene identification, functional analysis and assay development. Candidates should have a Ph.D and/or MD, 3 - 5 years of postdoctoral experience, good communication skills, and an outstanding record of publication. Experience with animal models of hyperalgesia is required. Preference will be given to applicants with behavioral and electrophysiological recording techniques for peripheral and central neurons. Familiarity with molecular biological and anatomical techniques is a plus.

Position Is For Our Cambridge, MA Facility Enjoy the rewards of a collaborative environment, the challenge of progressive science, the incentive of stock ownership, opportunities

for career growth and a generous compensation package.

Qualified candidates should send resumes in confidence, using one of the following: Please be sure to include Source Code SC1198 on all submissions. If including cover letter, please place/paste after resume.

 For fastest consideration, visit the "Careers" page of our website at www.minen.com and apply on line.

- Via e-mail at millennium@webhire.com.Please reference Source Code on "Subject" line.
- Via toll-free fax at 1-800-370-6925. Please reference Source Code on the fax cover or page 1.
- Via mail: Millennium Pharmaceuticals, Inc., Resume Processing Center, Source Code SC1198, PO Box 798, Burlington, MA 01803.





Postdoctoral Positions - Department of Neurobiology La Jolla, California

The Scripps Research Institute is currently seeking four postdoctoral professionals for the following projects in developmental neurobiology.

• The first project involves studying mechanisms of translational regulation in mRNAs that contain sequence complementarity to rRNA. Studies will focus on the direct interactions of mRNAs with ribosomes, and on the effects of these interactions on gene expression. (Apply to the attention of Dr. Vincent P. Mauro)

• The second project involves studying mechanisms of cell interaction in the central nervous system with an emphasis on methods of gene discovery, such as differential display and subtractive hybridization, and the analysis of the neural cell surface proteins and signaling. (Apply to the attention of Dr. Kathryn L. Crossin)

• The third project involves studying the mechanisms that control the expression of cell adhesion molecules during neural development. Projects will focus primarily on identifying CAM gene regulatory elements and characterizing transcription factor families that respond to differentiation factors of the bone morphogenetic protein family. (Apply to the attention of Dr. Frederick S. Jones)

• The fourth project involves studying the structure and function of cell adhesion molecules (CAMs), as well as proteins that interact with CAMs. Cellular and molecular biological approaches such as dominant negative analyses and site-directed mutagenesis will be used in conjunction with structural analyses. (Apply to the attention of Dr. Bruce A. Cunningham)

To apply, please submit a CV including a statement of research experience/interests and arrange for letters of reference to be sent to one of the above individuals, at The Scripps Research Institute, Department of Neurobiology, 10550 North Torrey Pines Road, SBR-14, La Jolla, California 92037. TSRI is an Affirmative Action/Equal Opportunity Employer.

www.scripps.edu

Cellular or Molecular Neurobiologists

The Center for Neuroscience, University of California, Davis, seeks applications for two tenure-track Assistant Professor positions in any area of Cellular or Molecular Neuroscience, starting in the fall of 1999. Ph.D. or M.D. required. These positions are additional to those advertised in April 1998.

The Center, housed in three research buildings and currently home to a large group of Systems/Cognitive neuroscientists, is continuing a new phase of expansion in which it expects to appoint an equivalent number of Cellular and Molecular neuroscientists. Successful candidates will have space and facilities in the Center and primary appointments in a department of the UC Davis School of Medicine. They will become members of the multidisciplinary Graduate Program in Neuroscience and will be expected to develop an active funded independent research program.

Please send a curriculum vitae, statement of research interests, and the names of at least three persons from whom references will be obtained to Dr. Edward G. Jones, Director, Center for Neuroscience, University of California, Davis, Davis, CA 95616. Positions open until filled, but applications should be received no later than January 31, 1999. The University of California is an Equal Opportunity Employer.

Center for Neuroscience University of California, Davis

Center for Neuroscience University of California, Berkeley

The University's Center for Neuroscience invites applications for an open-level position beginning July 1, 1999. Candidates must have exceptionally strong research program in either Systems Neuroscience and/or Cognitive Neuroscience, working with either human or primate populations. Special attention will be given to researchers with experience in neuroimaging (PET, FMRI) and capability of helping establish interdisciplinary program involving Psychology, Molecular and Cell Biology, and other departments in the biological and physical sciences. Position is available at either the non-tenured or tenured level. Applicants for the position must be postmarked by February 15, 1999, and are to include a curriculum vitae and selected reprints to: Administrative Assistant, Center for Neuroscience Search, University of California, Berkeley, Department of Molecular and Cell Biology, 142 Life Sciences Addition MC 3200, Berkeley, CA 94720-3200. Candidates must also arrange to have at least three letters of recommendation sent to the same address. Applications postmarked after the deadline will not be considered. The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants including minorities and women are encouraged to apply.

What's the shortest distance between two points?

you





THE NEUROSCIENCES INSTITUTE SAN DIEGO, CALIFORNIA W. M. KECK MACHINE PSYCHOLOGY LABORATORY

The Neurosciences Institute invites applications for **POSTDOCTORAL** FELLOWSHIPS to study biologically based models of behaving real-world devices (robots) as part of the newly established W. M. Keck Machine Psychology Laboratory. Continuing previous research conducted at the Institute, this Laboratory will focus on the construction of autonomous devices, on the design of simulated large-scale neuronal networks capable of guiding behavior in the real world, and on developing methods for the simultaneous analysis of neural and behavioral states. Applicants should have a background in computational neuroscience, robotics, computer science, behavioral science, or cognitive science.

Fellows will receive stipends appropriate to their qualifications and experience. Submit a curriculum vitae, statement of research interests, and names of three references to: Dr. Olaf Sporns, The Neurosciences Institute, 10640 John Jay Hopkins Drive, San Diego, CA 92121. Fax: 619-626-2099; E-mail: sporns@nsi.edu; URL: http:// www.nsi.edu.



Full/Associate/Assistant Professor Department of Neuroscience University of Florida The Brain Institute and College of Medicine

The Department of Neuroscience, in collaboration with the Gene Therapy Center, the University of Florida Brain Institute (UFBI) and the College of Medicine are seeking outstanding scientists for at least two tenure-track faculty positions at the FULL PROFESSOR, ASSOCIATE, or ASSISTANT PROFESSOR level. Funding for this search is, in part, provided by the Lucille P. Markey Charitable Trust. All candidate(s) must have a Ph.D. or M.D.-Ph.D. with adequate postdoctoral training. The successful candidates will be expected to have or establish, and maintain, an outstanding, independent, and well-funded research program in neurobiology. Areas of research interest could include, but are not limited to, neurodegenerative diseases, development/regeneration, and CNS injury. They will also be expected to contribute to the education of both graduate and medical students. The salary of each position is negotiable and will be commensurate with related experience. Laboratory and office space for these positions will be provided in the new state-of-the-art UFBI (http://www.ufbi.ufl.edu)

Applicants should submit curriculum vitae, a clear statement of research goals, and arrange for three references to be sent to:

> Dr. Harry S. Nick Chair of Search Committee Department of Neuroscience College of Medicine University of Florida P.O. Box 100244 Gainesville, FL 32610-0244

The completed application should be received by January 5, 1999, with an anticipated start date on or after June, 1999. The University of Florida is an Equal Opportunity Employer, and minorities and women are especially encouraged to apply.

The Neuroscience Research Institute of the University of Ottawa and the Ottawa Hospital seeks applications from basic researchers for two tenure-track equivalent appointments. These positions will be funded through the Institute, with generous start-up and equipment packages to be offered. The successful applicant will possess a strong background in molecular neurosciences applied to areas of particular research interest, which include neurotrophins and neuronal survival, mechanisms of sprouting and synaptic plasticity, receptor-mediated signal transduction mechanisms, regulation of apoptosis/proliferation/differentiation in brain, transgenic approaches to understanding brain function, and regulation of gene transcription in the brain.

These areas of research should broadly relate to conditions such as stroke, neurodevelopmental or neurodegenerative disease, or mental illness.

The NRI is a recently established institute focusing on developing innovative approaches to address mechanistic aspects of neuronal function. It is located on a thriving campus that includes the University of Ottawa basic medical science departments, several Research Institutes, and two tertiary care hospitals.

Please direct your application, including curriculum vitae, names of three references, and summary of proposed research, to:

> Paul R. Albert, Ph.D. Neuroscience Research Institute University of Ottawa 451 Smyth Road Ottawa, Ontario K1H 8M5 Canada

According to Canadian Immigration requirements, this ad is primarily addressed to Canadian citizens and landed residents of Canada. Applications will be received until December 30, 1998.

GLOBAL COURSES & TRAINING

RIKEN – BRAIN SCIENCE INSTITUTE 1999 SUMMER COURSES

The Brain Science Institute (BSI) at RIKEN is offering a summer program to train advanced students interested in molecular, cellular, systems, or computational Neuroscience. Applicants may choose either a laboratory internship for up to two months with one of the 23 teams at BSI, or participate in an intensive two-week lecture course featuring distinguished international faculty. Summer Interns (Plan A) may also enroll in the lecture course (Plan B). See our website (below) for details.

Summer Internship (Plan A): July-September 1999 Lecture Course (Plan B): July 25-August 7 1999

Laboratories at RIKEN BSI

Developmental Neurobiology Developmental Gene Regulation Neuronal Recognition Molecules Neurobiology of Synapses Cellular Information Processing Neuronal Circuit Development Neural Architecture **Behavioral Genetics** Neurobiology of Emotion Memory and Learning Proteolytic Neuroscience Neuronal Circuit Dynamics CAG Repeat Diseases Neurogenetics Alzheimer's Diseases Cognitive Brain Mapping Integrative Neural Systems Human Brain Dynamics **Brain-Operative Expression Brain-Operative Device** Neural Modeling **Open Information Systems** Information Synthesis

(K. Mikoshiba) (H. Okamoto) (K. Mori) (Y. Yoshihara) (R. Yano) (T. Hensch) (T. Hashikawa) (S. Itohara) (H. Niki) (M. Ito) (T. Saido) (T. Knopfel) (N. Nukina) (K. Yamakawa) (A. Takashima) (K. Tanaka) (M. Tanifuji) (A. Ioannides) (G. Matsumoto) (M. Ichikawa) (S. Tanaka) (A. Cichocki) (S. Amari)

Invited Faculty Dr. Thomas Jessell (Columbia Univ.) Dr. Hajime Fujisawa (Nagova Univ.) Dr. Masato Nakafuku (Tokyo Univ.) **Dr. Alain Prochiantz** (Ecole Normale, Paris) Dr. Fujio Murakami (Osaka Univ.) Dr. Akinao Nose (Tokyo Univ.) Dr. Masatoshi Takeichi (Kvoto Univ.) Dr. Motoy Kuno (Shionogi) **Dr.** Robert Malinow (Cold Spring Harbor) Dr. Shigetada Nakanishi (Kyoto Univ.) Dr. Charles Gilbert (Rockefeller Univ.) Dr. Yasushi Miyashita (Tokyo Univ.)

Application Forms: visit our website http://www.riken.go.jp or send inquries to: Summer Program Committee, BSI Planning Office, RIKEN, 2-1 Hirosawa, Wako-shi, Saitama 351-0198 JAPAN. Applicants: open to candidates of any nationality. Application Deadline: March 1, 1999 (candidates will be notified by April 1). Financial Support: funding available for travel and lodging expenses as needed.

GLOBAL OPPORTUNITIES

Head of New Laboratory BRAINWAY GROUP BRAIN SCIENCE INSTITUTE (BSI) INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH (RIKEN), JAPAN

BRAIN RESEARCH INSTITUTE

The BSI was established in October 1997 with three general research aims: "understanding the brain," "protecting the brain," and "creating the brain," and the Brainway Group under Gen Matsumoto is involved in the third of these activities.

BRAINWAY GROUP

The Brainway part of BSI has two laboratories: the first, under Michinori Ichikawa, concentrates on brain-operative devices research and the second, under Gen Matsumoto, on brain-operative expression research. The first is developing a Brainway computer and the second concentrating on neuronal activity, for which it has been developing optical imaging device to measure real-time neuronal activity in the brain.

NEW LABORATORY

Brainway is establishing a third laboratory for the study of the super-algorithms as to how they are genetically acquired and expressed in the brain. For the laboratory head, deep experiences in the fields of neuroscience, cell biology, and molecular biology, as well as interests in the constitutional approach of understanding the brain, are required.

CONTRACT

- 5 years: extendable on review by review committee
- Staff of 10 recruited by laboratory head in association with the group director
- Operation starts in the early 1999

APPLICATIONS

(1) curriculum vitae, (2) list of publications and reprints of 5 papers (3) research interests and proposed projects, (4) names and addresses of 3 referees.

DEADLINE OF APPLICATION: November 30, 1998

CONTACT DETAILS

Search Committee (6), BSI, RIKEN 2-1 Hirosawa, Wako-shi, Saitama 351-0198 Japan

Fax: +81-48-467-9643, e-mail: search6@brain.riken.go.jp

Unfortunately we cannot accept telephone enquiries in connection with this post.

RIKEN Brain Science Institute, Japan

Applications invited for two heads of laboratory in the "Protecting the Brain" section of BSI (RIKEN).

The Institute of Physical and Chemical Research (RIKEN) established the Brain Science Institute (BSI) in October 1997 to promote three strategic research areas: "understanding the brain," "protecting the brain," and "creating the brain." A new laboratory in the "protecting the brain" section will start operations in early 1999 and possible fields for applicants are i) aging, ii) neurodegenerative disorders and neuronal cell death, iii) psychiatric disorders, and iv) developmental disorders. Work is already being carried out at BSI in a number of related fields: CAG repeat diseases (Nobuyuki Nukina), Alzheimer's disease (Akihiko Takashima), Neuro-genetics (KazuhiroYamakawa), and Proteolytic neuroscience (Takaomi C. Saido). More information about the Institute and RIKEN in general can be seen on the website: http://www.riken.go.jp.

New heads of laboratory will be required to organize a team of 5-10 researchers and technical staff and be provided with generous support for five years. A review of progress by international review committee occurs every 5 years with possibility of contract renewal. Applications are encouraged from outside Japan, but researchers must be willing to work at BSI full time.

Applicants should send a full curriculum vitae listing all publications with a statement of research interests and work projected at BSI (max. 2,000 words), plus names and addresses of three referees to:

Search Committee (7), Brain Science Institute, RIKEN, 2–1, Hirosawa, Wako-shi, Saitama 351-0198, JAPAN. Fax: +81-48-462-4796, e-mail: search7@postman.riken.go.jp

Deadline: December 15, 1998. For further information, please contact the search committee (7).

Discoverneurocrine



NEUROCRINE BIOSCIENCES is a neuroscience-based research and development company focused on developing therapeutics for neuropsychiatric, neuroinflammatory and neurodegenerative diseases and disorders. We have collaborations with 3 worldwide leaders in CNS-related drug development: Janssen Pharmaceutica for our CRF receptor antagonist for anxiety and depression; Novartis for APLs for MS; and Eli Lilly and Co. for CRF-BP inhibitors and urocortin agonists for obesity and Alzheimer's disease.

RESEARCH SCIENTIST Department of Neuroscience

This scientist will be part of a behavioral pharmacology team that supports discovery and development of novel therapeutics. Requires a PhD in behavioral neuroscience or behavioral pharmacology plus 2-4 years post-doctoral experience. Preferred areas of emphasis include:

- Appetite Regulation
- Pain
- Psychotherapeutics
- Neurodegeneration

RESEARCH ASSOCIATES Department of Neuroscience

Individuals with a BS or MS in science and a minimum of two years experience in one or more of the following:

- Behavioral pharmacology
- Animal surgery
- Receptor pharmacology

Additional Research Associate positions are available in Molecular Biology, Pharmacology and Medicinal Chemistry.

Neurocrine Biosciences, located in the biotech hub of San Diego, offers competitive salaries and benefits and new, state-ofthe art research facilities. Please forward your resume to: Neurocrine Biosciences, Human Resources/Ref: SM-AF, 10555 Science Center Drive, San Diego, CA 92121; email: hr@neurocrine.com. EOE.

www.neurocrine.com



Predoctoral fellowships are available, funded by NIMH Division of Basic Brain and Behavioral Sciences. Individuals with undergrauate degrees in pertinent disciplines are invited to apply for this 5-year training program leading to the Ph.D. degree in Complex Systems and Brain Sciences. The Program is administered through the Center for Complex Systems and Brain Sciences established in 1985. The aim of the Program is to couple theoretical concepts and methods for handling complex systems to specific experimental research in the cognitive and brain sciences.

Graduate training consists of a core curriculum in nonlinear dynamics and neuroscience (including computational modeling and cognitive science. Research areas include sensormotor coordination and learning human brain imaging and event-related potentials, brainstem mechanisms of behavior, actual growth and development, ion channel dynamics, speech production and perception, neurolinguistics, visual perception, music perception, mathematics of complex systems, nonlinear dynamics, neural networks, and robotics.

Applicants should send a letter of interest, GRE scores, vitae, and 3 letters of reference to: Rhona Frankel, Center For Complex Systems and Brain Sciences, Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431. Email: frankel@walt.ccs.fau.edu. Please visit our web-site at http://www.ccs.fau.edu.

DIRECTOR CENTER For SYSTEM S

CENTER FOR CENTRAL NERVOUS SYSTEM SURVIVAL

Departments of Neuroscience and Clinical Neuroscience Brown University School of Medicine

The Departments of Neuroscience and Clinical Neuroscience at Brown University and Rhode Island Hospital are seeking a director to establish and run a new Center for Central Nervous System Survival. The mission of the Center is to carry out leading-edge molecular neuroscience research within the broad areas of (1) CNS mechanisms of cell death and degeneration; (2) cell cycle and apoptotic processes in the central nervous system; (3) differentiation of neural cells. The position is especially suitable for individuals using molecular and genetic approaches in mammalian systems. Applicants must have an established, externally funded research program related to the mission of the Center. The new director will participate in recruiting two additional faculty members at junior rank to be members of the Center. The positions will be supported by the Neurosurgical Foundation of Rhode Island Hospital.

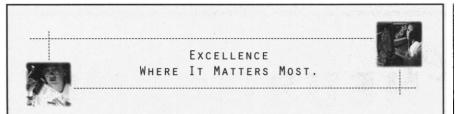
The director (Ph.D., M.D., or M.D.-Ph.D.) will have a joint appointment either at the associate or full professor (research) level in both departments. A well-equipped laboratory with core facilities is available and an animal care facility is located adjacent to the Center's space. The Center faculty will be eligible for membership in the Neuroscience Department's postdoctoral, graduate, and undergraduate programs.

Applications received by December 15, 1998, will receive full consideration. Applicants should send CV, a research statement, and five letters of recommendation to:

Center for CNS Survival Search Committee Department of Neuroscience Box G-F Brown University Providence, RI 02912

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





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

ETHICON Somerville, NJ

The Growth Technologies/New Business Development group within Ethicon, Inc. is committed to an aggressive pursuit of cutting edge technologies. Our mission is to help Ethicon, Inc. grow its business in a variety of surgical and peri-operative areas, while at the same time making sure that Ethicon maintains its worldwide leadership in the wound closure market. Our efforts to diversity have resulted in new business units such as women's health and sports medicine.

Ph.D. Recruits

In these new and challenging positions, you will support new business development initiatives, and will be challenged to explore new technologies. You will be responsible for conducting technology assessment, patent assessment, and feasibility studies, and will support the due diligence process in several areas. You will also actively participate in the new product development process by working closely with internal and external partners.

The qualified candidates must have received a Ph.D. and preferably post-doctoral training within the last two years in one of the following areas:

- Tissue Engineering
- Signal Processing

Medical Optics

Biomedical Instrumentation
 Medic
 Biomaterials and Biocompatibility

The ability to quickly learn and assess new technologies is key. A broad background is necessary, as well as an aptitude for commercialization of new technologies. Previous medical device industry experience will be a plus. **Dept. 2478.**



The R.W. Johnson Pharmaceutical Research Institute, located in suburban Philadelphia, conducts pharmaceutical research in therapeutic areas including anti-infectives, dermatology, oncology, immunology and women's health.

Principal Scientist/Research Fellow – Pathology

In this key role, you will conduct/evaluate the pathology portion of drug safety studies and summarize/evaluate these findings on the basis of their biological and statistical significance, as well as make an assessment of their safety for human exposure. Responsibilities will also include integrating study findings to propose mechanism of toxicity, designing specialized studies to determine the mechanism of toxicity, and writing reports for regulatory submissions.

To qualify, you must have a DVM (or equivalent) with board certification in Anatomic Veterinary Pathology (Ph.D. is desirable), and a minimum of 5 years of experience in the field of toxicologic pathology, including comprehensive knowledge of compound-induced pathologic changes, as well as spontaneously occurring lesions in rodents, dogs and non-human primates. An understanding of Good Laboratory Practices and the drug development process is highly desirable. Excellent verbal and written communication, organizational, planning, problem-solving and computer skills are essential. **Dept. 2479.**

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

For consideration, we strongly encourage individuals to apply on-line at: www.jnj.com

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



FACULTY POSITION ANIMAL BIOLOGIST PACIFIC LUTHERAN UNIVERSITY

Pacific Lutheran University invites applications for a new tenure-track position to be added in academic year 1999-2000 to the Department of Biology. The successful candidate will teach both introductory and advanced courses and must demonstrate a strong commitment to excellence in teaching general biology. Advanced course involvement will depend on the primary specialty of the successful applicant. Preference will be given to candidate with expertise in the physiology or development of invertebrates. This department of 12 faculty offers a strong undergraduate program with a diverse mix of courses. Professional scholarship is expected, and active participation in undergraduate research is highly valued. Ph.D. is required. Applicants should submit curriculum vitae, statements of their teaching and research interests, three letters of reference, and both undergraduate and graduate transcripts to: Angelia Alexander, Department of Biology, Pacific Lutheran University, Tacoma, WA 98447. E-mail: alexanag@plu.edu. Fax: 253-536-5055. Review of files will begin on December 1. 1998, and continue until the position is filled. Pacific Lutheran University is a comprehensive university and offers a balanced curriculum that integrates liberal arts and professional programs. It enjoys a healthy and progressive relationship with the Evangelical Lutheran Church in America and jealously guards the principle of freedom of inquiry and teaching. We are an Affirmative Action/Equal Opportunity Employer.

Faculty Positions Department of Human Genetics

A new Department of Human Genetics has been established at the University of Chicago, chaired by David H. Ledbetter, Ph.D. Strengths of the university genetics community include outstanding programs in cancer genetics, molecular cytogenetics, complex disease analysis, evolution and population genetics. We are recruiting tenure-track faculty in broad areas of human genetics research. including (but not limited to) neurogenetics, cancer genetics, chromosome structure/function, and computational or experimental genomics. Stateof-the-art research space is located in the new Institute for Molecular Medicine and generous startup funds are available. Applicants must have a demonstrated ability to develop an independently funded research program of the highest caliber. Positions are open to Ph.D., M.D., or M.D. Ph.D. candidates. Individuals with ABMG board certification or eligibility are encouraged to apply. Although the search is primarily aimed at Assistant Professor level scientists, appointments at other levels, including senior appointments will be considered.

Interested applicants should send curriculum vitae, a short summary of research plans, and the names of three references to: Chair, Human Genetics Search Committee, Department of Human Genetics, The University of Chicago, 924 East 57th Street, JFK R-110, Chicago, IL 60637.

http://www.genes.uchicago.edu The University of Chicago is an Equal Opportunity/ Affirmative Action Employer.

THE UNIVERSITY

POSTDOCTORAL RESEARCH SCIENTISTS

IMAGINE a place where people are dedicated to a singular goal. *IMAGINE* a company intensely focused on building and supporting its PEOPLE.

IMAGINE Pharmacia & Upjohn

Pharmacia & Upjohn is among the world's largest pharmaceutical companies, employing over 30,000 people around the globe. In support of its CNS and Infectious Disease Research areas, Pharmacia & Upjohn is seeking to fill nine, two-year postdoctoral positions immediately. Successful candidates will be encouraged to publish results and attend national and international meetings.

Proteomics

(Specialty Code 98P100)

- A postdoctoral position is available in proteomics for antibacterial Target Discovery. Experience in protein biochemistry with an interest in mass spectrometry to work within a multidisciplinary, gram-positive group. The individual will contribute by surveying proteomic/genomic databases, isolating and examining essential protein-protein interactions, and designing assays for drug discovery efforts.
- A second position is available in which the candidate will develop and apply mass spectrometric methods for high throughput proteome analysis as part of a core mass spectrometry facility. This position requires a Ph.D. in Biochemistry, Chemistry or a related field and experience with modern biological mass spectrometry, 2-D gel electrophoresis and bioinformatics.

Functional Genomics/ Molecular Biologist/ Protein Chemist

(Specialty Code 98P101)

- Model organisms such as C. elegans and the various worm and human DNA sequence databases are being used to discover novel therapeutic targets for Alzheimer's disease. We have an active program in the area of presenilin biology of which you would be a part. Experience in C. elegans biology and genetics is required.
- An additional postdoctoral position is available for studies of apoptosis and the involvement of caspases in programmed cell death. Experience in cloning and expression of proteins in bacterial and mammalian hosts and experience in protein purification and enzymology is required.



Computational Chemistry

(Specialty Code 98P201)

 We are seeking two individuals with an interest in cheminformatics to develop structure browsing and data-mining methods for exploring structure-activity relationships. A good chemistry background with computer skills or a computer science background with some knowledge of chemistry is required. Knowledge of statistics is also desirable.

Medicinal Chemistry

(Specialty Code 98P202)

 Two industrial postdoctoral positions are available in our CNS and Infectious Diseases areas. Highly motivated individuals with strong synthetic organic chemistry backgrounds are sought to work within a multidisciplinary team on the design and synthesis of biologically important molecules. A Ph.D. in organic/medicinal chemistry is required, and the ability to function independently is essential.

Flow NMR Spectroscopy

(Specialty Code 98P203)

 Develop and apply flow NMR spectroscopy to enhance and drive combinatorial chemistry and ligand-binding screening components of drug discovery research. Experience with biomolecular NMR spectroscopy is required.

Pharmacia & Upjohn offers a stimulating, multidisciplinary research environment. We provide a competitive compensation and benefits package to reward and recognize employees for the successful accomplishment of organizational goals. For confidential consideration, please send your resume with specific Specialty Code to: Pharmacia & Upjohn, Specialty Code # (indicate code here), Recruiting, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001. Or you may e-mail your resume (no attachments, please) to: recruit@am.pnu.com. We are an equal opportunity employer with a commitment to workplace diversity.



Look to your future. Explore Pioneer...



Pioneer Hi-Bred International continues to expand its functional genomics research program. We are committed to providing leading-edge information management solutions for our researchers. We have immediate openings for the following positions in Research Information Management:

PROJECT LEADER - SUPPORT (2 positions) - (Ad Code # SCI-S) =

A successful candidate will be part of a team providing computer support for scientists working in the genomics area. He/she will work closely with scientists and software development professionals to identify information management needs and develop, implement, and support information management solutions. Requires Ph.D. or equivalent experience in molecular biology, biochemistry, molecular genetics, or related scientific field. Experience with molecular sequence and structural analysis tools is an advantage. Experience in web development and delivery tools is desirable.

PROJECT LEADER - SOFTWARE DEVELOPMENT (2 positions) - (Ad Code # SCI-SD)

A successful candidate will coordinate multidisciplinary teams to analyze, design and develop software to support genomics and plant breeding research. He/ she is responsible for research information analysis and for providing direction to software development teams. Experience in data modeling, client/server systems and web development is an advantage. Excellent communication, project management and time management skills; and ability to think critically and drive projects to completion is essential. Advanced degree (Ph.D. preferred) in Molecular Biology, Biochemistry, or Plant Breeding is required.

BIOINFORMATICS SOFTWARE ENGINEER (2 positions) – (Ad Code # SCI-BI)

A successful candidate will work on multidisciplinary teams to develop and integrate software for the management, analysis and presentation of genomics information. Experience developing research software with client/server tools, JAVA, and relational databases is required. Experience with UNIX, C/C++, PERL, and standard sequence analysis programming is an advantage. Excellent communication, organizational and time management skills are essential. Advanced degree in Computer Science or Computational Biology preferred.

SUPPORT ASSOCIATE (2 positions) - (Ad Code # SCI-SA)

A successful candidate will be part of a team providing computer support for scientists in the genomics area. The associate will work with project leaders to support software tools used by the scientists. Requires BS or MS degree and at least two years in a support or research environment. Degree in Molecular Biology, Genetics, or Plant Biology preferred. Experience with database software, DNA sequence analysis, web tools, and software training is desirable.

For consideration, submit a scannable resume to: Employment Services, P.O. Box 14454, Des Moines, IA 50306-3454. Or Email: <u>jobs@phibred.com</u> (attachments to be submitted in MSWord or plain text format). PLEASE REFERENCE THE AD CODE IN YOUR RESPONSE.

For more information on scannable resumes and these and other employment opportunities, please visit our website <u>www.pioneer.com</u> or call our Employment Hotline 1-800-247-6803 ext. 4000.

Pioneer Hi-Bred Int'l. Inc. @ An Equal Opportunity Employer.

Computational Chemistry

Zeneca Pharmaceuticals, a worldwide leader in the research, development and production of ethical pharmaceuticals in seven key therapeutic areas, including cardiovascular, oncology, respiratory, CNS and anti-infectives, has openings in computational chemistry at our Wilmington, Delaware research facility.

At Zeneca, you will join an exciting multidisciplinary team employing Molecular Modeling, X-ray Crystallography, NMR Spectroscopy, and Protein Biochemistry to solve some of the most challenging research problems in today's pharmaceutical industry.

We are particularly interested in creative, self-motivated individuals with excellent interpersonal skills to work in the areas of structure-based design, combinatorial chemical library design, pharmacophore elucidation, optimization of ADME properties, and leading chemoinformatics applications. A focus on project team objectives at all stages of the discovery process is key to our success.

Computational chemists holding Ph.D. degrees are preferred; opportunities are also available for candidates with M.S. degrees and applicable experience.

We offer an excellent compensation and flexible benefits program, including relocation, and opportunities for growth with one of the world's leading pharmaceutical research organizations. To apply, please send your resume/c.v. to: Darla Wilson, Human Resources, Code DFW 1827, Zeneca Pharmaceuticals, 1800 Concord Pike, P.O. Box 15437, Wilmington, DE 19850-5437. Fax: 302-886-7124.





MAYO CLINIC POSTDOCTORAL FELLOWS AND RESEARCH TECHNICIANS

Postdoctoral fellow and research technician positions are available immediately to work in the laboratory of **Dr. Richard Vile** within the Molecular Medicine Program at Mayo Clinic, Rochester, Minnesota. The specific interests of this group are the construction of novel, targeted viral vectors and the development of gene transfer strategies for the treatment of tumors using both cytotoxic and immunostimulatory genes. Postdoctoral fellows are required with experience in molecular biology, tumor immunology, and virology (particularly adenoviral vectors). Technicians are required with experience in molecular biology, cell culture, and/or laboratory management. Applications along with curriculum vitae and all relevant publications should be sent to:

Dr. Richard Vile c/o Ms. Maureen Craft Mayo Clinic Rochester Guggenheim 18th Floor 200 First Street Southwest Rochester, MN 55905

Informal inquiries should be directed to Dr. Richard Vile by e-mail at r.vile@icrf.icnet.uk or by phone at 00 44 181 383 8584. The deadline for applications is December 1, 1998.

Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator. Working at the molecular level to conquer, treat or prevent debilitating diseases.

DRUG DISCOVERY RESEARCH AT SCHERING-PLOUGH

It's an exciting time at the Schering-Plough Research Institute. Every day, some of the world's brightest minds are discovering breakthrough therapeutic agents and treatments that will improve the health and extend the lives of millions of people around the world. As we continue to experience unprecedented growth, we are moving confidently into the 21st century and seek exceptional Scientists whose goal is to make a difference.

CNS

Senior Scientist -Molecular Pharmacology/Immunology

As part of a multidisciplinary team focusing on Alzheimer's disease and stroke, the successful candidate will study the role of chemokines and chemokine receptors in the etiology of these neurodegenerative diseases. A Ph.D., a minimum of 3 years of postdoctoral experience in molecular biology, pharmacology and/or immunology and a strong record of scientific achievement are required. Experience in basic molecular biology techniques, radioligand binding techniques and signal transduction assays is also required. A background in neurobiology and/or G protein-coupled receptors is desired. **Dept. XHXBMDD9668**

RESEARCH INFORMATION SYSTEMS

Managers-Scientific Systems for Discovery or Development Operations

Successful candidates will set strategy (technical, organizational, processes) to meet Discovery's or Development Operations' long- and short-range needs for information systems. This will include establishing day-to-day working relationships and facilitating internal improvement projects for enhanced response to Discovery or Development Operations' IS needs. The environment includes: Win95, WinNT, Macintosh, Unix workstations, Oracle, Intranet, C/C++, Java, Fortran, Visual Basic and vendor specific scripting languages. Requires an MS/Ph.D. or equivalent in Life or Physical Sciences and 10+ years of experience developing and supporting scientific software systems. This should have included 4+ years in technology identification/ introduction/deployment and/or scientific systems delivery process improvement and 4+ years' experience at the supervisory and project leadership level. The Development Operations Manager must have 2+ years' experience developing systems in compliance with government regulations. Both openings require excellent interpersonal, written and verbal communication skills. Dept. XHXPK9704, XHXPK9705

Manager - Scientific Systems for Drug Safety

Successful candidate will lead/supervise computer application development projects (procure commercial SW, develop internally or contract for its development) to support the Drug Safety department of Discovery Research. The environment includes: IBM mainframe, VMS, Windows, Oracle, Inquire and laboratory instrumentation. Will support existing computer application systems (maintain, enhance, troubleshoot, assist end-users, develop procedures); set technical strategy and lead technology planning; manage operational and capital budgets. Requires a BS/MS in Computer Science, Engineering or Mathematics or a MS/Ph.D. in Physical or Life Sciences, or equivalent experience. Your 10+ years of experience developing and supporting scientific/engineering application systems should include 4+ years involving SW validation and regulatory compliance and 4+ years at the supervisory and project leadership level. Excellent interpersonal, written and verbal communication skills essential. Dept. XHXPK9814

INFECTIOUS DISEASE

Senior/Principal Scientist & Section Leader-Antifungal

Our antifungal team is focused on the discovery of broad spectrum antifungal agents active against human pathogens. As a member of this team, you will be responsible for the development and implementation of assays on a genomic level. An outstanding record of scientific achievement in the field of fungal biochemistry/molecular biology is required. Experience with Candida or Aspergillus is a plus. For the Section Leader position, successful candidate will possess: a Ph.D. and 8-10 years' fungal experience, including demonstrated leadership/ management skills; for the Senior/Principal Scientist position: a Ph.D. and 2-8 years of experience in fungal molecular biology/biochemistry. **Dept. XHXGSDD9850**

Assistant Scientist-Antifungal

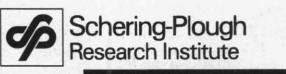
Will join a multidisciplinary team involved in antifungal research. Requires a BS degree and 0-4 years of experience or an MS degree and 0-2 years of experience in microbial or fungal genetics/molecular biology/biochemistry. Experience in assay development and high throughput screening is a plus. **Dept. XHXGSDD9851**

IMMUNOLOGY

Associate Scientist/Scientist-Immunology

Will join a multidisciplinary team involved in chemokine studies using mouse genetics. Requires a BS degree in Molecular Biology, Biochemistry, Immunology or a related discipline and 4-10 years of experience or an MS degree and 2-8 years of experience. Background must include expertise in cloning, automatic DNA sequencing, solid working knowledge of immunology, strong interpersonal, communication and computer skills, as well as familiarity with standard software. Demonstrated ability to work both independently and as an effective team member is critical. **Dept. XHXGSDD8178**

For prompt, confidential consideration, we invite you to forward a resume which MUST include the **Dept. Code** to: **Human Resources RM**, **Schering-Plough Research Institute**, 2015 **Galloping Hill Road**, **K-15**, **Kenilworth**, **NJ** 07033-0539; e-mailsprijobs@ny.hodes.com Please visit our Web site at www.sp-research.com for additional information. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



Using Science for Human Advantage

Associate and Full Professors **Cancer Drug Discovery**

The College of Medicine and The H. Lee Moffitt Cancer Center and Research Institute at the University of South Florida are seeking applications from Associate and Full Professor level individuals to participate in the Cancer Center Drug Discovery Program. Applicants must have a demonstrated track record in research areas related to growth factor signal transduction, oncogenes, tumor suppressor genes, cell cycle or metastasis. Applicants must also have a great desire to interact with bioorganic chemists. The main focus of the Drug Discovery Program is to stimulate interactions among intercomplementary and interdependent basic science programs with the ultimate goal of identifying rational targets and designing small molecules for cancer therapy and prevention.

Individuals at the rank of Associate Professor must hold M.D. and/or PhD. degrees and must have a demonstrated potential for extramural funding along with signs of active and sustained participation as an Assistant Professor. Individuals for Full Professor must have a proven track record of independent research, leadership ability and training experience as evidenced by publications and extramural funding as well as 5 years of active and sustained activities as an Associate Professor. The Moffitt Cancer Center and USF offer an outstanding salary, benefits and relocation package. Academic rank and salary will be commensurate with experience and qualifications. These tenure-track positions will be assigned to a specific, mutually agreed upon department within the College of Medicine.

Send current curriculum vitae and a brief statement of major academic interests to S.M. Sebti, PhD., Director, Drug Discovery Program, H. Lee Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, Florida 33612. Applications must be postmarked by deadline of January 15, 1999.

The H. Lee Moffitt Cancer Center & Research Institute is a free-standing Cancer Center located adjacent to the Health Sciences Center on the Tampa campus of the University of South Florida. In addition to a 162-bed full service cancer treatment facility, the Center has research laboratory space of 50,000 square feet of dedicated laboratory and support space in a new Cancer Research Center building.

Moffitt Cancer Center is an Equal Opportunity Employer. The University of South Florida is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award degrees at the baccalaureate, master's, specialist and doctoral levels, including the Doctor of Medicine.



CANCER CENTER & RESEARCH INSTITUTE At the University of South Florida A NATIONAL CANCER INSTITUTE DESIGNATED CANCER CENTER

The University of South Florida is an Equal Opportunity Equal Access Affirmative Action Employer. For disability accommodations please contact Jody Swanson at (813) 975-7894, a minimum of five working days in advance. TDD# (813) 974-2218

UofL College of Arts & Sciences

Chairperson **Department of Psychology**

The University of Louisville invites applications for the position of Professor and Chair of the Department of Psychology. Position will start July 1, 1999. We seek an individual with a national reputation as an outstanding scientist, a vigorous research program with a strong record of external funding, demonstrated leadership and administrative abilities, and a commitment to outstanding undergraduate and doctoral education. An excellent recruiting package is available, including highly competitive salary, generous start-up funding, and the opportunity to guide recruiting of new junior faculty in 1999-2000.

The Challenge for Excellence, a major initiative to foster research and teaching excellence, is underway at the University of Louisville. Areas targeted for this investment include the Psychology Department's programs in cognition and in perception & sensory physiology. Other areas targeted in the Challenge include neuroscience, genetics, early child development, social work, and visual science. The Psychology Department supports a large undergraduate major, active Ph.D. programs in clinical, cognitive, perception & sensory physiology, and 20+ faculty of rapidly rising research prominence. Candidates with research programs in Challenge areas are particularly desirable, but applicants from all areas of psychology are welcome.

Applicants should send a description of research and administrative abilities and experience, teaching goals, curriculum vitae, and the names of three references to: Carolyn Mervis, Ph.D., Search Committee Chair, Department of Psychology, University of Louisville, Louisville, KY 40292. Review of applications is to begin January 5, 1999. Women and minorities are encouraged to apply. The University of Louisville is an Affirmative Action, Equal Opportunity Employer.

The University of Illinois at Urbana-Champaign School of Molecular & Cellular Biology Faculty Position, Rank Open, in Immunology/Host Response to Bacterial Pathogens

The School of Molecular and Cellular Biology at the University of Illinois at Urbana-Champaign invites scientists with interests in Immunology relevant to Bacterial Pathogenesis to apply for a faculty position in the School. This position is full-time and, depending on qualifications, may involve appointment at the Assistant, Associate, or Full Professor level. The starting date for the position is August 1999. Appointment at the Assistant Professor level requires a doctoral degree, postdoctoral experience, and evidence of outstanding research potential. Appointees at this level will be expected to develop a vigorous, independently funded research program. Appointment at higher levels requires evidence of outstanding research accomplishments including extramural funding and national recognition. Applicants at all levels will be expected to teach an undergraduate course in Immunology. Laboratory facilities, substantial start-up funds, and a salary commensurate with experience will be provided. The University of Illinois at Urbana-Champaign offers highly interactive and interdisciplinary research environment plus state-of-the-art research support facilities. The School of Molecular and Cellular Biology includes the Department of Microbiology, which has particular strengths in the physiology, genetics, and pathogenesis of bacteria. The University is committed to significant future growth in the biological sciences. Urbana-Champaign offers the residential advantages of a medium-sized university city, excellent cultural opportunities, and easy access to Chicago and St. Louis. In-formation concerning the University can be found at <http:// www.uiuc.edu/>. Applicants should submit a curriculum vitae with a complete list of publications, summary of research interests and future plans, and arrange four letters of reference sent to:

> **Immunology Search** School of Molecular and Cellular Biology University of Illinois at Urbana-Champaign 393 Morrill Hall 505 S. Goodwin Avenue Urbana, IL 61801

To ensure full considerations, applications should be received by December 15, 1998. Interviews may be conducted before the closing date but no final decisions will be made before that time.

The University of Illinois at Urbana-Champaign is an Affirmative Action/Equal Opportunity Employer.



Research Director, Diabetes

The Division of Endocrinology at Children's Hospital Medical Center/ University of Cincinnati is seeking applications for director of a multi-disciplinary diabetes research program at the full professor level. The candidate must have an M.D. or Ph.D. degree and experience in diabetes-related research as an independent investigator, with a track record of extramural funding. M.D. candidates from departments of pediatrics or internal medicine, as well as basic science departments, will be considered. The successful candidate will be expected to devote at least 80% effort to directing a research team consisting of 3–4 other faculty.

Send CV and three letters of recommendation to:

Stuart Handwerger, M.D. Director of Endocrinology Children's Hospital Medical Center 3333 Burnet Avenue Cincinnati, Ohio 45229-3039

Contact Dr. Handwerger at (513) 636-4209 or stuart.handwerger@chmcc.org

Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR Plant Molecular Cell Biologist

 Assistant Professor, tenure-track position available in the Department of Biology, Fall, 1999. The successful candidate is expected to establish an external funded research program that uses molecular, biochemical and/or cellular techniques to study problems of general biological significance in a plant system. We seek an individual to teach an undergraduate course in the Biochemistry, Molecular Biology, or Cell Biology of plants and a graduate course in his/her specialty. We are interested in candidates who are strongly committed to excellence in graduate training, undergraduate teaching and who can contribute to a general education curriculum for non-majors. Send a letter describing your background, a description of your interests and goals in both research and teaching, CV, reprints and three letters of reference to: Office of Human Resources, Search 195-255, University of Massachusetts Boston, 100 Morrissey Blvd., Boston, MA 02125-3393. Deadline for receiving applications is December 15, 1998. E-mail inquiries can be made to jan.heatley@umbsky.cc.umb.edu. Women and minorities are encouraged to apply. An Affirmative Action, Equal Opportunity, Title IX employer.

Mass Boston

UroGen Corp./GenStar Therapeutics provides challenging career opportunities for highly motivated scientists

Urogen Corp./GenStar Therapeutics Inc., specializing in gene therapy, has developed a technology platform of minimal adenoviral (mini-Ad) vectors and is entering a major expansion in R&D activities in hemophilia. The company has recently formed a corporate partnership with Baxter Healthcare Corporation and provides an ideal environment for career development in the biomedical sciences. Highly motivated and innovative scientists are encouraged to apply for the following positions:

Director of Hemophilia Program (Position: 98010)

Successful candidates should have a Ph.D. or M.D. degree with 5–8 years of biotech R&D management experience, with expertise in hematology, especially in clotting factors (FVIII), molecular biology, vector technology for *in vivo* gene therapy (particularly adenoviral vector technology), animal models, assay development, and validation processes. The primary responsibilities are to direct a gene therapy program for hemophilia supervising 7–12 direct reports, manage preclinical operations to support clinical trials of the related products, interact with peers in other programs of the company, play a liaison role with corporate partners, and serve as an up-to-date scientific and technical resource for senior management of the company.

Scientists for Preclinical Studies (Positions: 98011-98013)

Three positions are open for candidates who have a Ph.D. degree with 4–8 years of biotech R&D experience with knowledge and skills in immunology, virology, adenovectors, *in vivo* gene therapy, animal models and assay development. The primary responsibilities are to design, conduct and optimize preclinical studies on adenovector-based products for hemophilia.

Scientist for Process Development (Position: 98014)

Candidates should have a Ph.D. degree and 4–8 years of postdoctoral research experience with knowledge and skills in scale-up production of adenovectors for clinical trials, particularly experience in suspension culture and bioreactor process. The primary responsibilities are to join a production team and play a hands-on role in scaling-up process development of adenoviral vector production.

Scientist for Purification/Formulation

(Position: 98015)

Candidates should have a Ph.D. degree and 4–8 years of postdoctoral research experience with knowledge and expertise in optimizing purification and developing formulations of products for clinical trials. The primary responsibilities are to join a production team and play a critical role in downstream process development for adenoviral vector production, especially development of scalable purification processes and proprietary product formulation.

Research Assistants for Preclinical Studies (Positions: 98016-98019)

Candidates should have a B.S. or M.S. degree in Biology or related majors with 2–4 years of research experience in recombinant DNA, biochemistry, cell culture, viral vector development, different types of assays on DNA, RNA, protein, cellular, and animal samples Experience in handling adenoviral vectors and producer cells preferred. The primary responsibilities are to join specific R&D teams and carry out experiments required in preclinical studies of products, including *in vitro* and *in vivo* characterization of vectors, functional and structural analyses, animal modeling, tox/pk studies, etc.

Please send your CV with a cover letter indicating the desired position number to: Wei-Wei Zhang, M.D., Ph.D., Sr. VP and CSO, UroGen Corp./Genstar Therapeutics, 10835 Altman Row, Suite 150, San Diego, CA 92121. Tel: (619) 450-5949 ext. 107, Fax: (619) 642-9173.



DEPARTMENT OF BIOLOGY

The Department of Biology of Case Western Reserve University invites applications for the position of Chair and Professor of Biology. The chair will be expected to provide leadership in maintaining and developing excellence in research and teaching. Candidates should be senior biologists with outstanding credentials in biology as well as demonstrated service to the profession. The facilities housing the department currently are undergoing a major renovation, and it is expected that several faculty positions will be filled in the period immediately following the chair's appointment.

Case Western Reserve University is a private research university with broadly-based strengths in the arts and sciences, engineering, health sciences, law, management, and social work. The Department of Biology offers both undergraduate (B.A. and B.S.) and graduate (M.S. and Ph.D.) degrees and has active research programs in a number of areas of biology, including cell and molecular biology, developmental biology, plant biology, ecology, and neuroscience. Several research and educational programs include collaborative efforts with the School of Medicine, the Case School of Engineering, and other departments within the College of Arts and Sciences. With nine years of support from the Howard Hughes Medical Institute, the department has enhanced a number of undergraduate programs, including a highly successful summer undergraduate research program. More information about Case Western Reserve University and the Department of Biology is available on the WWW through http://www.cwru.edu.

In employment, as in education, CWRU is committed to affirmative action and equal opportunity. Applications from women and minority candidates are especially welcome. Applicants should send a current curriculum vitae with a list of references. They also are invited to submit a letter that describes their vision of the current challenges and opportunities facing biology departments. Applications should be received by December 15, 1998, to receive full consideration although the search will proceed until the position is filled. Applications, nominations, and inquiries should be directed to: Chair, Search Committee, College of Arts and Sciences, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, Ohio 44106-7068. Phone: 216-368-3561; Fax: 216-368-3842; E-mail: jfk7@po.cwu.edu

In employment, as in education, CWRU is committed to Affirmative Action and Equal Opportunity.



Graduate and Post-Graduate Study in the Center for Organogenesis University of Michigan

Fellowships are available through an NIH sponsored training program that focuses on the molecular and genetic basis of development and the translation of developmental principles to potential clinical applications. The Center for Organogenesis is an interdisciplinary, university-wide program that offers students and research fellows a broad selection of mentors whose research areas encompass: model organism genetics, cellular differentiation, transcription regulation, human genetics, gene therapy, tissue remodeling, stem cell biology, neuroscience and more.

Contributing faculty: K.F. Barald: Molecular pattern formation and morphogenesis of the developing vertebrate inner ear. R. Bodmer: Molecular basis of heart and nervous system development, genetic approaches in flies and mice. S. Camper: Developmental genetics of the pituitary and anterior structures, gene targeting. J.S. Chamberlain: Molecular genetics and gene therapy of muscular dystrophy. G. Dressler: Transcription factors and cell signaling in the developing kidney. A. Dlugosz: Molecular regulation of skin appendage development and formation of basal cell carcinoma. J.T. Elder: Signaling pathways involved in reepithelialization. R.T. Franceschi: Transcriptional regulation of bone formation, gene therapy approaches for bone regeneration. D. Gumucio: Developmental regulation of globin gene expression. M. Long: Blood cell development, cell cycle control in cancer cells, ex vivo formation of bone. B. Margolis: Protein-protein interactions in signal transduction. M. Meisler: Role of ion channels and semaphorins in neurological development and disease. J.M. Metzger: Direct modification of heart contractile performance by viral vector gene transfer in vivo. D.M. Robins: Hormonal control of gene expression, androgen receptor in prostate and breast cancer. K. Tosney: Cytoskeletal dynamics and signaling in growth cones as they contact specific guidance cues.

See also: http://www.med.umich.edu/medschool/organo/

Interested applicants should send a CV and names of three references to: Michelle Shukait, Program Coordinator, Center for Organogenesis, The University of Michigan, 5714 Med Sci II, Ann Arbor, Michigan 48109-0616.

The University of Michigan is an equal opportunity/affirmative action employer.



MAYO CLINIC POSTDOCTORAL RESEARCH FELLOW OR SENIOR RESEARCH FELLOW

A postdoctoral research fellow or senior research fellow position is available in the Mayo Clinic's Transplantation Immunology Program. The successful candidate will hold a Ph.D. and have a background in molecular biology or protein biochemistry. Experience in immunology and cellular physiology is desirable. Send a current curriculum vitae, bibliography, a description of research experience, and three letters of recommendations to:

> Jeffrey L. Platt, M.D. Transplant Biology Mayo Clinic Medical Sciences Building 200 First Street S.W. Rochester, MN 55905

Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

COURSES & TRAINING

Modeling of Biological Systems An Interdisciplinary Course February 1-28, 1999

Modeling of Biological Systems (MOBS) is an intensive, multi-disciplinary, residential lecture & laboratory course designed to train biologists and non-biologists to apply and adapt successful modeling approaches in biology to their own research. MOBS is for students in the biological, chemical and physical sciences, mathematics and engineering. The course is organized into thematic cassettes that focus on particular broad areas of biology.

The MOBS curriculum is geared to advanced graduate students and above. Students require at least a working knowledge of calculus, and preferably a facility with differential equations. Successful applicants will receive pre-course assignments to help with their Course activities. The Course represents an innovative approach to education of modeling of biological systems in its thematic organization, modularity of content, interdisciplinary teaming, and multi-year involvement by both students and faculty.

The faculty will introduce students to successful approaches to modeling used to address contemporary biological questions. With faculty tutelage, students will have hands-on opportunity to work with these models, and to learn to apply these approaches to their own scientific questions.

Additional information is available at http://www.mbl.edu/MOBS/

Funding support for the MOBS Course is provided by the Burroughs Wellcome Fund and the National Science Foundation.

Course Director: Robert B. Silver, Marine Biological Laboratory

February 1999 Faculty: John Hummel, Argonne National Laboratory; Peter Kollman, UCSF; Stephen Leibholz, Chesapeake TechLabs; John Pearson, Los Alamos National Laboratory; Silvina Ponce-Dawson, Univ. of Buenos Aires; Gregory Petsko, Brandeis Univ.; Merle Wastney, Georgetown Univ.; and others to be announced.

Application Deadline: December 10, 1998. Course Fee: \$3,750 (room & board is provided). Scholarship support is available.



Contact: Admissions Coordinator, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543-1015. Voice: (508-289-7216) e-mail: admissions@mbl.edu.

The MBL is an EEO Affirmative Action

SUNNYBROOK AND WOMEN'S COLLEGE HEALTH SCIENCES CENTRE TRAUMA RESEARCH PROGRAM Fully Affiliated with the University of Toronto Toronto, Canada

Sunnybrook and Women's College Health Sciences Centre is a new health care organization that combines the strengths of three of Canada's finest hospitals. It is an academic centre of excellence, with a full range of high-quality, value-based services where patients are the focus of everything we do. It is also a leader in women's health care and research.

SCIENTIST (Sunnybrook Site)

The Trauma Research Program at Sunnybrook and Women's College Health Sciences Centre is seeking a full-time scientist with interests in molecular neurobiology/neuroprotection/neuroanaesthesia as these areas relate to trauma. Present members have interests in circulatory physiology, matrix biology, and neuronal injury. The research complements a Clinical Program which represents the largest trauma Unit in Canada. The University of Toronto has a large neurosciences research program with many opportunities for collaborative interactions.

The candidate will hold a Ph.D. and preference will be given to those sufficiently advanced in their research career to have published widely and successfully competed for peer-reviewed research funding. However, consideration will be given to promising young investigators completing suitable postdoctoral training. It is expected that the candidate will seek cross-appointment to one of the Graduate Departments at the University of Toronto with the potential to supervise research trainees at all levels.

In accordance with Canadian Employment and Immigration Guidelines, preference will be given to Canadian citizens and permanent residents of Canada. In accordance with the University of Toronto's Employment Equity Policies and the Sunnybrook Site's Diversity Initiative, applications from all qualified candidates will be accepted.

Interested applicants should submit a complete curriculum vitae, as well as letters from three referees, by February 26, 1999, to:

> Dr. Miles G. Johnston, Director, Trauma Research Program Sunnybrook and Women's College Health Sciences Centre Sunnybrook Site, S-111 Research Building 2075 Bayview Avenue, North York, ON M4N 3M5

Post Doctora Research in Biology and Biomedical Science

Unique opportunity to participate in focused, interdisciplinary studies in:

- Cancer cell biology DNA mutagenesis,
- recombination and repair • Eukaryotic transcriptional
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- Gene therapy
- Human genetics
- Molecular biology of HIV
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- Proteomics
- RNA processing and catalytic RNA
- Signal transduction
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Qualified candidates should

Adrienne Fryhoff City of Hope 1500 E. Duarte Road Duarte, CA 91010 E-mail: RSO@coh.org FAX: (626) 930-5394

EOE

The Power of Knowledge

Because of you

we're making a world of difference

t's our solid dedication, vision and constant search for answers that allow us to touch millions of people around the world every day. As a major division of Fortune 100 American Home Products Corporation, we help people lead healthier lives through the development of innovative pharmaceutical, vaccine and nutritional products. We achieve this through our superior research, manufacturing, sales and marketing capabilities. Enjoy the freedom to develop your own career while having the support of a valuable team.



Positions located in Princeton, N.J.

Principal Research Scientist Gene Expression Profiling -**CNS** Disorders

Responsible for overseeing our transcriptional profiling group. The selected candidate will use microarray technologies, including cDNA library arraying, array probing and analysis in support of the group's objectives. Knowledge of differential display and skills in cDNA library construction are required. A Ph.D. in a relevant scientific discipline and a minimum of 3 years' experience, including significant experience in transcriptional profiling methodologies is required. Candidate must possess strong written and verbal skills and must have the ability to work in a team oriented environment. A proven record of excellence in research is a must. Job Code: OPSCI-3938

Research Scientist, Drug Metabolism

Responsible for performing metabolism studies, including in vitro and in vivo biotransformation studies while having direct involvement in the preparation of filings for IND, IND updates and NDA submissions of drug candidates. The selected candidate will have 2-5 years of experience in drug metabolism and disposition along with a strong background in chromatography and bioanalytical method development. Experience in chemistry, chemical analysis, metabolite isolation/identification and radiotracer work also are essential. A Ph.D. in Pharmacology, Medicinal Chemistry, Chemistry, Biochemistry, Analytical Chemistry or a similar field along with graduate training in drug metabolism and disposition are required. Candidate must possess strong written and verbal skills and must have ability to work in a team oriented environment. Job Code: OPSCI-4368

Wyeth-Ayerst offers competitive compensation and benefits programs including stock options, child-care subsidies, flex time, business casual Fridays, educational assistance and professional development programs. Please forward your resume with salary requirements, referencing appropriate Job Code, to: Wyeth-Ayerst, P.O. Box 7886, Philadelphia, PA 19101-7886. Fax in fine mode to: (610) 989-4854. Email:

jobs@RAMAIL1.wyeth.com (ASCII format, no attachments, subject: resume). For more information, visit our website at www.ahp.com/wyeth.htm Principals only. Equal Opportunity Employer M/F/D/V



Bringing results home.



Two Tenure-Track Faculty Positions in Bacterial Infectious Diseases College of Veterinary Medicine

We are seeking two tenure-track faculty to strengthen our research and teaching efforts in bacteriology. Appointments will be made at the rank of Assistant, Associate, or Full Professor.

The successful appointees will have a Ph.D. with appropriate background and experience; a D.V.M. or M.D. degree would be an advantage. The appointees would be expected to study bacterial pathogens of animals, preferably those associated with veterinary diseases or food-borne disease.

The new faculty will be members of the Department of Microbiology and Immunology in the College of Veterinary Medicine. They will develop independent research programs supported by nationally competitive agencies, and will also interact and collaborate with faculty in the Departments of Clinical Sciences and Population Medicine and Diagnostic Sciences. They will contribute to infectious disease teaching in the College's professional (D.V.M.) curriculum and in undergraduate and postgraduate courses.

Send letter of intent, curriculum vitae, three page summary of research and teaching interests and plans, and names and addresses of three professional referees by December 31, 1998, to: Bacteriology Search Committee, James A. Baker Institute for Animal Health, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853. For more information contact Dr. Colin R. Parrish at crp3@cornell.edu or (607) 256-5649. Information about the College of Veterinary Medicine at Cornell can be found at http://www.vet.cornell.edu.

Cornell is an Equal Opportunity/Affirmative Action Employer/Educator.



Director, Introductory Biology Program The Ohio State University

The College of Biological Sciences seeks a senior scientist with an accomplished record of teaching and scholarship to provide leadership for the College's Introductory Biology Program (IBP). The IBP currently includes course sequences for non-majors, majors, and Honors students. The Director will have primary administrative responsibility for continuing development, organization, and implementation of these courses. The duties of the Director include providing vision, implementing new directions in biology teaching, revising curricula, assessing faculty teaching, and teaching Program courses. The Director's appointment will be 50% Administrative/ Professional and 50% in one of the College's six departments. The initial term is four years, with renewal for subsequent terms possible. The Director reports to the Dean of the College. Qualifications include established excellence in teaching biology, a record of scholarship sufficient to warrant a tenured appointment at the associate or full professor level, and outstanding interpersonal and administrative skills.

The expected starting date for this position is July 1, 1999. Salary will be commensurate with the successful applicant's qualifications. Applicants should submit a current *Curriculum vitae*, a narrative detailing teaching philosophy and administrative experience, and names and addresses of three professional references to **IBP Director Search Committee**, **College of Biological Sciences**, **The Ohio State University**, **484 West 12th Avenue**, **Columbus**, **OH 43210**. The Search Committee will begin its review of applications on December 1, 1998, and continue its review until a suitable candidate is identified. *The Ohio State University is an Equal Opportunity Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and persons with disabilities are encouraged to apply.*

Microscopy and Imaging Center Director Texas A&M University

Texas A&M University is seeking applications and nominations for Director of the Microscopy and Imaging Center (MIC). The MIC is a faculty-driven facility supporting diverse interdisciplinary teaching and research. It has a sizeable annual budget for technical and service support for multiple electron microscopes and advanced light microscopy instrumentation. Applicants must be nationally and internationally recognized scholars with strong leadership and interpersonal skills and a vision for the future of microscopy and imaging technologies. An understanding of the multifaceted approaches to contemporary and emerging imaging technologies, as well as an active research program engaged in the development and/or novel application of imaging technology, will be necessary. Additionally, evidence for an appreciation of the opportunities to further enhance an interdisciplinary research environment that encourages scientific exchange between materials scientists, engineers, and life scientists related to these technologies is required. The Director will have an earned Ph.D. with expertise in the life sciences area and will have a faculty appointment at the tenured Professor rank in one or more life science departments and credentials commensurate with an Endowed Chair position.

Applicants should send a complete C.V., statement of research interests, and names of five references no later than January 1, 1999. All correspondence should be addressed to:

Microscopy and Imaging Center Director Search Attn: Terry Thomas, Search Committee Chair Department of Biology, Texas A&M University College Station, TX 77843-3258

Texas A&M University is an Equal Opportunity Employer.

Fellowship



Edison International Postdoctoral Fellowships

The California Institute of Technology announces the availability of postdoctoral fellowships for international scholars to pursue collaborative research in all fields of science and technology. These one-year fellowships are open to men and women who have recently received their doctorates and who have legal citizenship in one of the countries in which Edison International does business:

Australia	Spain
Indonesia	Thailand
Italy	Turkey
Philippines	United Kingdom
Singapore	South Africa

The Edison International Postdoctoral Fellowship provides a stipend of \$35,000 and one-way airfare to Caltech. Fellows are eligible to participate in Caltech's health and dental programs.

Applicants should include a letter outlining a specific field of research and a curriculum vitae. Three letters of reference should be submitted directly. All correspondence should be addressed to

Edison International Postdoctoral Fellowship Committee California Institute of Technology Mail Code 104-31 Pasadena, CA 91125

Completed applications with references should arrive at Caltech before February 1, 1999.

Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.



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UNDERGRADUATE

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An applicant must:

- Be a full-time student at any four-year college or university
- Have junior year academic status
- Major in a life or physical science (first professional degrees excluded)
- Have a minimum cumulative GPA of 3.3 (4.0 point scale)

G R A D U A T E Science research

DISSERTATION FELLOWSHIPS

- 12 Fellowships Annually
- Fellowship Stipends up to \$30,000
- Department Grants of \$10,000
- Support for 12-24 months

An applicant must:

- Be enrolled full-time in a Ph.D. or equivalent doctoral program in a biomedical life or physical science
- Be within 2 years of completing dissertation research

POSTDOCTORAL

SCIENCE RESEARCH FELLOWSHIPS

- 10 Fellowships Annually
- Fellowship Stipends up to \$40,000
- Department Grants of \$15,000
- Support for 12-24 months

An applicant must:

- Hold a Ph.D. or equivalent degree in a biomedical life or physical science
- Be appointed as a postdoctoral fellow during the 1999 calendar year at an academic or non-academic research institution (private industrial laboratories are excluded)

Applicants must be African American (Black, non-Hispanic), U.S. citizens or permanent residents and at an institution in the U.S.A. Applications must be postmarked by January 15, 1999 For application forms and more information, please contact your department chairperson or Jerry L. Bryant, Ph.D., by mail at *The College Fund/UNCF*, 8260 Willow Oaks Corporate Drive, P.O. Box 10444, Fairfax, VA 22031-4511, by fax (703) 205-3574, or by E-mail: uncfmerck@uncf.org

Visit our web site: www.uncf.org

UofL UNIVERSITY CHAIR OF BIOLOGY

The Department of Biology is seeking candidates for the position of Chair. The University of Louisville is a major metropolitan university with current enrollment of 21,000 students. The Challenge for Excellence, a major initiative to foster research and teaching excellence, is underway at the University. Areas targeted for investment include the Biology Department's programs in Environmental Sciences, including environmental health, environmental quality and genetics. The Biology Department currently has 17 tenured or tenure-track full-time faculty, 83 graduate students, 671 declared undergraduate majors, and offers an MS in Biology and a Ph.D. in Environmental Biology. The successful candidate is expected to guide the faculty and program to greater research productivity as the University strives towards a new pinnacle of research excellence while maintaining its traditional instructional roles.

Candidates for the position of Chair must have a strong record of teaching and extramurally-funded research. Applicants in all areas of Biology will be considered. Preference will be given to candidates with administrative experience and whose research and teaching interests complement those of the department. An excellent recruitment package is available, including a highly competitive salary and generous start-up funding. Also, the new Chair will have the opportunity to participate with the department in the hiring of several new junior and senior-level faculty in the next few years. Review of applications will begin on January 15, 1999 and continue until a suitable candidate is chosen. Applicants should send a Statement of Research Interests, Statement of Teaching Philosophy, current vita, and reprints of their 5 most significant publications. In addition, the names, telephone numbers and e-mail addresses of at least 5 references should be included with the materials. Send application materials to: Chair Search Committee, University of Louisville, Department of Biology Louisville, KY 40208. Further information is available at www.louisville.edu/a-s/biology/search.html.

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



at The University of Texas Southwestern Medical Center

<u>UT Southwestern</u> is pleased to announce the second year of the Endowed Program for Scholars in Biomedical Research. The Program, which is fully funded from private endowment, will provide \$600,000 over four years to support the research activities of each new <u>Assistant Professor</u> (tenure track) appointed to the Program; five will be appointed annually. In addition, regular funding for salary, as well as research space, will be provided by the medical school department or research center offering the appointment. Positions in both <u>basic science</u> and <u>clinical departments</u> are available. The goal of the program is to assure a successful beginning of the research careers of an ever-growing cadre of outstanding young investigators at UT Southwestern.

For detailed information about currently available faculty positions, please access our web page: http://www.swmed.edu



THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS

UT Southwestern is an equal opportunity institution

Ph.D. Statistical Genetics

The Section of Biostatistics at the Mayo Clinic has openings for Ph.D. statisticians with training and/or experience in statistical genetics. The applicant's primary duty will be to collaborate with genetic epidemiologists, basic scientists, and medical staff on a wide variety of genetics studies of human diseases, working as the leader of a team of statisticians. The consultation involves study design and analysis, manuscript preparation, oral presentations, and grant writing. The position requires outstanding oral and written communications skills, self-direction, and the ability to direct activities of assigned support staff. Basic understanding of statistical applications in genetics and genetic epidemiology is a requirement. Familiarity with statistical genetic software and some statistical computer package (SAS, Splus) is desirable.

CAREERS

The incumbents will work within the Section of Biostatistics. Their primary responsibilities will be to:

- Develop/apply appropriate statistical methods for genetic epidemiology studies (particularly in cancer epidemiology).
- Participate in the creation and submission of research grant applications, primarily in collaboration with other clinical and laboratory scientists.
- Collaborate with laboratory and medical scientists to carry out research as a member of an interdisciplinary team.
- Maintain familiarity with standard and evolving methods in statistical genetics, including segregation analysis, genetic linkage, and association studies.

Compensation is competitive and commensurate with experience. An excellent benefit package is also available.

Please send resume, college transcripts, and three letters of recommendation to:

mayo

Terry M. Therneau, Ph.D. • Head, Section of Biostatistics • Harwick 7 Mayo Clinic • 200 First Street SW • Rochester, Minnesota 55905

Mayo Foundation is an affirmative action and equal opportunity educator and employer.

The Science of Agricultural Genetics

POST-DOCTORAL RESEARCH SCIENTISTS

Gene Expression in Plants (Job #98316B) We seek a highly motivated individual to study gene expression that controls maize seed composition and germination. The successful candidate will screen genetic materials for trait divergence and utilize selections in assessing gene expression differences via state-of-the-art methodologies and bioinformatics. Applicants should have good organization abilities, prior experience in expression analysis, strong background in genetics and proficiency in the use of computers for biotechnological applications and data management. Field experience a plus. Previous research in seed biology is preferred, but not required. This position requires a Ph.D. degree in Plant Biology, Agronomy, Molecular Biology or a related discipline with relevant experience in gene expression and plant genetics. Excellent written and verbal communication skills are also essential.

Genetic Recombination in Plants (Job#:98324B)

A postdoctoral position is available to study the molecular mechanisms of DNA recombination in plant cells. The candidate will be expected to participate in a broader research program aimed at the development of gene targeting strategies, but the ability to work independently on fundamental problems related to DNA recombination reactions in plant cells using a model system will be essential for this position. Knowledge of molecular biology methods is required and experience in plant genetic transformation, gene expression, DNA/protein interactions, biochemistry of nucleic acids will be highly desirable. Good communication skills and the ability to work as part of an integrated team will benefit this position.

Viral Replication in Plants (Job#:98325B)

Seeking a highly-motivated post-doctoral scientist to study molecular mechanisms of viral replication in plant cells. This project will involve investigating functions of viralencoded proteins, regulation of the viral replication process and characterization of plant genes and/or proteins affected by viral replication. Strong background in molecular biology is required, and familiarity with plant viral biology is desirable. Experience in cellular techniques (genetic transformation, micromanipulations, cell-imaging techniques) will also be taken into consideration. A Ph.D. degree in biology or related disciplines is required.

These three postions are located in Johnston, Iowa, Pioneer offers a competitive salary and an excellent company benefit package. Please submit your curriculum vitae (in scannable format), a statement of research interests, and names of three references to: Pioneer Hi-Bred International, Inc. ATTN: Human Resources - Research (Job, #98-XXX), PO Box 1004, Johnston, IA 50131-1004; e-mail: jobsresearch@phibred.com , For more information on these positions visit our website www.pioneer.com.

Pioneer Hi-Bred International. Inc.. is the world leader in agricultural genetics. Founded in 1926, we are a publicly held company that invests more than \$160 million in research and product development, Pioneer brand products are grown in almost every crop-producing continent in the world. At our headquarters in Des Moines, Iowa, we're adding to our Research team.



OFFICE OF BIOLOGICAL AND ENVIRONMENTAL RESEARCH Alexander Hollaender DISTINGUISHED Postdoctoral Fellowship Program Research Opportunities in Energy-Related Life, Biomedical, and Environmental Sciences including Human and Microbial Genome and Global Change Research in OBER-sponsored programs Tenable at various laboratories Stipends \$37,500 Doctoral degree received after April 30, 1997 U.S. citizens or PRA eligible Information and application: http://www.orau.gov/ober/hollaend.htm

U.S. DEPARTMENT OF ENERGY

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Oak Ridge Institute for Science and Education P.O. Box 117 Oak Ridge, TN 37831-0117 (423) 576-9975

Deadline January 15, 1999

Mitotix is a biotechnology company developing cell-cycle based biotherapeutics for cancer, cardiovascular and infectious diseases.

SCIENTIST MOLECULAR/CELLULAR o BIOLOGIST

We are seeking a molecular/ cellular biologist to join our tumor apoptosis program. This position requires a Ph.D. and 1-3 years' postdoctoral experience preferably in retroviral vector development and apoptosis. **Job Code: SR98**

Mitotix offers competitive salaries, benefits and a chance to work in an exciting scientific environment. Please send resume to: Human Resources, Mitotix, Inc., One Kendall Sq., Bldg. 600, Cambridge, MA 02139; Fax: (617) 225-0005. EOE.



www.mitotix.com

UNIVERSITY OF CALIFORNIA, SANTA CRUZ EVOLUTIONARY BIOLOGY/ECOLOGY

The biology department at the University of California, Santa Cruz, invites applications for the position of Associate or Full Professor. We seek applicants using theoretical and/or experimental approaches to address questions in Evolutionary Biology, Genetics, or Ecology in any setting (lab or field), system (marine, aquatic, or terrestrial) or taxa. The successful candidate will have an established and active research program. In addition he/she should possess demonstrated leadership abilities and be willing to participate in the continued development of the Organismal Biology program.

UCSC has strong programs in marine and terrestrial ecology, evolution, animal behavior, and marine mammal biology. Many faculty, students, and researchers work locally in the Monterey Bay region, an area of extraordinary marine and terrestrial habitats. All faculty have access to University resources such as the Institute of Marine Sciences, Long Marine Lab, Arboretum and the UC Natural Reserves including Nuevo Island, Landis-Hill Big Creek, Younger Lagoon, Hastings, and Fort Ord. UC Santa Cruz is committed to attracting a premier scientist, and salary and start-up packages will reflect that commitment. Lab space will be provided in a newly constructed research facility located on our 2,000-acre campus in the midst of a spectacular redwood forest overlooking Monterey Bay. In addition to lab space, the University provides substantial common facilities and services, including electron and light microscopy laboratories, greenhouses, vivarium, analytical laboratories, research vessels, constant temperature rooms, and molecular biology laboratories.

RANK: Associate to Full Professor.

MINIMUM QUALIFICATIONS: In addition to possessing a Ph.D. in Biology or a closely related field, candidates are expected to show evidence of a strong research record that supports appointment at the associate or full professor level and evidence of excellence in teaching.

POSITION AVAILABLE: Fall 1999, subject to final budgetary approval

APPLY TO: Applications should include a curriculum vitae, three recent publications, a statement of research interests, a statement of teaching interests, and names of contact information for four persons who can provide letters of recommendation. Letters will be solicited only after contact with the candidate. Please send application material to:

Chair, Evolutionary Biology/Ecology Search Committee Biology Department Earth and Marine Sciences Building University of California Santa Cruz, CA 95064

Please refer to position #126 in your reply.

CLOSING DATE: Complete applications received prior to December 11, 1998, will receive full consideration.

Inquiries should be directed to Pete Raimondi (831-459-5674, raimondi@biology.ucsc.edu).

Visit the Biology Department Website at http://www.biology.ucsc.edu

UCSC IS AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER. WOMEN AND MINORITIES ARE ENCOURAGED TO APPLY.



MAYO FOUNDATION ROCHESTER, MINNESOTA POSTDOCTORAL POSITION

A position is available immediately to participate in the development of a national center for genetic testing for Niemann Pick Type C disease. The project will include development of mutation screening assays, analysis of gene expression, study of genotypephenotype correlation's and delineation of other genes important in the expression of NPC disease. Research will be centered in the DNA diagnostic laboratory with interactions with the biochemical genetics laboratory and with the Department of Medical Genetics.

Experience in molecular techniques is essential. Previous work with mutation screening assays is helpful, but all strong candidates will be considered. Salary will be determined by the successful candidate's experience. There is also an attractive benefit package. Mayo Foundation is a nonprofit clinical practice integrated with education and research in a unified multi-campus system. Interested individuals should send copies of curriculum vitae, summary of research interests, and the names of three references to:

Karen Snow, Ph.D. Mayo Foundation Division of Laboratory Genetics Hilton 970 200 First Street S.W. Rochester, MN 55905

Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator

Department of Pharmacology University of Minnesota Medical School TENURE-TRACK POSITION (Assistant Professor, Associate Professor, Professor)

The Department of Pharmacology at the University of Minnesota Medical School invites applications for a new tenure-track faculty position in molecular/cellular pharmacology. The successful candidate is expected to establish an outstanding, independent research program, in addition to participating in team-taught undergraduate/ graduate medical courses in pharmacology. Requirements for the Assistant Professor position include a Ph.D. in Pharmacology or other basic medical science, or an M.D., and at least 2 years of postdoctoral research experience. Candidates with a strong research background and experience in using state-of-the art approaches involving cellular, molecular, genetic, or biophysical techniques to study problems relevant to pharmacological sciences are preferred. Applicants must have demonstrated excellence in research as documented by publications in leading peer-reviewed journals.

Appointment as Associate Professor (Tenured) or Professor (Tenured) will be considered for applicants with professional distinction in published research, teaching, and evidence of consistently attracting extramural funding for research. Appointment at these ranks must meet the minimum qualifications established by the University of Minnesota.

Applicants should indicate the rank for which they are applying and send a copy of their curriculum vitae, reprints of important publications, a brief statement of research plans, and names of three references to: Chairperson, Pharmacology Search Committee, Department of Pharmacology, 3-249 Millard Hall, University of Minnesota, 435 Delaware Street S.E., Minneapolis, MN 55455. Review of applications will begin November 20, 1998. Position will remain open until it is filled. University of Minnesota is an Equal Opportunity Education/Employer and offers an excellent academic research environment.

Information about the Department of Pharmacology and its programs is available on the Department's website (http://www.pharmacology. med.umn.edu).

TENURE-TRACK FACULTY POSITION IN BIOCHEMISTRY AND MOLECULAR BIOLOGY

Applications are invited for a faculty position at the rank of ASSISTANT, ASSOCIATE, or FULL PROFES-SOR. Applicants should have a Doctoral degree, postdoctoral research experience, and a commitment to excellence in both teaching and research. Faculty members are expected to develop strong, extramurally funded research programs and teach both medical and graduate students. The Department will assist with technical support and start-up funds. Special consideration will be given to individuals with research interests that complement those of current Departmental faculty, which include eukaryotic genetics (yeast, *C. elegans*), transcriptional regulation, chromatin structure, translation and cell growth control, protooncogenes, protein and biophysical chemistry, development of the nervous system, signal transduction via kinases and phosphatases, nutrition and free radicals, chromosome rearrangements and cancer, and glucose transport. More information can be found at website: http://gradsch.shreveport.lsumc.edu. Review of applicants will begin in January 1999. Send curriculum vitae, a brief statement of current and future research interests, and the names of three referees to:

Robert E. Rhoads, Ph.D., Professor and Head Department of Biochemistry and Molecular Biology Louisiana State University Medical Center 1501 Kings Highway Shreveport, LA 71130-3932

LSUMC is an Equal Opportunity/Affirmative Action Employer

The Department of Microbiology and Immunology at the University of Oklahoma Health Sciences Center invites applications for a 12-month tenure-track position at the ASSISTANT PROFESSOR level in the discipline of virology. Special consideration will be given to individuals with expertise in the study of viral immunology and viral pathogenesis; however, outstanding scientists in all areas of virology are encouraged to apply. The successful candidate will be expected to develop an extramurally funded research program and participate in team-taught medical, dental, and graduate courses. The Department consists of 15 full-time faculty and maintains a multimillion-dollar annual research budget generated from more than 40 extramural grants. An outstanding training program is in place that supports 14 Postdoctoral Fellows and 36 graduate students. For an overview of the Department, visit our website: www.microbiology.ouhsc.edu. Submit a curriculum vitae, description of research interests and teaching experience, and names of three references to: Ronald Č. Kennedy, Ph.D., Chair of the Virology Search Committee, Department of Microbiology and Immunology, P.O. Box 26901, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73190. Applications will be reviewed beginning November 16, 1998. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer. Applications from women and ethnic minorities are strongly encouraged.

FACULTY POSITION IN PHYSIOLOGY

The Department of Physiology at Loyola University Chicago Stritch School of Medicine is seeking applicants for tenure-track positions at the ASSISTANT, ASSO-CIATE, or FULL PROFESSOR level. Applicants must have a Ph.D., M.D., or equivalent and are expected to have the ability to establish a strong research program. Senior applicants should have a strong record of research productivity and extramural support. Applicants whose research complements and extends existing research strengths in areas of cellular and molecular aspects of Ca regulation and signal transduction in the cardiovascular system are especially encouraged (see website: http:/ www.meddean.luc.edu/lumen/DeptWebs/PHYSIO/) Send letter, curriculum vitae including research plans, and names of three references to: Donald M. Bers, Ph.D., Chair, Department of Physiology, Loyola University Chicago Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153. Loyola is an Equal Opportunity/Affirmative Action Employer.

Carnegie Mellon, Department of Engineering and Public Policy has FACULTY openings at ALL LEVELS for technically skilled candidates with policy research track records in information policy, telecommunications, mod-ern power, technology and development, management of innovation, research and development policy. Joint appointments available. Details at website: epp.cmu.edu. Résumé, papers, and references to: Granger Morgan, Department of Engineering and Public Policy, Car-negie Mellon, Pittsburgh, PA 15213 USA.

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, DAVIS

University of California, Davis is seeking applications for a

DIRECTOR of Clinical and Health Services Research.

This is a full-time academic position at the rank of Profes-

sor in the ladder rank (tenure-track) series. The candidate

must hold a M.D. degree. Training and experience in health services research and a Ph.D. or M.P.H. degree or

equivalent is highly desirable since this individual will also

be charged with the responsibility to develop a compre-

hensive mental health services research program with a

focus on psychiatry: primary care collaboration, rural psy-

chiatry, telemedicine, outcomes research, and managed

care issues. The candidate should have an established re-

search background as exemplified by having served as a

Principal Investigator on extramurally funded research

grants. The Director of Clinical and Health Services Re-

search will also be responsible for the development of

research projects among junior faculty members and will

meet periodically with the Department's Junior Faculty

Committee to review research and career development

issues. At least 10 years of experience in psychiatric research and research administration is essential. Service as a

member or Chair of an institutional review board, or

NIH/NIMH study section is desirable. The candidate

must be Board-certified in general psychiatry. Clinical

experience or training in community psychiatry is not

essential, but preferred. The candidate must be licensed, or eligible for licensure in California. Send curriculum

vitae and the names and addresses of five references to:

Dr. Robert Hales, Chair, Search Committee, Depart-

ment of Psychiatry, University of California, Davis Medical Center, 4430 V Street, Sacramento, CA 95817. Applications will be accepted until the position is

filled, but not later than December 31, 1998. The University of California, Davis is an Equal Opportunity Employer.

ASSOCIATE PROFESSOR

VASCULAR PLANT SYSTEMATICS

THE OHIO STATE UNIVERSITY

ogy, and Organismal Biology seeks an Associate Professor (or advanced Assistant Professor) in vascular plant system-

atics to join our existing systematics group in the Museum

of Biological Diversity. This is a tenure-track position

with a starting date of October 1, 1999. The successful

applicant will be expected to maintain an extramurally

funded research program in an area of vascular plant sys-

tematics, taxonomy, or phylogenetics that complements existing programs and extends the program's ability to

train graduate students and Postdoctoral Researchers in

molecular or monographic methods. The appointee will

also be expected to assume a formal leadership role in the

further development of the research and service programs

of the Ohio State University Herbarium, a collection of

over 500,000 specimens with emphasis on eastern North

America and temperate South America. In addition, the

successful applicant will direct graduate students and con-

tribute to the undergraduate and graduate teaching pro-

grams in evolutionary and organismal biology. Recently

renovated office and laboratory space is available in the

Museum. Applicants should forward a current curriculum

vitae, statements of teaching and research experience and interests, and three letters of reference to: **The Chair**,

Plant Systematics Search Committee, Department of

Evolution, Ecology, and Organismal Biology, The

Ohio State University, 1735 Neil Avenue, Columbus,

OH 43210. Review of applications will begin on Decem-

ber 1, 1998, and will continue until a suitable candidate is

identified. The Ohio State University is an Equal Opportunity,

Affirmative Action Employer. Qualified women, minorities, persons

with disability, and Vietnam-era veterans are encouraged to apply.

ATE PROFESSOR for its graduate Department of Cog-nitive and Neural Systems. Candidates should have an

outstanding research profile in modeling nonlinear neural

networks in vision and image processing, adaptive pattern

recognition, cognitive information processing, speech

and language, adaptive sensory-motor control, or neural

network technology. Send curriculum vitae and three rec-

ommendation letters to: Search Committee, Cognitive

and Neural Systems Department, 677 Beacon Street, Boston University, Boston, MA 02215. Affirmative Ac-

tion/Equal Opportunity Employer

Boston University seeks an ASSISTANT or ASSOCI-

The newly established Department of Evolution, Ecol-

Position #2205. The Department of Psychiatry at the

POSITIONS OPEN

ASSISTANT PROFESSOR NEUROBIOLOGIST

Tenure-track opening for Neurobiologist in the De-partment of Biological Sciences at DePaul University starting September 1999. Successful candidate will be broadly trained in neurobiology with a strong commitment to undergraduate education. All subdisciplines and animal model systems (invertebrate or vertebrate) considered. Ph.D. required; postdoctoral and previous teaching experience preferred. Teaching responsibilities to include some combination of biology courses with laboratory for non-majors; coteaching introductory biology sequence for majors; intermediate-level undergraduate course(s) in neurobiology; and graduate/advanced undergraduate course in candidate's area of expertise. Modest research support and start-up funds available. The Department is housed in a new Biology and Environmental Sciences Building that includes modern laboratory space and ample animal care facilities. Review of applications will begin December 15, 1998, and will continue until position is filled. Please send curriculum vitae; three letters of reference; statement of teaching and research interests; statement of your educational philosophy; and list of equip-ment and supply needs with cost estimates to: Neurobiology Search Committee, Department of Biological Sciences, DePaul University, 2325 North Clifton Avenue, Chicago, IL 60614. Additional inquiries to above address, or: FAX: 773-325-7596; e-mail: jdean@ wppost.depaul.edu. The Department of Biological Sciences seeks diversity in its faculty. We enourage applications from women, people of color, and the members of other historically underrepresented groups. DePaul University is committed to diversity and equality in education and employment.

BIOLOGIST

The Biology Department of Saint Michael's College, a Catholic, residential, liberal arts college, invites applications for a tenure-track position in biology at the ASSIST-ANT or ASSOCIATE PROFESSOR level, commensurate with experience, to begin September 1999. The suc-cessful applicant will have the Ph.D. with extensive expe-rience in neurobiology. Teaching assignments will include upper-level courses in neurobiology and comparative vertebrate anatomy, participation in a team-taught general biology course for majors, and non-majors courses with laboratory components. Total teaching load is 21 hours per year. Responsibilities include maintaining an active research program in which undergraduates can become involved, participation in our advising program for prehealth students, general academic advising, and service to the College community. Previous teaching and postdoctoral experience preferred.

Send curriculum vitae, undergraduate and graduate transcripts; statements of teaching experience, interests, and philosophy; research plans and objectives; and three letters of recommendation to: Dr. Donna Bozzone, Biology Chair, c/o Human Resources, Saint Michael's College, Winooski Park, Colchester, VT 05439. Review of applications will begin on December 21, 1998. For more information, visit our website: http://academics.smcvt.edu/biology. Affirmative Action/Equal Opportunity Employer.

AMERICAN UNIVERSITY OF BEIRUT FACULTY OF ARTS AND SCIENCES

Faculty positions in the Department of Biology available starting October 1999. Applicants sought in marine biology, with emphasis on ecology. Ph.D. degree, teaching and research experience

required.

Positions are at the ASSISTANT PROFESSOR level but higher ranks may be considered depending on qualifications. Appointments are generally for an initial period of three years. Visiting positions at all levels may be considered for all vacancies. Sabbatical visitors are welcome in all fields

All interested applicants may send a letter of application and arrange for three letters of reference addressed to:

> Dean, Faculty of Arts and Sciences American University of Beirut c/o New York Office 850 Third Avenue, 18th Floor New York, NY 10022-6297

Electronic submission may be sent to HYPERLINK mail to e-mail: as_dean@aub.edu.lb. All applicants and letters of reference should be received by January 15, 1999

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THE INSIDE TRACK

The best way to get your foot in the door is to get there first. Science's new e-mail Job Alerts service allows you to receive advance notification about new jobs appearing on Science Professional Network. If you're looking for a new position, or just testing the market, make Job Alerts part of your search...

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• EASY: Simply select the appropriate criteria for positions that fit your job search profile. After you've completed the form, the Job Alerts system automatically notifies you via e-mail about new positions. Hundreds of new positions are posted each week.

Science **JOB ALERTS** Go to www.scienceonline.org

and click on Science Careers.

Parke-Davis Pharmaceutical Research, a division of Warner-Lambert, offers a challenging scientific environment at our Ann Arbor, MI headquarters. Pursue a rewarding future of research and discovery as:

Postdoctoral Research Fellowship Cloning and characterization of a Protease-related

apoptosis inhibitor gene.

SHAPF The Departments of Neuroscience and Molecular Biology have joined together to create this Postdoctoral opportunity to better understand molecular mechanism of apoptosis. You will clone and characterize a protease-related apoptosis gene and its protein product; interact with other pharmaceutical scientists from different disciplines; and learn more about industrial research. A Ph.D. in Molecular Biology/Biochemistry or related areas with a strong molecular biology and biochemistry background is required. Experience with apoptosis study is highly desirable. Job Code: CJM-985571

Postdoctoral Research Fellowship Molecular Immunology at Parke-Davis Pharmaceutical

Research/University of Michigan

A postdoctoral position is available to study the regulation of cytokine gene expression by complement-derived immune complex. You will have a joint appointment at both Parke-Davis and the University of Michigan and will work creatively in both an academic and industrial laboratory setting. A Ph.D in Molecular Biology, Cell Biology or a related field is required. Hands-on experience with routine DNA/RNA/protein analysis, protein kinases and site-directed mutagenesis would be an advantage. Expertise in molecular biology and signal transduction is preferred. Job Code: CJM-985570

Postdoctoral Research Fellowship Immunopathology Department

This is an outstanding opportunity for a highly motivated individual to study the regulation of pulmonary inflammation. Your research will focus on the activation and migration of CD4 T cells and other leukocyte types in animal models of allergic lung inflammation. Qualifications include a Ph.D. in Immunology, Cell Biology or related field, and previous experience with animal models, tissue culture, and flow cytometry. Previous experience with analyses of pulmonary mechanics, cell adhesion, monoclonal antibody production, or molecular biology preferred. Job Code: CJM-985353

Senior Scientist/ Research Associate

You will be involved in validation of surrogate markers and resulting analytical methods for pharmacodynamic analysis of drug development. Your primary responsibility will be to work with drug discovery and development teams to identify and implement biochemical methods needed to generate, isolate and quantitate surrogate markers. You will also serve as a biochemistry expert/consultant for other departments; prepare method/sample analysis reports; write scientific publications as well as present research results at scientific meetings; and provide guidance in departmental strategic plan for surrogate markers. A Ph.D. in Biochemistry or related discipline with 2+ years' experience or an MS in Biochemistry, Biology or related area with 5-7 years' experience is required. Demonstrated knowledge and experience in chromatography and/or LC/MS/MS would be a definite plus. Job Code: CJM-98577

Shape the Future of Drug Discovery at Parke-Davis, and enjoy a competitive salary, benefits and an environment that supports your profession-al growth. Qualified candidates please mail, fax or e-mail your resume, indicating the JOB CODE of interest, to: Parke-Davis Resume Processing Center, P.O. Box 92242, Los Angeles, CA 90009-2242. Fax: (310) 337-3367. E-mail: parkedavis@isearch.com

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BIOLOGY FACULTY POSITIONS UNIVERSITY OF ST. THOMAS

The University of St. Thomas Department of Biology in St. Paul, Minnesota invites applications for (1) tenuretrack ASSISTANT PROFESSORSHIP in plant biology (position #200074) and (2) temporary (annually renewable up to five years) ASSISTANT PROFESSOR-SHIP in aquatic ecology (position #200621). Both positions will begin fall semester 1999.

Candidates for the plant biology position should be broadly trained in plant biology and be committed to teaching in a liberal arts setting. We especially encourage persons with research interests in plant physiology and/or plant molecular biology. Teaching responsibilities will include participation in our introductory courses, an intermediate-level course in plant biology, and an advanced plant course. An active research program that involves undergraduate students will be expected. Ph.D. in plant biology required. Postdoctoral research and teaching experience preferred. Send letter of application, curriculum vitae, statement of teaching philosophy, proposal for an advanced plant course you would like to teach, statement of future research plans, and three letters of recommendation.

Candidates for the aquatic ecology position should be broadly trained and be committed to teaching in a liberal arts setting. We especially encourage persons with additional expertise in invertebrate biology. Responsibilities will include participation in our majors and non-majors introductory courses and upper-level courses in your area of expertise. Candidates must have a Ph.D. Teaching experience is preferred. Send letter of application, curriculum vitae, statement of teaching philosophy, proposal for an upper-level course you would like to teach, and three letters of recommendation.

Completed applications due by 4 December 1998 to: Ms. Carol Felton, Mail #OWS153, 2115 Summit Avenue, St. Paul, MN 55105.

The University of St. Thomas is a private, Catholic, comprehensive, liberal arts university with an undergraduate student body in excess of 5,000. The Department of Biology has a membership of 12 faculty and four staff. Additional information is available on our website: http://tigger.stthomas.edu/BIOL/. The University is an Equal Opportunity Employer and is committed to a program of Affiniative Action.

MOLECULAR MICROBIOLOGIST UNIVERSITY OF TEXAS AT ARLINGTON

The Department of Biology invites applications for a tenure-track **ASSISTANT PROFESSOR**. Applicants using molecular techniques to investigate physiological or genetic aspects of bacterial-environmental interactions are preferred. However, outstanding candidates in related areas will be considered. The successful candidate must have a Ph.D., and postdoctoral experience is preferred. The appointee will participate in teaching at the under-graduate and graduate levels and is expected to establish a vigorous externally funded research program. Applicants should submit a curriculum vitae, selected reprints, a statement of research goals and teaching philosophy, and arrange for three letters of recommendation to be sent to: Dr. George Stewart, Chairman, Search Committee, Department of Biology, Box 19498, The University of Texas at Arlington, Arlington, TX 76019. The Department of Biology offers Ph.D. and M.S. degrees as well as B.S. degrees in microbiology, medical technology, and biology. Located in the Dallas/Ft. Worth metroplex, The University of Texas at Arlington is a comprehensive university with about 18,500 students. Application review begins December 1, 1998, and will continue until position is filled. UTA is an Equal Opportunity and Affirmative Action Employer

ASSISTANT/ASSOCIATE PROFESSOR IMMUNOLOGY

The Immunobiology Unit of the Department of Medicine at Boston University Medical Center invites application for a faculty position in immunology. Candidates with an M.D. or Ph.D. degree, working in any area of immunology, who have a strong research record and commitment to developing an independent, innovative program, will be considered. Interested individuals should submit a curriculum vitae, outline of future research plans, and the names of three references before December 15, 1998, to: Thomas L. Rothstein, M.D., Ph.D., Boston Medical Center, Room E-556, 88 East Newton Street, Boston, MA 02118. Equal Opportunity Employer.

POSITIONS OPEN



UNIVERSITY OF CALIFORNIA, DAVIS

Position #2206. The Department of Psychiatry at the University of California, Davis is seeking applications for a full-time ASSOCIATE/FULL PROFESSOR ladder rank series with research expertise in the area of neuroim-aging. The candidate must hold an M.D. and/or Ph.D. degree and have a demonstrated record of solid academic accomplishment, including ability to compete for extra-mural research support. The candidate will preferably have expertise in structural and/or functional magnetic resonance imaging and will be interested in developing a neuroimaging research program. UC Davis has made a major commitment to neuroscience research and the Department of Psychiatry will expand its neuroimaging program in coordination with the overall growth of clinical neuroscience research. The new faculty member will be tenured in the School of Medicine. He/she will be expected to collaborate in the development of a larger functional neuroimaging research facility at UC Davis Medical Center that will serve not only his/her own research program but also the research of other clinical and basic neuroscience and medical Investigators. Please send curriculum vitae, a letter summarizing past and future research directions, and the names of three references to: Dr. David Amaral, Chair, Neuroimaging Search Committee, Department of Psychiatry, University of California, Davis Medical Center, 4430 V Street, Sacramento, CA 95817. Applications will be accepted until the position is filled, but not later than December 31, 1998. The University of California, Davis is an Equal Opportunity Employer.

ENDOWED PROFESSORSHIP IN ENTOMOLOGY

The Department of Entomology of North Carolina State University invites nominations and applications for the Charles G. Wright Professorship in structural pest management. This position is supported in part by the Blanton J. Whitmire Endowment for Structural Pest Management and is an important element in our effort to build a center of excellence in urban pest management. We seek candidates with extensive postdoctoral experience, a strong publication and funding record, effective leadership skills, and a demonstrated ability to interact effectively with research and extension colleagues. Duties include research directed to development and implementation of environmentally sound systems of indoor arthropod pest management, participation in graduate training and development of a course in area of expertise, and development of a strong working relationship with the pest control industry.

Applications will be accepted until January 15, 1999, or until a suitable candidate is selected. Submit a curriculum vitae, statement of research philosophy and goals, a set of recent reprints, and the names of at least five references.

To apply or nominate a candidate contact: Dr. James D. Harper, Head, Department of Entomology, North Carolina State University, Box 7613, Raleigh, NC 27695-7613. E-mail: james_harper@ncsu.edu.

Equal Opportunity/Affirmative Action Employer. Individuals with disability desiring accommodations in the application process should contact James D. Harper at the above address.

CELL BIOLOGIST. Tenure-track ASSISTANT PROFESSOR to start August 1999. Responsibilities include teaching, involving undergraduates in research, and contributing to a developing program in biochemistry. Ph.D. required; postdoctoral experience highly desirable.

Applicants must demonstrate excellence in and commitment to undergraduate teaching in a liberal arts setting, and should describe how their research program could involve undergraduate collaborators.

Ursinus, northwest of Philadelphia in a suburban setting, is a highly selective, residential, coeducational, liberal arts college of 1,250 students with a long tradition of strength in science. Laboratory facilities in biology and chemistry, supported by numerous grants from NSF and HHMI, are outstanding. Send letter of application, curriculum vitae, and three

Send letter of application, curriculum vitae, and three letters of recommendation to: Dr. Robert Dawley, Co-Chair, Department of Biology, Ursinus College, Collegeville, PA 19426-1000. Applications reviewed upon receipt, but accepted until January 10, 1999. Ursinus College is an Equal Opportunity Employer/Affirmative Action and encourage applications from women and minorities.

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA, BERKELEY DEPARTMENT OF BIOENGINEERING

The University of California, Berkeley invites applications for tenure-track positions in bioengineering beginning in fall semester 1999. Applications for appointments at the ASSISTANT PROFESSOR, ASSOCI-ATE PROFESSOR, and FULL PROFESSOR levels will be considered. The faculty positions are tenure-track in the Department of Bioengineering, a joint program at University of California, Berkeley and University of California, San Francisco.

Applicants should have received (or be about to receive) a Doctoral degree in a field of engineering or science related to bioengineering. The academic and research programs seeking faculty are tissue engineering, bioMEMS, and related bioengineering themes at the interface of engineering, biology, medicine, physics, and chemistry. A principal requirement is demonstrated excellence in research. In addition, potential for excellence in teaching and leadership are important requirements. Successful applicants will be expected to establish a quality research program and to teach both graduate and undergraduate courses in their general area of engineering specialty.

Interested persons should send a résumé, a selected group of publication reprints (five or less), a one- to two-page statement of their future research plans and interests, and the names of three references by January 31, 1999, to the address below. The applicant should request their references forward letters of reference directly to the same address. These letters will not be requested directly by the department. Applications received after the deadline will not be considered; earlier applications are encouraged.

Bioengineering Faculty Search Committee Chair c/o Marcia Steinfeld College of Engineering Dean's Office 315 McLaughlin Hall #1700 Berkeley, CA 94720

Applications postmarked after the deadline will not be considered.

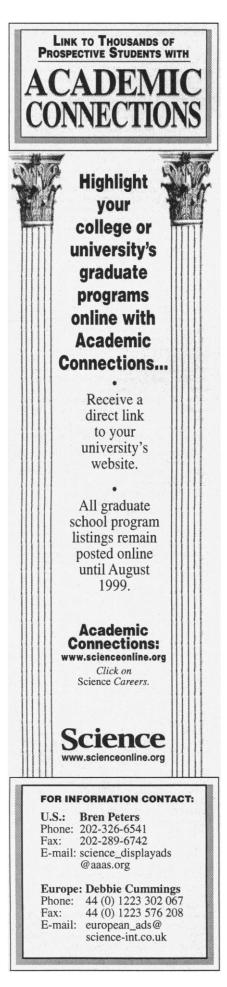
The University of California is an Equal Opportunity/Affirmative Action Employer.

> ASSISTANT PROFESSOR CELL DYNAMICS California Institute of Technology

We invite applications for a tenure-track Assistant Professor position in the Division of Biology at the California Institute of Technology. The applicant is expected to develop a state-of-the-art research program, and to be committed to high-quality teaching as well. We are particularly interested in candidates who take a multidisciplinary approach to investigate basic questions of subcel-lular regulation and function. The uniqueness of the applicant's proposed research program will be a major con-sideration. The term of the initial appointment is four years. Applicants who have completed the requirements for a Ph.D. degree should submit, by January 1, 1999, a curriculum vitae, list of publications, and a brief statement of teaching experience, research interests, and plans. In addition, the candidate should arrange to have three letters of reference sent. All materials should be sent to: Cell Dynamics Search Committee, Division of Biology 156-29, California Institute of Technology, Pasade na, CA 91125 USA. CalTech is an Equal Opportunity/ Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

SYSTEMS NEUROBIOLOGY OR COMPUTATIONAL NEUROSCIENCE CORNELL UNIVERSITY

The Section of Neurobiology and Behavior invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. Applicants must have a Ph.D., an excellent record of scientific productivity, and a commitment to undergraduate and graduate teaching. Candidates should have research interests in neuroethology with expertise in one or more of the following areas: sensory or motor systems, evolutionary neurobiology, neural modeling. Send curriculum vitae, statement of research interests, statement of teaching interests, up to three publications, and three letters of reference to: Chair, Search Committee, Section of Neurobiology and Behavior, Cornell University, Ithaca, NY 14853-2702. Review of applications begins December 1, 1998. Women and minority candidates are strongly encouraged to apply. Cornell University is an Equal Opportunity/Affirmative Action Employer.



Procter&Gamble

The Corporate **Research** Division of the Procter & Gamble Company has openings for Ph.D. Molecular and Cell Biologists at our Miami Valley Laboratories, located in Cincinnati, Ohio. These positions require demonstrated excellence in problem solving, teamwork, and written and oral communications.



No agency referrals, please. Applicants must be presently authorized to work in the U.S. on a fulltime basis.

Equal Opportunity Employer

• Opportunities for Molecular & Cell Biologists

Department-CS

A Ph.D. in molecular biology/genetics will carry out experiments using *Drosophila melanogaster* as a model system. The successful candidate will identify and characterize new mutations. The tissue distribution of expression of one or more genes will be followed. This research will require experience with *Drosophila* genetics, DNA and RNA isolation from *Drosophila*, and the use of modern genomics techniques.

Department-RG

A Ph.D. in cell biology will work to discover molecular targets for drug development. Knowledge of adipocyte biology and/or fat metabolism and experience with animal models would be beneficial. A basic knowledge of modern methods of gene cloning and expression analysis is required.

The Procter & Gamble Company is a world leader in the research, development, manufacture and marketing of a wide variety of consumer products. The Company's annual sales exceed \$37 billion and our annual R&D investment is more than \$1.5 billion. P&G offers a competitive salary and benefits package, placing it in the top tier of U.S. companies. The Company's R&D organizations provide excellent opportunities for both personal and professional growth.

If you meet the qualifications for one of these positions, please mail or e-mail a letter of introduction indicating the department designation for the position, resume, and list of publications to:

Dr. G. D. Owens The Procter & Gamble Company Doctoral Recruiting • P.O. Box 538707 - Dept. CS or Dept. RG Cincinnati, OH • 45253-8707 E-mail: rolfes.rl@pg.com (plain text or Microsoft Word only, please)



Director of Research Arkansas Cancer Research Center



University of Arkansas for Medical Sciences

The Arkansas Cancer Research Center (ACRC) at the University of Arkansas for Medical Sciences (UAMS) seeks nominations and applications for a Director of Research. Applicants must have an MD, PhD, or equivalent degree, and major administrative experience. He/she should have an active, funded program in basic and/or clinical cancer research. The candidate's scope, knowledge, and interest in cancer research should be sufficiently broad so that he/she can effectively interact with and facilitate the integration of the various research programs at the center.

The Director of Research will oversee the overall development, coordination, and implementation of basic and clinical research at the ACRC. Specifically, the Director of Research will: (i) play a major role in the integration and expansion of existing research programs, (ii) monitor the progress of ongoing basic and clinical research in order to enhance and facilitate research productivity and inter-programmatic collaborations, (iii) facilitate initiation and conduct of collaborative studies with clinical and basic science departments at UAMS and other nearby institutions, (iv) identify specific areas of research to be developed and participate actively in recruiting new investigators, (v) be responsible for the allocation of research funds, (vi) contribute to the education of medical students, graduate students, and fellows, and (vii) advise the ACRC Director in budgetary and general organizational issues. The Director of Research will have an appointment in an academic department at UAMS and report directly to the ACRC Director. Send applications and *curriculum vitae* to:

Bart Barlogie, MD, PhD, Director Arkansas Cancer Research Center 4301 West Markham, Slot 623 Little Rock, AR 72205

University of Arkansas for Medical Sciences is an Affirmative Action/Equal Opportunity Employer

ENDOWED CHAIR OF ENVIRONMENTAL STUDIES BIOLOGICAL SCIENCES Southeastern Louisiana University Website: www.selu.edu/Academics/Depts/Biology

Southeastern Louisiana University (SLU) seeks an in-dividual at the level of **PROFESSOR** with expertise in environmental biology to serve as the Edward G. Schlieder Endowed Chair of Environmental Studies in the Department of Biological Sciences. SLU has a research station in the oligonaline wetlands of the Lake Pontchartrain Basin, a large estuarine system. Specific areas of environmental study include, but are not limited to, systems and landscape modeling, biogeochemistry, conservation, trophic interactions, limnology, restoration ecology, and fisheries research. This individual will be expected to work closely with the government agencies and the private sector in addressing environmental problems and implementing new technologies that will enhance ecosystem productivity and sustainability. The candidate must have a distinguished history of referred publications, invited presentation, and proven success in obtaining substantial extranural support. Review of applications begins December 1, 1998, and will continue until the qualified candidate is identified. Interested applicants are encouraged to submit a packet including (1) a two- to four-page narrative describing how the applicant would use the Endowed Professorship to enhance their academic productivity and SLU's interdisciplinary program in environmental studies, including graduate and undergraduate research opportunities; (2) a current curriculum vitae; (3) three to five letters of reference; and (4) a copy of all transcripts (originals required upon employment) to: Dr. Nick Norton, Head, Department of Biological Sciences, Southeastern Louisiana University 10736, Hammond, LA 70402. SLU is an Affirmative Action/ADA/Equal Employment Opportunity Employer.

EVOLUTION AND ECOLOGY

The Department of Biology and Biochemistry at the University of Houston invites applications for an ASSIST-ANT, ASSOCIATE, or FULL PROFESSOR in all areas of population biology, especially those using molecular approaches to evolutionary or ecological questions in marine or terrestrial systems. The position requires postdoctoral experience. Faculty are expected to develop a nationally competitive research program and participate in teaching. The Department has spacious laboratories with state-of-the-art equipment, strong research programs, and encourages active research collaborations among its faculty. Submit a curriculum vitae, a research plan, and have three letters of reference sent to: Dr. A. Eskin, Evolution Search, Department of Biology/ Biochemistry, University of Houston, Houston, TX 7204-5513. Application review will begin December 1, 1998. UH is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disability are encouraged to apply.

Experimental medicine. Candidates with documented research skills sought for 12-month tenure-track AS-SISTANT/ASSOCIATE PROFESSOR position with emphasis on research (80 percent) and professional and graduate teaching (20 percent). Expected to develop funded program in molecular and cell biological approaches to disease. Ph.D. degree and significant postdoctoral experience expected; D.V.M. degree preferred. Competitive salary and benefits package. Earliest start date July 1, 1999. Send curriculum vitae, career goals statement, research summary, reprints, references to: Dr. Philip N. Bochsler, Pathology Search Committee Chair, Department of Pathology, College of Veterinary Medicine, University of Tennessee, Knoxville, TN 37901-1071. Telephone: 423-974-8234. Informal inquiries are encouraged. The University of Tennessee is an Equal Opportunity/Affirmative Action Employer.

PLANT BIOLOGIST

Tenure-track ASSISTANT PROFESSOR position, beginning fall 1999. Will teach plant biology, preferably microbiology, and general biology, all with laboratory; advise students; and direct student research. Ph.D. and commitment to liberal arts education required. Submit curriculum vitae, names of three references, teaching and research goals to: Plant Biologist Search, Department of Biology, Nazareth College, 4245 East Avenue, Rochester, NY 14618-3790 by January 4, 1999. Women and minorities are especially encouraged to apply. Affirmative Action Employer.



ASSISTANT PROFESSOR (tenure track) of complex systems and brain sciences at Florida Atlantic University (FAU), to teach and do re-search within the joint NIMH/FAU National Training Program in Complex Systems and Brain Sciences. An interest and background in theoretical modeling (dynamical/computational) and analysis of cognitive brain function (including EEG, MEG, fMRI) with particular emphasis on cross-level analysis and establishing a theory-experiment connection is highly desirable. Please send a current curriculum vitae, three letters of recommendation, and three reprints to: Prof. J. A. Scott Kelso, Director, Center for Complex Systems and Brain Sciences, Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431-0991 by December 15, 1998. Website: http://www.ccs.fau.edu. FAU is an Equal Opportunity/Equal Access/Affirmative Action Institution

MOLECULAR ELECTRONICS AT ARIZONA STATE UNIVERSITY

The Department of Electrical Engineering at Arizona State University is recruiting for a **PROFESSOR**-level appointment in molecular electronics. The successful applicant will be expected to take a leadership role in building a molecular electronics program at Arizona State University (ASU), including mentoring graduate students, developing an innovative educational program, and establishing strong links with industry. Required: an earned doctorate in electrical engineering or related field; established research and publications record/teaching experience appropriate to Professor rank; and evidence of ability to attract research funding. Desired: research/teaching experience in molecular electronics and history of interdisciplinary collaboration.

disciplinary collaboration. Arizona State University, a Research One institution, is the fourth largest U.S. university with approximately 37,000 undergraduate and 12,000 graduate students. The College of Engineering and Applied Science at ASU is established among the leading engineering graduate schools in the country. The Department of Electrical Engineering has approximately 750 undergraduate and 450 graduate students, with research expenditures approaching \$6 million per year. The Phoenix area high-technology industrial base, including Intel and Motorola, enriches the ASU research environment with project funding and consulting opportunities. Candidates will also benefit from excellent experimental facilities and active research programs within the Center for Solid State Electronics Research at ASU.

Applicants must send a letter of application, a résumé with publication list, and names, addresses, and telephone numbers of at least three references to: Faculty Search Committee for Molecular Electronics, Department of Electrical Engineering, Box 875706, Arizona State University, Tempe, AZ 85287-5706. The first application deadline is February 15, 1999; thereafter applications will be reviewed biweekley until the search is closed. Arizona State University is an Equal Opportunity Employer. The department encourages diversity among its applicants.

CIRCADIAN BIOLOGY

The Department of Biology and Biochemistry at the University of Houston invites applications for a Neurobiologist ASSISTANT, ASSOCIATE, or FULL PRO-FESSOR, using genetic, molecular, cellular, or biochemical methods to study the mechanisms underlying circadian rhythmicity. The position requires postdoctoral experience. The successful candidate will join a group of four faculty studying circadian rhythms and is expected to develop a nationally competitive research program and participate in teaching. The Department offers generous setup packages and spacious laboratories. Submit curriculum vitae, a research plan, and have three letters of reference sent to: Dr. A. Eskin, Circadian Search, Department of Biology/Biochemistry, University of Houston, Houston, TX 77204-5513. Application review will begin December 1, 1998. UH is an Equal Opportunity/Affirmative Action Employer. Minorities, women, weterans, and persons with disability are encouraged to apply.

POSITIONS OPEN

ORGANIC CHEMIST. The Williams College Chemistry Department invites application for a tenure-track position at the ASSISTANT PROFESSOR level for fall 1999. (Senior appointment possible in exceptional circumstances.) Preference will be given to applicants with research interests in bioorganic or synthetic organic chemistry. Intitial teaching assignment, depending upon the successful candidate's subspecialty, will include two courses from physical organic chemistry, enzyme kinetics and reaction mechanisms, a course for non-science majors, sophomore-level organic chemistry, and instrumental methods of analysis. A semester teaching load normally includes complete responsibility for one course and two laboratory sections, and supervision of student research projects. Candidates should have the Ph.D. or completed dissertation by September 1999 (postdoctoral experience is preferred). The successful candidate must have a strong commitment both to teaching at the undergraduate level and to developing a productive research program. Wil-liams College is a highly selective, coeducational liberal arts institution of approximately 230 faculty and 2,000 undergraduates, located in northwestern Massachusetts. The Chemistry Department, with 12 faculty members and about 30 majors each year, has excellent facilities for teaching and research. A new 47-million dollar science complex will be completed in the year 2000. Send résume, undergraduate and graduate transcripts, description of teaching philosophy, description of research projects for undergraduates, and three letters of recommendation to: Professor David P. Richardson, Chair, Department of Chemistry, Williams College, Williams-town, MA 01267 by December 1, 1998. For additional information about the Chemistry Department visit our website: http://www.williams.edu/Chemistry. Williams College is an Equal Opportunity/Affirmative Action Employer. The College is actively working to increase the ethnic and ender diversity of its science majors and seeks an individual who can help us meet these goals.

BIOCHEMISTRY OR INFECTIOUS DISEASES

The Department of Biology and Biochemistry at the University of Houston invites applications for an ASSIST-ANT, ASSOCIATE, or FULL PROFESSOR with research interests in the mechanisms of microbial pathogenesis, including antibiotic development and drug target identification. The individual will complement existing strengths in microbial biochemistry and genetics, mechanistic enzymology, X-ray crystallography, and computerbased drug design. The position requires postdoctoral experience. Faculty are expected to develop nationally competitive research programs and participate in teach-ing. The Department has about 100 graduate students, spacious laboratories, and vigorous research programs in biochemistry and cellular and molecular biology. Submit curriculum vitae, a research plan, and have three letters of reference sent to: Dr. A. Eskin, Microbiology Search, Department of Biology/Biochemistry, University of Houston, Houston, TX 77204-5513. Application re-view will begin December 1, 1998. UH is an Equal Opporand persons with disability are encouraged to apply.

Hematology/oncology. The University of Virginia, Division of Hematology/Oncology is seeking a Ph.D. **ASSISTANT PROFESSOR** of research in molecular pharmacology to research eicosanoids in cancer biology. The laboratory of **Dr. Charles Myers** uses human prostate cancer cells as a model for examining the molecular basis by which dietary fat fosters progression of carcinomas. Our current emphasis is on the biology of arachidonic acid lipoxygenases in cancer cell survival and growth. Desirable skills include experience with HPLC, especially of eicosanoids, drug discovery, and high-throughput screening. Experience with transduction research is also an asset. Send résumé to: **Dr. Charles Myers, Box 334, University of Virginia School of Medicine, Charlottesville, VA 22908.** The University of Virginia is an *Affinnative Action/Equal Opportunity Employer.*

MARINE BIOLOGY

ASSISTANT PROFESSOR. Invertebrate zoology, marine biology. To teach general biology, invertebrate zoology, marine biology. Research with undergraduates expected. Ph.D. in biology and demonstrated excellence in teaching. Send curriculum vitae, teaching and research philosophy, and three letters of reference to: Dr. Stockhouse, Chair, Department of Biology, Pacific University, Forest Grove, OR 97116. Deadline December 7, 1998. For further information website: http://www. biology.pacificu.edu/hiring.html.

Director

The Autism Genetic Resource Exchange, a path-breaking, non-profit autism gene bank created by parents and researchers seeks full-time director. This is an unusual opportunity for a highly motivated individual in which your commitment is likely to have direct impact on our understanding of possible genetic causes and biological treatments for autism and related disorders. The director will be responsible for program planning, project documentation, family recruitment, and administration of an open researchers sharing program. The director will serve as project spokesperson at meetings and scientific conferences. Budget development and maintenance and grant-writing experience essential. Administrative experience in a scientific setting and an advanced degree in a biomedical or related field preferred.

> Contact: Janice Sowinski, M.S., The Human Biological Data Interchange 1880 JFK Blvd., 6th Floor Philadelphia, PA 19103 Phone: 215-557-7361, x232 Fax: 215-557-7154 Web: http://www.hbdi.org

MAYO FOUNDATION FOR RESEARCH AND EDUCATION DIRECTOR OF RESEARCH COMPUTING FACILITY



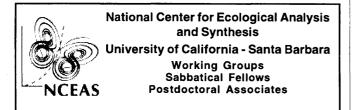
The Mayo Clinic at Rochester, Minnesota (http://www.mayo.edu) is seeking a Director of the Mayo Research Computing Facility. This is a full-time professional position, with a competitive compensation and benefits package.

The Research Computing Facility (<u>http://www.mayo.edu/research/ref</u>) is a core component of the Mayo Clinic research infrastructure that provides information technology (IT) services to the diverse Mayo research community, including expert consulting to provide optimal IT solutions, innovative technological guidance and development, and infrastructure support. The Research Computing Facility staff collaborates with investigators from almost every medical and research specialty. The director will work closely with research faculty while managing a large and diversified technology group, providing vision and guidance to enable innovative computing support for the research community. The director will provide leadership with the ability to assess appropriate technologies beneficial to researchers. Knowledge of bioinformatics is preferred, with the ability to introduce bioinformatics advancements into the research environment. The director will interact with institutional leadership regarding integration of clinical and research IT environments.

The Mayo Foundation includes "not-for-profit" clinic and hospitals staffed by nearly 2,000 physicians and scientist, as well as medical and graduate schools, with an annual research budget exceeding \$125 million. Its primary location is in Rochester, Minnesota (<u>http://www.rochesterusa.com</u>), approximately one hour from the Minneapolis/St. Paul metropolitan area. Rochester has excellent schools, a cosmopolitan cultural atmosphere, growing economy, clean environment, and has been rated one of the best places to live in the USA by Money Magazine.

Candidates should have a Ph.D. in Computer Science, Bioinformatics, or a closely aligned quantitative science, with significant professional experience in management and leadership in a research or clinical environment, as well as demonstrated knowledge of technological advancements. Excellent communications skills are essential. Review of application materials will begin December 31, 1998, and will continue until the position is filled. Potential applicants for this position should submit their curriculum vitae or résumé to:

Daniel J. Schaid, Ph.D. Harwick 7 Mayo Clinic 200 First Street S.W. Rochester, MN 55905 E-mail: schaid@mayo.edu Fax: (507) 284-9542 Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.



The mission of the National Center for Ecological Analysis and Synthesis is to advance the understanding of ecological patterns and processes using existing information. Ecology encompasses many associated disciplines and the Center is interested in involving scientists from a variety of fields in analyses of important ecological topics.

NCEAS supports group activities (Working Groups focusing intensively on an issue), Center Fellows (sabbaticals), Postdoctoral Associates, and creative combinations of these approaches. Funds are available for travel, accommodations, and local costs for Working Groups, and stipends and other allowances are available for Center Fellows and Postdoctoral Associates. To promote scientific productivity, NCEAS provides comprehensive support services and high performance computing capabilities, along with offices and meetings rooms for visiting and resident scientists.

Ecologists, scientists in related disciplines, resource managers, and policy makers are encouraged to discuss possible activities with the Director or to submit proposals to NCEAS. Proposals that deal with particularly novel ideas or approaches, that bring innovative ideas to bear on important issues, that synthesize existing information or that address new methods for the integration and analysis of data are especially welcome. The Center is funded by the National Science Foundation, the State of California, and the University of California-Santa Barbara. Additional information about the Center, including contacts, proposal guidelines, and deadlines for semi-annual applications, is available at http://www.nceas.ucsb.edu.



UNIVERSITY OF CALIFORNIA AT BERKELEY

The Department of Plant and Microbial Biology and the Agricultural Experiment Station at the University of California, Berkeley, have two openings for tenure-track Assistant Professor positions (9-month appointments) starting July 1, 1999.

Plant Genomics

Applications are invited from outstanding individuals whose research interests are in the area of plant genomics. Representative areas might include functional genomics to study plant development, physiology, disease, and/or evolution. The appointee will be expected to contribute to the teaching of plant genomics at the undergraduate or graduate level, and establish a strong and independent research program. Please direct correspondence to the Chair, Plant Genomics Search Committee at the address below. Deadline for applications: January 2, 1999.

Microbial Molecular Biologist

Applications are invited from outstanding individuals whose research focuses on the molecular biology of microbes, in particular archaea and/or bacteria. The appointee will be expected to establish a strong and independent research program and to contribute to the teaching of microbial biology lecture and laboratory at the undergraduate level. Please direct correspondence to the Chair, Microbial Molecular Biologist Search Committee at the address below. Deadline for applications: January 15, 1999.

Applicants must have a Ph.D. degree and at least two years of postdoctoral experience. Application packages must include a *curriculum vitae*, a statement of current and future research interests, a statement of teaching experience and/ or goals, and names of three references.

University of California Department of Plant and Microbial Biology 111 Koshland Hall MC #3102 Berkeley, CA 94720-3102

Applications submitted after the deadline will not be accepted. The University of California is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK POSITIONS IN COMPUTATIONAL TISSUE/ CELL MECHANICS Tulane University School of Engineering Biomedical Engineering

The Department of Biomedical Engineering at Tulane University invites applications for two tenure-track faculty positions that will be available as early as January 1, 1999. Both positions are funded by a newly awarded Whitaker Special Opportunity Award, "Establishing Excellence in Computational Tissue Mechanics." We seek both senior and junior-level faculty members whose focus includes computational cell and tissue biomechanics research. These positions (with associated start-up funds, Research Assistants, and Postdoctoral scholars) will allow for rapid expansion of the department's focus—which already incudes macroscale biomechanics work in biosolids and biofluids and experimental cell and tissue engineeringto include microscale investigations of cell and tissues. The department, founded in 1977, presently has 10 fulltime faculty members, an ABET-accredited undergraduate program with approximately 200 undergraduate and 50 graduate students. Applicants must have an earned doctorate, and will be expected to teach undergraduate and graduate courses and develop an externally funded research program. We plan to begin interviews with the top candidates by November 15, 1998. However, the search will continue until both positions are filled. Send a curriculum vitae, a brief description of research and teach-ing interests, and names and addresses of three references to: Richard T. Hart, Ph.D., Faculty Search Committee, Department of Biomedical Engineering, Boggs Center, Suite 500, Tulane University, New Orleans, LA 70118-5674. More information about the Department of Biomedical Engineering can be found at website: http://www.bmen.tulane.edu. Tulane University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT/ASSOCIATE PROFESSOR DEPARTMENT OF BIOLOGICAL SCIENCES University of Delaware

The Department of Biological Sciences is currently undertaking a significant expansion of its programs in the molecular and cell biosciences under the direction of a new Chair, **Dr. Daniel Carson**. At this time, we invite applications for a tenure-track faculty position at the Assistant or Associate level.

We seek an individual who utilizes molecular approaches to study extracellular matrix structure and function in animal or plant systems or the interactions of organisms with extracellular matrix related to pathogenesis. Candidates must have a Ph.D. or equivalent and a minimum of two years of postdoctoral experience. Preference will be given to an outstanding candidate who has a solid publication record, is supported by a federally funded grant, and is committed to quality teaching.

Applicants should submit a complete curriculum vitae, a description of research interests and goals, and the names of three references to: Dr. David C. Usher, Chair, Search Committee, Department of Biological Sciences, University of Delaware, Newark, DE 19716-2590 or FAX your information to FAX: 302-831-2281, or e-mail your information to e-mail: david.usher@mvs.udel.edu. The starting date for this position is September 1, 1999, or earlier. Review of applicants will begin upon receipt and will continue until the position is filled. For additional information you may Telephone: 302-831-6977.

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

ASSISTANT PROFESSOR INSECT SYSTEMATICS/MORPHOLOGY

The Department of Entomology, Kansas State University invites applications for a research and teaching tenuretrack position to start after March 1, 1999. Ph.D. in systematics/morphology required; experience with modern approaches to systematics, curation, grantsmanship, and teaching preferred. Incumbent will teach morphology, systematics, and general entomology. Send curriculum vitae, research interests and teaching philosophy, reprints, and three letters of recommendation to: Head, Department of Entomology, Kansas State University, Manhattan, KS 66506. Application deadline December 1, 1998. KSU is an Affiniative Action/Equal Opportunity Employer.

UNIVERSITY OF MINNESOTA DEPARTMENT OF GENETICS, CELL BIOLOGY, AND DEVELOPMENT

As part of a major initiative in cell and molecular biology, the University of Minnesota is establishing a new Department of Genetics, Cell Biology, and Development. This new department will incorporate strong existing scientific programs as part of a reorganization of biologic sciences at the University, including undergraduate and gradu-ate-level instruction. The Department seeks candidates for up to three new tenure-track positions at the ASSISTANT PROFESSOR level in the disciplines of genetics and/or cell biology. All areas of research in these disciplines will be considered, but specific areas of research expertise sought for cell biology include signal transduction, membrane trafficking, chromosome dynamics, nuclear-cytoplasmic interactions, growth control, and cell cycle. Those sought in genetics in-clude gene expression, genomics, DNA repair, chromosome organization and function, and human genetics in association with the Institute of Human Genetics.

Candidates must have a Ph.D. and/or M.D. degree, at least two years of postdoctoral experience, and a strong publication record. Successful candidates must be U.S. citizens or be able to secure permanent resident status. Candidates will be expected to develop independent research programs that will lead to external funding. The ability to interact collaboratively among a variety of disciplines will be encouraged, and teaching of undergraduate, graduate, and/or professional students will be expected. Successful candidates will hold appointments in the Department, and the starting salary will be commensurate with education and experience.

Please send a curriculum vitae, statement of research interests, and three letters of recommendation that consider both research and teaching potential to: Bonita Bartholomew, Search Committee, University of Minnesota, Department of Genetics, Cell Biology, and Development, Box 206 Mayo, 420 Delaware Street S.E., Minneapolis, MN 55455-0392 USA. Note: Electronic versions of the above required information will facilitate the review process and may be e-mailed to e-mail: gcd_searches@gene.med. umn.edu but must be followed up with a hard copy for a the official search files.

Review of applications will begin December 15, 1998, and continue until the positions are filled. The University of Minnesota is an Equal Opportunity Educator and Employer.

ASSISTANT PROFESSOR GEOMICROBIOLOGY Department of Microbiology College Of Liberal Arts and Sciences Arizona State University

Tenure-track position. Requires Ph.D. degree with a minimum of two years of relevant postdoctoral experience, published research appropriate to rank, and evidence of potential to develop a vigorous research program that can attract extramural funding. Evidence of research interests could include microbiology/molecular biology of extreme environments, biogeochemical cycles of benthic microbial mats, microbial mediation of biomineralization processes, subsurface microbial ecosystems, lithoautorrophy, or other geomicrobiological areas. Interactions with the Molecular and Cellular Biology Program, and the ASU Astrobiology Program, concerned with questions about the origin, evolution, and distribution of life in the solar system, are desired. Responsibilities include participation in teaching at undergraduate and graduate levels, and direction of graduate dissertation research. Candidates must send a curriculum vitae, representative reprints, statement of research and teaching interests, and names and addresses of three referees to: Geomicrobiology Search Committee, Desity, Tempe, AZ 85287-2701. FAX: 602-965-0098; e-mail: vstout@asu.edu; website: http://lsvl.la.asu. edu/microbiology. Review of applications will begin November 15, 1998, and continue monthly thereafter until the position is filled. Arizona State University is an Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

ECOLOGIST AND PARASITOLOGIST

We invite applications for two tenure-track **ASSIST-ANT PROFESSOR** positions for fall 1999. Ph.D is required and postdoctorate is preferred. Candidates must have a record of research, ability to establish a research program including supervision of Master's students, and a commitment to excellence in teaching. We seek (1) Parasitologist with interests in molecular, genetic, or cellular mechanisms underlying parasitism. Duties include teaching undergraduate and graduate courses in parasitology and participation in cell and molecular biology courses. (2) Ecologist with interests in the spatial structure of ecological systems employing modeling combined with observation and experiments. Duties include teaching undergraduate and graduate courses in quantitative ecology. The Department of Biology offers a comprehensive program with 41 faculty with diverse research interests. The Department hosts the Conservation Genetics Laboratory and is affiliated with The Romburg Tiburon Center for Environmental Studies, the Sierra Nevada Field Campus, and the Moss Landing Marine Laboratory (see our web-site: http://www.sfsu.edu/~biology). San Francisco State University (SFSU), a member of the California State University system, serves a diverse student body of 27,000 undergraduate and graduate students. The mission of the University is to promote scholarship, freedom, human diversity, excellence in instruction, and intellectu-al accomplishment. SFSU faculty are expected to be effective teachers and demonstrate professional achievement and growth through continued research, publications, and/or creative activities. Send letter, curriculum vitae, statement of teaching and research interests, and three letters of reference by January 15, 1999, to: Para-sitology or Ecology Search, Department of Biology, San Francisco State University, 1600 Holloway Ave-nue, San Francisco, CA 94132. Women, ethnic minorities, and persons with disability are especially urged to apply. SFSU is an Equal Opportunity/Affirmative Action Employer.

CELL BIOLOGY AND ANATOMY

The Department of Cell Biology and Anatomy, Faculty of Medicine and Oral Health Sciences at the University of Alberta invites applications for a tenure-track position at the ASSISTANT/ASSOCIATE PROFESSOR level. We are looking for an individual who will complement our existing strengths in (1) neurobiology, (2) cell signaling, (3) protein targeting and organelle biogenesis, and (4) cell-cell interactions. Applicants should have a proven record of research achievement and be eligible for funding by the Alberta Heritage Foundation for Medical Research. The successful candidate will be expected to carry on an independent research program but will also have the opportunity for collaborative interactions with several multidisciplinary research groups within the University. A contribution to the Department's teaching program will also be expected. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. If snitable Canadian citizens and permanent residents cannot be found, other individuals will be considered. Please send a curriculum vitae, a two-page statement of research interests, and arrange to have three letters of reference sent on your behalf to: Dr. Robert Campenot, Search Committee Chair, Department of Cell Biology and Anatomy, University of Alberta, Edmonton, Alberta T6G 2H7 Canada. Deadline for receipt of applications is December 31, 1998. Further information about the position may be obtained at website: www.ualberta.ca/~anatomy/cellbiol/. The Uni-versity of Alberta is committed to the principle of Equity in Em-ployment. 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.

ASSISTANT PROFESSOR of biology. Centre College seeks applicants for a full-time renewable non-tenure-track position beginning fall 1999. Successful applicant will have teaching duties in the following courses: Introductory Biology, Genetics and Evolution, Ecology, possibly our non-majors course in natural science, and one course per year in a specialty area. We seek an individual who can offer a field-oriented course in animal ecology or paleoecology. Collaborative research with undergraduates is strongly encouraged. Send statements of teaching philosophy, research interests, curriculum vitae, transcripts, and three letters of recommendation to: Dean John Ward, Vice President for Academic Affairs, Centre College, 600 West Walnut Street, Danville, KY 40422-1394. Equal Opportunity Employer. Women and minorities are encouraged to apply.



PRODUCT DEVELOPMENT Group Leaders/ Research Scientists/ Research Associates

Exciting opportunities exist for non-Ph.D. and Ph.D. scientists in the newly formed Product Development department at Curagen Corporation This department will utilize Curagen's advanced functional genomics technologies to develop novel protein therapeutic drugs for treatment of human disease. Current openings exist for individuals in the Gene Expression/Protein Purification and Cell Biology groups. Qualified candidates will have experience in the expression/purification of recombinant proteins from E. coli, insect, and mammalian cells. In the Cell Biology group, qualified candidates will have demonstrated productivity in the implementation of experiments designed to characterize cytokines and growth factors. Minimum requirements for the Group Leader position are a M.D. or Ph.D. in biological sciences plus 8 years of postgraduate experience. A strong publication record is desirable for all positions. Exceptionally talented candidates with an overriding drive to succeed, demonstrated by a history of productivity, are invited to participate in our growth. CuraGen offers a challenging work environment, career path opportunities, and an attractive benefits package. Please send résumé (with e-mail address) along with salary requirements to: Human Resources, CuraGen Corporation, 555 Long Wharf Drive, New Haven, CT 06511. Fax: 203-401-3337 www.curagen.com or jobs@curagen.com.

EOE/AA.

GLOBAL OPPORTUNITIES

IRRI

Position Announcement for Affiliate Scientist (Plant Breeder)

INTERNATIONAL RICE RESEARCH INSTITUTE **Affiliate Scientist (Plant Breeder)** IRRI is seeking a Plant Breeder for its "new frontier" project on the development of a

perennial upland rice plant. IRRI, supported by the Consultative Group on International Agricultural Research (CGIAR), is a nonprofit, autonomous organization based in the Philippines and engaged in research and training on rice-related technology.

The development of a perennial upland rice plant is expected to contribute to the development of sustainable cropping systems for upland areas highly susceptible to erosion. The first phase of the project ended in June 1998. The successful candidate will continue the research initiated during phase one over a scheduled 3-year phase two.

Major activities include 1) evaluating interspecific hybrid progenies that express perenniality and improving them through back crosses and intercrosses; 2) transferring perennial traits from wild species to cultivars of *O. sativa* adapted to the uplands and evaluating the material in upland conditions; 3) exploring the possibility of improving the yield of naturally introgressed populations of wild perennial rice; 4) providing leadership to ensure the different components of the project (breeding, physiology, and molecular biology) are coordinated and planned outputs are achieved and reported. The plant breeder will work closely with the Affiliate Scientist (Molecular Biologist) of the project and will collaborate with a multidisciplinary team including nematologists and physiologists.

Candidates should have a Ph.D. in plant breeding/genetics/crop science with at least three years of field experience in breeding (preferably small grain cereals). Experience in conducting an independent breeding program or leading a project would be desirable. Experience with rice breeding and with introgression of traits from wild species would be advantageous. Understanding of techniques of evaluation of genetics diversity and molecular marker technology would be useful.

Fluency in English is required. Salary and prerequisites for the position are internationally competitive. *IRRI provides a gender-sensitive environment and welcomes women applicants*. Send a comprehensive curriculum vitae and names, addresses, and fax numbers or e-mail addresses of three referees by 15 November 1998 to:

Dr. K. S. Fischer Deputy Director General for Research International Rice Research Institute P.O. Box 933, 1099 Manila, Phillipines Tel. (63-2) 845 0563; Fax (63-2) 891-1292 E-mail: k.fischer@cgnet.com

Please refer to code IR98-ASPB-05.

nature

the international weekly journal of science seeks a

Journalist

based on the West Coast of the United States, to help boost our coverage of the US scientific community. This is an ideal job for a writer who combines a sound scientific background with journalistic experience, and is keen to explore professional and policy developments affecting or influenced by the research community, placing such developments in a broad scientific context. The job entails weekly contributions to our news section, plus occasional longer feature articles.

This is a new staff position, based in our San Francisco office.

Applicants should send a CV and examples of their work together with the names of two referees and a brief covering letter to Colin Macilwain, Nature, 968 National Press Building, 529 14th Street NW, Washington DC 20045-1938 (fax: +1 202 628 609; email: nature@naturedc.com) as soon as possible and no later than 23rd November.

Macmillan Magazines Ltd



UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE (CSREES)

ADMINISTRATOR, CSREES

USDA is seeking to fill the position of agency Administrator for the Cooperative State Research, Education, and Extension Service. As Administrator, the incumbent is responsible for working with partners and customers to advance research, extension, and higher education in the food and agricultural sciences and related environmental and human sciences to benefit people, communities, and the Nation. Programs under the direction of the incumbent are financed by approximately \$900 million in Federal funds and accomplished through the efforts of approximately 400 CSREES employees. The incumbent reports directly to the Under Secretary, Research, Education, and Economics and has frequent contacts with top officials of USDA, other government agencies, cooperative extension services, state agricultural experiment stations, colleges and universities, private organizations and corporations, national and international institutions, Departments and Ministries of Agriculture in other nations, and members of Congress and their staffs.

This is a Senior Executive Service position. Salary ranges from \$106K to \$125K (including locality pay), commensurate with experience. A Ph.D. in a discipline related to the position is highly desirable. For information on the position, call **Betty Lou Gillilland at 202-720-7441**; for vacancy announcement/application procedures, call **Gwen Donovan at 301-504-1448**.

TENURE-TRACK POSITIONS IN DEVELOPMENTAL NEUROBIOLOGY, MOLECULAR NEUROSCIENCE, SIGNAL TRANSDUCTION, VISUAL SYSTEMS Neuroscience-Cornell

Weill Medical College of Cornell University

As part of a significant enhancement of its basic science programs and laboratory facilities, Weill Medical College of Cornell University is undertaking a major program initiative in the area of neuroscience and is seeking to recruit tenure-track faculty at all levels. We are especially interested in candidates with research interests related to developmental neurobiology, molecular neuroscience, signal transduction, and retinal biology (with an emphasis in cell and/or developmental biology and genetics). Exceptional candidates in other related/appropriate fields will also be considered. Candidates for junior positions should demonstrate the potential for establishing a vigorous independent research program, and candidates for senior positions should have an outstanding record of productivity. Candidates may have Ph.D., M.D., or

M.D.-Ph.D. degrees. Recruited faculty will receive generous start-up support. Candidates may participate in the Graduate School of Medical Sciences program, which includes faculty from the Weill Medical College and the Sloan-Kettering Institute. Faculty appointment could be in any basic science and/or clinical department. Applications should include a curriculum vitae, statement of research interests, and three letters of recommendation. Applications should be sent to: Jack D. Barchas, M.D., Chair, Neuroscience Recruitment Team, Box# 27, Weill Medical College of Cornell University, 1300 York Avenue, New York, NY 10021.

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

POSITION IN IMMUNOLOGY OR PARASITOLOGY

University of Alberta. The Department of Biological Sciences in the Faculty of Science is a broadly based biology department with strong existing research groups in cell biology and physiology, and in microbiology and biotechnology. We invite applications for a tenure-track ASSISTANT PROFESSOR to add to these existing strengths. We are particularly interested in applicants specializing in any of the following areas: comparative immunology, molecular parasitology, cell biology, or parasitic organisms. The successful candidate will contribute to our teaching program in immunology or parasitology. The effective date of employment will be July 1, 1999. 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. Candidates must have a Ph.D. and postdoctoral experience, and they should forward a curriculum vitae, list of publications, reprints of their most significant publications, a brief statement of research and teaching interests, and the names of three referees to: Dr. S. E. Jensen, Chair, Department of Biological Sciences, CW 405 Biological Sciences Building, University of Alberta, Edmonton, Alberta T6G 2E9 Canada. E-mail: susan.jensen@ualberta.ca. For additional information about the Department see website: www.biology.ualberta.ca. Closing date: January 15, 1999. The University of Alberta is committed to the principle of Equity in Employment. As an employer, we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disability, and members of visible minorities.

Marquette University Biology Department invites ap-plications for a tenure-track ASSISTANT PROFES-SOR beginning August 16, 1999, to teach a one-semester undergraduate laboratory course in cell biology annually beginning August 1999. At the graduate level, the candidate will participate in a team-taught cell biology lecture course and offer a biennial seminar course. The successful candidate will have postdoctoral experience and must develop an extramurally funded research program in some aspect of cell biology. Send curriculum vitae, a statement of research interests, and three letters of recommendation by December 15, 1998, to: Dr. Brian R. Unsworth, Marquette University, Department of Biology, WLS 112, P.O. Box 1881, Milwaukee, WI 53201-1881. Department information available on website: http://mendel.biol.mu.edu. Marquette Univer sity is an Equal Employment Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR NUTRITIONAL SCIENCES The University of Texas at Austin

Faculty position. The Division of Nutritional Sciences at the University of Texas at Austin invites applications for a tenure-track or tenured position. This position is a full-time, nine-month appointment. Candidates must have a Ph.D. and postdoctoral experience and are expected to establish and maintain an independently funded re-search program in some aspect of biochemical or molecular nutrition. Candidates will be expected to contribute to the undergraduate and graduate teaching programs. Division information salary is dependent on qualifications and experience. Applications with curriculum vitae, up to five selected reprints, names and addresses of five references, and an outline of research interests should be submitted no later than January 1, 1999, to: Richard A. Willis, Search Committee Chair, Department of Human Ecology, A2700, The University of Texas at Austin, Austin, TX 78712. For additional information on the department see: website: http://www.utexas.edu/depts/he/ nutr_science/. The University of Texas at Anstin is an Equal Opportunity Employer.

PROFESSOR POSITIONS

The Ben May Institute for Cancer Research and the Department of Surgery at the University of Chicago are seeking applicants for tenure-track positions at the AS-SISTANT or ASSOCIATE PROFESSOR level with expertise in molecular oncology. The ideal candidates will be an Investigator with the ability to develop an independently funded research program in basic cancer biology, molecular genetics of cancers, or regulation of cell growth and differentiation. Candidates should have sufficient research experience to demonstrate both significant accomplishments and outstanding potential. The faculty member is expected to take advantage of the extensive collab-orative interactions available with members of the University genetics, biochemistry, immunology, and molecular biology community. The Ben May Institute for Cancer Research (BMICR)

is a basic research unit that for 45 years has been committed to the study of basic mechanisms of cancer and immunology. The Department of Surgery has a strong history of research in the field of oncology. The BMICR and Surgery are closely interfaced with the University of Chicago NCI-designated Comprehensive Cancer Center, the University of Chicago Center for Molecular Oncology, and the Gwen Knapp Center for Lupus and Immunology Research. Additionally, these departments are closely af-filiated with degree-granting Committees on Immunology and Cancer Biology. Letters of recommendation including curriculum vitae, bibliography, a brief statement of research interest, and the names of three references should be sent to: Jeffrey Bluestone, Chair, Search Committee, University of Chicago, 5841. South Maryland Avenue, MC6027, Chicago, IL 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

NEUROPHYSIOLOGY

The Department of Biology and the Biological Psychology program at the College of William and Mary in Virginia (website: http://www.wm.edu) invite appli-cations for a tenure-track ASSISTANT PROFESSOR position. Teaching responsibilities include animal physiology with laboratory and an upper-level course in neurophysiology. In addition to a commitment to excellence in undergraduate teaching, the successful candidate will be expected to establish a vigorous research program able to attract extramural funding. Postdoctoral experience is required. The College enrolls 5,500 undergraduate and 2,000 graduate students among five schools. The Department has 21 faculty members and offers training through the Master's level. Send letter, curriculum vitae, statement of teaching interests and philosophy, summary of research experience and goals, and the names of three references to: Paul Heideman, Search Committee, Department of Biology, College of William and Mary, P.O. Box 8795, Williamsburg, VA 23187. Application review begins 30 December 1998 and will continue until the position is filled. W&M is an Equal Employment Oppor tunity/Affirmative Action University.

POSITIONS OPEN

ASSISTANT PROFESSOR BIOCHEMISTRY University of Connecticut, Storrs

The Department of Molecular and Cell Biology invites applications for a tenure-track faculty position at the As-sistant Professor level. We seek individuals who conduct research on the structure/function relationships of biological macromolecules through studies of their chemical, physical, and structural properties. Outstanding applicants in all areas of biochemistry will be considered. The ideal candidate will complement current departmental research strengths, which include protein folding and assembly, enzyme activity and structure, and ligand binding with water-soluble and membrane-bound proteins. The successful applicant will be expected to establish an extramurally funded, productive research program. Responsibilities will include teaching in the undergraduate bio-chemistry curriculum and participation in graduate courses appropriate to the applicant's areas of interest. In 1999, research space in a new building will become available to the department. The main campus at Storrs is located between Boston and New York City, in a rural area in Northeastern Connecticut. Information about the research interests of the faculty, teaching program, and departmental resources may be obtained at the Depart-Interested individuals should send curriculum vitae,

statements of research and teaching interests, and arrange for three letters of reference to be sent to: Debra A. Kendall, Chair, Biochemistry Search Committee, Department of Molecular and Cell Biology, University of Connecticut, 75 North Eagleville Road, U-44, Storrs, CT 06269-3044. Applications will be reviewed beginning December 1, 1998, and will continue until the position is filled. We encourage applications from underrepresented groups, including minorities, women, and people with disability. (Search #99A186)

The Biology and Microbiology Department at the University of Wisconsin-Oshkosh is seeking two tenure-track ASSISTANT PROFESSORS: (1) Plant Biologist with training in plant systematics beginning 1 September 1999. Ph.D. required; postdoctoral, teaching, and cura-torial experience desirable. Responsibilities: teach plant taxonomy, plant anatomy, and share in teaching intro-ductory plant/microbial biology and other introductory biology courses; develop a research program in plant biology and pursue extramural funding; curate and continue development of our herbarium containing over 96,000 specimens (including many type specimens); supervise M.S. theses. (2) Microbiologist with specialty in industrial/fermentation microbiology beginning I September 1999. Ph.D. required; postdoctoral and teaching experience desirable. Responsibilities: teach introductory microbiology for majors; teach food/industrial microbiology course; share in teaching other introductory courses; develop a research program in industrial/fermentation microbiology; pursue extramural funding; supervise M.S. theses. Send letter of application, brief statements of teaching philosophy and research interests, curriculum vitae, three letters of recommendation, and official tran-scripts to: Chair, Department of Biology and Microbiology, University of Wisconsin–Oshkosh, Oshkosh, WI 54901-8640. Telephone: 920-424-1102; FAX: 920-424-1101; e-mail: drecktra@uwosh.edu. Application deadline: January 9, 1999. For additional information, see the department website: http://www.uwosh. edu/departments/biology/. The University of Wisconsin Oshkosh is an Affirmative Action/Equal Opportunity Employer.

ANIMAL PHYSIOLOGIST

The Department of Biological Sciences at Indiana University South Bend invites applications for a tenure-track position as an ASSISTANT PROFESSOR of animal physiology beginning August 1999. A Ph.D. is required and postdoctoral experience is preferred. The candidate is expected to establish an active research program involving undergraduates. Teaching responsibilities will include hu-Applications are due by December 21, 1998, and should include a description of research and teaching interests, curriculum vitae, and three letters of reference. Send to: Dr. Douglas Duff, Chair, Department of Biological Sciences, Indiana University South Bend, P.O. Box 7111, South Bend, IN 46634-7111. IUSB is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of women, persons of color, applicants with disability, and members of other underrepresented groups.

Procter&Gamble

MOLECULAR & CELL BIOLOGY

Procter & Gamble Pharmaceuticals has three immediate openings for Research Associates in the Molecular and Cell **Biology Department** located in Cincinnati, Ohio. Highly motivated individuals are welcome to ioin our research team that is committed to worldclass biopharmaceutical research.



No agency referrals, please. Applicants must be presently authorized to work in the U.S. on a full-time basis. Equal Opportunity Employer

Research Associates

BS/MS Scientist in Protein Chemistry

The qualified candidate will be responsible for routine protein microsequencing operations. Work will include protein microsequencing, capillary reverse-phase HPLC separation of protein/peptides, and instrument maintenance. Experience in protein gel electrophoresis (1-D and 2-D), sample handling and enzymatic digestion of proteins is required.

BS/MS Scientist in Cell Biology

The duty of this laboratory position involves all aspects of monoclonal antibody development. Responsibilities will include immunizations, ELISAs, hybridoma generation and screening, and antibody production and purification. Experience in antibody purification using FPLC is preferred and experience with in situ hybridization and immunostaining techniques is required.

BS/MS Scientist in Fermentation

This qualified candidate will be responsible for the operation of small scale fermentors and the associated harvest and primary recovery equipment. Additional duties include solution preparation, plasmid DNA purification and analysis, as well as responsibility for the preventative maintenance program. General microbiology and fermentation experience is required. The successful candidate will have good communication skills and the ability to work well as a member of a multi-disciplinary discovery research team.

Procter & Gamble is a world leader in the research, development, manufacture, and marketing of a wide variety of consumer products. Annual sales exceed \$35 billion, and our R&D investment is more than \$1 billion. These positions will provide excellent opportunities for personal and professional growth. P&G offers a competitive salary and benefits package, placing us among the top 5% of U.S. firms. For confidential consideration, please send a letter of introduction and resume to:

> P&G Pharmaceuticals Recruiting Office 11450 Grooms Road, Box D51 Dept. TLD-11/6 Cincinnati, OH 45242

Washington UNIVERSITY IN ST LOU School of Medicine FACULTY POSITION IN **MOLECULAR NEUROSCIENCE**

WASHINGTON UNIVERSITY **Department of Anatomy and Neurobiology**

We seek an individual taking innovative approaches to fundamental questions in molecular, cellular, or developmental neuroscience for a tenure-track position as Assistant Professor in the Department of Anatomy and Neurobiology at Washington University School of Medicine. The department houses 23 active research labs in neurobiology, and it is part of a much larger interdepartmental neuroscience program. Excellent facilities are available for automated DNA sequencing, confocal and two-photon microscopy, and transgenic mouse studies. Both the department and the neuroscience program offer numerous opportunities for scientific interactions and collaborations.

Applicants should send a curriculum vitae, synopsis of research interests, and names (incl. addresses, phone/fax/e-mail) of three references to: Dr. David Van Essen, Head, Anatomy and Neurobiology, Box 8108, Search Committee, Washington University School of Medicine, 660 S. Euclid Ave., St. Louis, MO 63110, by December 31, 1998.

Affirmative Action/Equal Opportunity Employer. Applications from minorities and women are encouraged.



Fellowships to Investigate Structure–Function Relationships and Physiological Functions of **Novel Enzymes from Diverse Microbes**

A unique, interdisciplinary research and training program in microbial structural biology, sponsored by the National Science Foundation.

FACULTY PARTICIPANTS:

- S. J. BENKOVIC, Enzyme Reaction Mechanisms
- P. C. BEVILACQUA, RNA Folding, RNA Enzymology
- J. M. BOLLINGER, JR., Mechanisms of Catalysis by and Synthesis of Metalloenzymes
- J. E. BRENCHLEY, Physiology of Psychrophiles
- D. A. BRYANT, Electron Transport Pathways in Photosynthetic Bacteria
- C. E. CAMERON, Mechanism of Genome Replication by Positive-Strand **RNA** Viruses
- J. R. DESJARLAIS, Computational and Experimental Protein Design and Dynamics
- G. K. FARBER, Protein Crystallography
- J. G. FERRY (Director), Physiology of Archaea
- J. H. GOLBECK, Spectroscopy of Electron Transport in Photosynthetic Bacteria
- J. T. L. LECOMTE, NMR Spectroscopy of Proteins
- C. R. MATTHEWS, Protein Folding and Assembly
- K. M. MERZ, Computational Biochemistry
- B. T. NIXON, Signal Transduction and Sigma-54 Dependent Transcription Activation
- S. TAN, Structural Biology of Gene Regulation

Fellowships for undergraduate, graduate, and postdoctoral students are available. Information and applications can be obtained from Carol DeArmitt, program administrator, NSF Research and Training Program, The Pennsylvania State University, 206 S. Frear Building, University Park, PA 16802; E-mail: cqd2@psu.edu

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce. Women and minorities are encouraged to apply.

DEVELOPMENTAL PLANT BIOLOGY POSITION

The Department of Environmental and Plant Biology at Ohio University invites applicants with research interest in developmental plant biology to apply for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning September 1999. Candidates are expected to have completed the Ph.D. degree, to have postdoctoral experience, and to develop an active externally supported research program that uses molecular, genetic, and/or biochemical approaches to study plant development. The successful candidate will teach upper-division undergraduate/graduate courses in plant biology, participate in introductory courses for majors or non-majors, and provide research opportunities for Doctoral, Master's, and undergraduate students.

Applicants should send by January 1, 1999, their curriculum vitae, a statement of research and teaching interests, reprints of publications, and three letters of recommendation to:

Chair of the Search Committee Department of Environmental and Plant Biology Porter Hall 317 Ohio University

Athens, OH 45701-2979

Further information about the department, website: www.plantbio.ohiou.edu. E-mail inquiries to: James P. Braselton, Chair; e-mail: braselto@ohio.edu.

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

AMERICAN UNIVERSITY OF BEIRU'T FACULTY OF ARTS AND SCIENCES

Faculty positions in the Department of Chemistry available starting October 1999.

Applicants sought in the following fields: physical organic chemistry; analytical chemistry, with preference for separations and/or environmental chemistry; inorganic chemistry, with preference for materials science.

Ph.D. degree, teaching and research experience required.

Positions are at the **ASSISTANT PROFESSOR** level but higher ranks may be considered depending on qualifications. Appointments are generally for an initial period of three years. Visiting positions at all levels may be considered for all vacancies. Sabbatical visitors are welcome in all fields.

All interested applicants may send a letter of application and arrange for three letters of reference addressed to:

> Dean, Faculty of Arts and Sciences American University of Beirut c/o New York Office 850 Third Avenue, 18th Floor New York, NY 10022-6297

Electronic submission may be sent to HYPERLINK mail to e-mail: as_dean@aub.edu.lb. All applicants and letters of reference should be received by January 15, 1999.

The American University of Beirut is an Equal Opportunity Employer.

TENURE-TRACK ASSISTANT/ ASSOCIATE PROFESSOR IMMUNOLOGY/MOLECULAR PATHOGENESIS

The Department of Medical Microbiology and Immunology at Southern Illinois University School of Medicine invites applications from exceptional young Investigators in the broadly defined field of immunology. Applicants with a Ph.D. and/or M.D., at least two years of postdoctoral experience, and an excellent publication record are invited to apply for a tenure-track Assistant or Associate Professor position with substantial start-up package. The position requires teaching medical immunology, an advanced graduate course, and development of a competi-tive research program. Candidates with interests that complement Departmental research in molecular immunology, molecular pathogenesis, neuroimmunology, or tumor immunology are especially encouraged to reply. Review of applications will begin January 4, 1999, and continue until the position is filled. Candidates should forward a curriculum vitae, names and addresses of three references, representative publications, and a summary of research plans to: Search Committee, Department of Medical Microbiology and Immunology, Southern IIlinois University School of Medicine, P.O. Box 19626, Springfield, IL 62794-9626. Website: www. siumed.edu/mmi. An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

ASSISTANT PROFESSOR WILDLIFE/LANDSCAPE ECOLOGY

Temporary, full-time position with possibility of extension or conversion to tenure-track status. Ph.D. required at time of appointment. Candidate must demonstrate interest and ability to teach undergraduates. Responsibilities include 12 semester units of teaching plus advising, committee service, and/or collateral duties. Dedication to superior teaching is a tradition at Humboldt State University and is the primary criterion in promotion and tenure considerations. Applicants should demonstrate strong quantitative skills; experience with effects of land use and landscape-scale management practices on wildlife; expertise in resource assessment technologies, including GIS; and application of these tools to landscape-scale research on wildlife populations, communities, or ecosystems as it relates to wildlife conservation. Successful candidate may teach landscape ecology, habitat ecology, principles of wildlife management, wildlife techniques, or other assigned courses and duties. Submit curriculum vitae, three letters of reference, and transcripts to: Dr. Mark A. Colwell, Chair, Wildlife Department, Hum-boldt State University, Arcata, CA 95521. Telephone: 707-826-3723. Applications accepted until 1 January 1999 or until position is filled. *Humboldt State* University is an Equal Opportunity/Affirmative Action/Title IX Employer

ASSISTANT PROFESSOR

Mount Sinai School of Medicine is in a period of remarkable growth and the Department of Ophthalmology offers core support and opportunities for basic and clinical research development within a group of established Investigators. We now have a tenure-track position with a joint appointment in a Basic Science Department. The selected candidate will possess a Ph.D. for full-time research or a M.D. for at least 80 percent research commitment and should also have experience in molecular biology approaches to understand normal/pathological functions of eye tissues, including retina and anterior segment. Potential applicability of research goals to a relevant eye disease preferred. Three years of previous postdoctoral training required.

Salary, research support, and start-up funds guaranteed for two years. Candidate should have the potential for extramural support of his/her research program. Please e-mail curriculum vitae and description of research project and goals to: Oscar A. Candia, M.D., Director of Research, ocandia@smtplink.mssm.edu. For more information, visit our website: http://www.mssm.edu. We are an Equal Opportunity Employer fostering diversity in the workplace.

ENVIRONMENTAL SPECIALIST III POSITION #43010719

Location: Palatka, Florida. Starting salary: \$30,400. Establishment of this position is contingent upon Governing Board approval. This is professional work assessing pollution sources, developing and implementing environmental management and restoration plans. Qualifications include a Bachelor's degree in biology, limmology, chemistry, botany, or environmental science and four years of professional experience in the environmental field. Send résumé indicating source of advertisement and position number by November 30, 1998, to: St. Johns River Water Management District, P.O. Box 1429, Palatka, FL 32178-1429. Preference will be given to candidates proficient in development and use of watershed water quality models and who are familiar with nonpoint source pollution sources, characteristics, and controls in urban and agricultural setting. Equal Employment Opportunity/Veterans Preference/Drug-free workplace.

DIRECTOR, NORTH CAROLINA SPACE GRANT CONSORTIUM. Reports to Vice Chancellor at North Carolina State University. Part of the NASA National Space Grant Program. Direct eight university members, obtain matching funds, and establish partnerships. Doctorate in engineering or science, or education if other degrees in engineering or science. Teaching experience at college or university level and preferably Space Grant experience. Knowledge of NASA's university progrants. Open until filled. Start January 1, 1999. Submit résumé and three references to: Chair of Search Committee, North Carolina Space Grant Consortium, North Carolina State University, Raleigh, NC 27695. E-mail: space_grant@cos.ncsu.edu; website: www. mae.ncsu.edu/spacegrant/index.html. Affirmative Action/Equal Opportunity Employer/ADA.

POSITIONS OPEN

Ecology. The Department of Biology, State University of New York, College at Fredonia seeks candidates for a one-year temporary ASSISTANT PROFESSOR position to begin August 1999. A separate search for a tenuretrack position is expected to begin in fall 1999. Preference will be given to a Quantitative Ecologist utilizing experimental approaches to the study of terrestrial ecosystems. The successful candidate will be encouraged to involve undergraduates in short-term research projects. Teaching responsibilities will include an ecology course required for biology and environmental science majors, upper-level/ graduate elective(s) in the candidate's area of expertise, and courses supporting the general education program. The department offers undergraduate degree programs in biology, medical technology, recombinant gene technology, and secondary education, and offers a Master's degree in biology. The department jointly sponsors undergraduate programs in biochemistry and environmental sciences and offers courses supporting the general college program.

The candidate must possess a Ph.D., and postdoctoral experience is desired. A complete application includes curriculum vitae, unofficial undergraduate and graduate transcripts, separate statements of teaching philosophy and research goals, and three letters of reference. Review of applications will begin December 15, 1998, and continue until the position is filled. Send materials to: Ecology Search Committee, Department of Biology, SUNY Fredonia, Fredonia, NY 14063. Further information may be obtained from Telephone: 716-673-3282; website: www.fredonia.edu. SUNY Fredonia is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.

FACULTY POSITION NON-VIRAL VECTORS

A tenure-track position is available in the Institute for Gene Therapy and Molecular Medicine at Mount Sinai School of Medicine. We seek a faculty member with a major interest in the design and development of novel high-efficiency non-viral vehicles for *in vivo* gene transfer. In addition to an excellent start-up package and state-ofthe-art research facilities, the Institute for Gene Therapy and Molecular Medicine (website: www.mssm.edu/ gene/GeneTherapy) also offers an ideal environment for productive collaboration with faculty who have expertise in molecular virology, cellular immunology, stem cell biology, molecular genetics, and gene therapy in animal models of human disease.

Candidates should send a curriculum vitae and bibliography, a description of major post research accomplishments, future research plans, and three names of reference es with addresses by December 18, 1998, to: Aurelian Radu, Ph.D., Non-Viral Vectors Faculty Search Committee, Institute for Gene Therapy and Molecular Medicine, Box 1496, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. We are an Equal Opportunity Employer fostering diversity in the workplace.

Biology. Four positions. ASSISTANT PROFESSOR. Tenure-track. Ph.D. required. (1) Teach introductory and advanced courses. Areas of specialty desired: developmental biology, genetics, cell biology, and molecular biology. (2) Teach undergraduate and graduate levels and direct student research. Areas of specialty desired: field, ecosystem and population ecology (animal emphasis), soil ecology, biostatistics. Direction of Master's thesis work possible, (3) Teach introductory and advanced courses. Areas of specialty desired: general microbiology, microbial ecology, immunology, virology. (4) Teach introductory and advanced courses and direct student research. Areas of specialty desired: animal anatomy and physiology, human anatomy and physiology. All positions begin August 1999. To apply to any of the above positions, please send a letter of application, curriculum vitae, a statement of teaching philosophy and research goals, transcripts, and telephone numbers of three references to: Human Resources, Biology Searches, Longwood College, 201 High Street, Farmville, VA 23909. Review begins De-cember 1, 1998. Longwood College is an Equal Opportunity/ Affirmative Action Employer. The College encourages applications from qualified women and minority candidates. Smoke-free campus.

STAFF ASSOCIATE to coordinate large study of development in children. Master's-level studies in epidemiology required; bilingual Spanish/English desirable. Contact: Dr. Hesdorffer, Sergievsky Center, Columbia University, 630 West 168th Street, P&S Unit 16, New York, NY 10032. We take Affirmative Action toward Equal Employment Opportunity.

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

Assistant Professor Developmental Biology

DEPAUL UNIVERSITY

Tenure track opening for Developmental Biologist in the Dept. of Biological Sciences at DePaul University starting September 1999. Successful candidate broadly trained in developmental biology with a strong commitment to undergraduate education. All sub-disciplines and approaches using an animal model system will be considered, including molecular, cellular, genetic, and morphological. Ph.D. required; post-doctoral experience and previous teaching experience preferred. Teaching responsibilities to include some combination of: biology courses with lab for non-majors; co-teaching introductory biology sequence for majors; intermediate-level undergraduate course(s) in developmental biology; and graduate/advanced undergraduate course in candidate's area of expertise. Modest research support and start-up funds available. The Department is housed in a new Biology and Environmental Sciences building that includes ample animal care facilities. Review of applications will begin December I and will continue until position is filled. Please send: vitae; three letters of reference; statement of teaching and research interests; statement of your educational philosophy; and list of equipment and supply needs with cost estimates to: Developmental Biology Search Committee, Department of Biological Sciences, DePaul University, 2325 N. Clifton Avenue, Chicago, IL 60614. Or, FAX: 773/325-7596. E-mail: msillike@wppost.depaul.edu.

The Department of Biological Sciences seeks diversity in its faculty. We encourage applications from women, people of color, and the members of other historically under-represented groups. DePaul University is committed to diversity and equality in education and employment.



Biology Department

St. Lawrence University invites applications and nominations for two tenure-track positions at the assistant professor level to begin the fall of 1999.

Vertebrate Biology–A Ph.D. in Vertebrate Biology, Zoology, or a related subdiscipline is required. The successful candidate will be expected to teach a course related to conservation biology, participate in the department's introductory courses, and develop courses according to his/her expertise. Possible offerings could include Tropical Biology, Mammalogy, Vertebrate Natural History, Herpetology, Ornithology, Animal Behavior, and Environmental Physiology. We are particularly interested in courses that would support our Environmental Studies–Biology combined major and our international programs.

Anatomy-Animal Physiology-A Ph.D. in Anatomy with emphasis in physiology/endocrinology or a related subdiscipline is required. The successful candidate will be expected to participate in the department's introductory courses and to develop other courses according to his/her expertise. Possible offerings could include Environmental or Comparative Physiology, Neurobiology, Comparative Vertebrate Morphology, Human Anatomy, Applied Physiology, Men's and Women's Health, or other related courses.

Demonstrated expertise in the use of computers and instructional technologies is preferred. The development of a research program that involves undergraduate student majors will also be expected. As part of the general education curriculum at St. Lawrence, all first-year students enroll in a team-taught course that seeks to develop skills in critical thinking, writing, and research. The successful candidate will have the opportunity to participate in this program.

Interested candidates should submit a letter of application clearly indicating which position is being applied for, a curriculum vitae, a statement of teaching experience and philosophy that reflects innovative and progressive pedagogies as well as possible elective courses that could be offered, a statement of research interest, and have three letters of recommendation forwarded to **Dr. T. Budd, Biology Department, St. Lawrence University, Canton, NY 13617**. The search committee will begin reviewing applications on October 30, 1998, and will continue until both positions are filled.

St. Lawrence University, chartered in 1856, is an independent, private, coeducational institution of higher learning in New York State. For more information please visit SLU's homepage at: http://www.stlawu.edu and the biology homepage is at: http://it.stlawu.edu/~biology. St. Lawrence University is an Affirmative Action/ Equal Employment Opportunity Employer. Women, minorities, veterans, and persons with disability are encouraged to apply.

DEVELOPMENTAL BIOLOGIST. The University of Tulsa is seeking a tenure-track ASSISTANT PRO-FESSOR to begin fall 1999. The successful candidate must have a Ph.D., postdoctoral experience, a demonstrated potential to establish an independent, externally funded research program, and a commitment to undergraduate and graduate education. Competitive salary and start-up funds will be provided. The University of Tulsa is a private, comprehensive institution dedicated to excellence in education and research. Faculty in the Department of Biological Science have externally funded research programs in cellular, molecular, organismic, and environmental biology, and the department has excellent research support facilities that include core laboratories for DNA sequencing, flow cytometry, and electron microscopy. The Department of Biological Science offers degrees at the B.S., M.S., and Ph.D. levels. Review of applications will begin December 1, 1998, and will con-tinue until the position is filled. Applicants should submit a curriculum vitae, a statement of research and teaching interests, recent publications, and have three letters of recommendation sent to: Developmental Biology Search Committee, Department of Biological Science, The University of Tulsa, 600 South College Avenue, Tulsa, OK 74104-3189. Website: http:// bio44.utulsa.edu. The University of Tulsa is an Equal Opportunity/Affirmative Action Employer.

TWO BIOLOGY FACULTY POSITIONS UNIVERSITY OF MARYLAND

The Department of Biology is searching for two GE-NETICISTS studying cellular, developmental, popula-tion, or evolutionary processes of any organism using emat the ASSISTANT PROFESSOR level. An extremely well-qualified applicant could be appointed at the tenured SENÍOR LEVEL for the other position. Exceptional opportunities exist for collaborations within the Department as well as with colleagues in other campus departments and nearby institutions such as the NIH and Smithsonian. Applicants must have a Ph.D., postdoctoral expe-rience, an active research program, and be committed to teaching excellence. Applicants should send a curriculum vitae, the names, e-mail, and mailing addresses of three references together with statements of both research and teaching interests to: Genetics Search Committee, Department of Biology, University of Maryland, College Park, MD 20742 by December 15, 1998, for best consideration. More information is available at website: www. life.umd.edu. Applications are especially encouraged from women and minorities. The University of Maryland, College Park is an Affirmative Action/Equal Employment Opportunity Employer.

PHYSIOLOGICAL PLANT ECOLOGIST

The Department of Biology, Syracuse University invites applications for a faculty position in physiological plant ecology at the **ASSISTANT PROFESSOR** rank. An individual will be appointed familiar with contemporary methods and technology of the field. Postdoctoral experience is preferred. Teaching responsibilities will con-sist of a plant physiology course with an environmental orientation, a graduate seminar, and a senior keystone seminar, shared with earth sciences faculty, in environmental sciences, usually with a global change orientation. Applicants should send a curriculum vitae, a one-page statement of research interests, a paragraph stating teaching objectives, and have three references send letters. Application deadline is December 15, 1998. Appointment will begin in 1999. Materials should be submitted to: Physiological Plant Ecology Search, S. J. McNaughton, Chair, Biological Research Laboratories, Syra-cuse University, Syracuse, NY 13244-1220. Equal Employment Opportunity

State University of New York at Binghamton. The Department of Psychology is seeking a faculty member in behavioral neuroscience (RANK OPEN) for fall 1999. Area of specialization is open. Strong record of research and external funding, commitment to graduate and undergraduate training required. Applicants whose research combines a molecular neurobiological approach with the study of behavior are encouraged to apply. Send curriculum vitae, reprints, and three letters to: P. M. Di Lorenzo, Chair, Behavioral Neuroscience Search Committee, Department of Psychology, Binghamton University (SUNY), Box 6000, Binghamton, NY 13902-6000. Applications will be evaluated upon re-ceipt. Binghamton University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

The USDA, Agricultural Research Service (ARS) Red River Valley Agricultural Research Center at Fargo, North Dakota is seeking a highly qualified individual with an established record of experience to serve as an AGRI-CULTURAL ADMINISTRATOR (CENTER DI-RECTOR). Salary would be commensurate with experience and would range from \$64,998 per annum to \$99,397 per annum. Responsibilities include management and oversight of an interdisciplinary scientific staff in addition to supervision of administrative staff. Current research is being done to (1) reduce the impact of foreign chemicals in animals used for food, (2) control of perennial invasive weeds, (3) control and manage harmful and beneficial insects, (4) develop improved germplasm of wheat, barley, oats, sugarbeets, and sunflowers, (5) develop improved quality tests for small cereal grains, and (6) improve nutritional quality of potatoes and reduce post-harvest loss. A degree in a field of science associated with agricultural crops such as physiology, biochemistry, genetics, molecular biology, plant pathology, entomology, or related disciplines or a combination of education and experience is needed to qualify. A Ph.D. is highly desirable. Applicants must have excellent communication and interpersonal skills with a demonstrated ability to guide research programs and provide leadership. This is a permanent, full-time position and applicants must be U.S. citizens. For application information and procedures, you may call Paula Bovee, Telephone: 970-229-5503 or write to: USDA, ARS, HRD, WOB, 5601 Sunnyside Avenue, Beltsville, MD 20705-5106. A full copy of the job announcement is available on ARS website: www. ars.usda.gov/afm/hrd/resjobs. Applications accepted November 9, 1998, to January 11, 1999. Applications must be postmarked by January 11, 1999. ARS is an Equal Opportunity Employer.

COPY EDITOR. Nature Neuroscience, a monthly journal from the publishers of *Nature*, is seeking a Copy Editor who will work closely with editors and authors to make complex technical manuscripts accessible to the widest possible readership. This challenging job involves substantially editing research articles on a broad range of neuroscience topics to make them clear, concise, and consistent with our style.

The successful candidate will have a degree in biological science, excellent literary abilities, and a commitment to the communication of scientific ideas. Other requirements include routine computer skills, an eye for detail, and the ability to meet regular deadlines. Graduate coursework or laboratory experience in neuroscience is a significant advantage. Copy editing experience is helpful, but a talent for working with words is more important. This full-time position, based in Manhattan, offers a

competitive salary and benefits, a lively work environment, the chance to learn about important developments in all areas of neuroscience, and the opportunity to have a significant influence on a major scientific journal. Please send cover letter, curriculum vitae, and example(s) of scientific text on which you have worked (stating your contribution) to: The Editor, Nature Neuroscience, 345 Park Avenue South, New York, NY 10010-1707 FAX: 212-696-0978; e-mail: neurosci@natureny.com as soon as possible, and no later than November 23, 1998.

Inotek Corporation, located in Cincinnati, Ohio, is a rapidly growing pharmaceutical company focusing on new approaches in the treatment of inflammatory diseases. We have several positions immediately available for motivated, dynamic individuals with M.D. and/or Ph.D. degrees to join ongoing projects into novel anti-inflammatory therapeutics related to nitric oxide and poly (ADP-ribose) synthetase. A position for a MOLECU-LAR BIOLOGIST with experience in DNA/RNA isolation, PCR, Northern blotting, generation of deletional constructs to identify promoter elements, gel shift assays, and cell transfection is immediately available. A position for a **PHARMACOLOGIST** with extensive experience in in vivo models of inflammation and ischemia-reperfusion is also available. In addition, a position for an IM MUNOLOGIST with experience in flow cytometry and cell death is available. Previous experience in the fields of nitric oxide or poly (ADP-ribose) synthetase is preferred. Also, two positions are open for RESEARCH ASSIST-ANTS, experienced in molecular biology and small ani-mal experimentation, respectively. We provide competitive salaries and benefits. Please send curriculum vitae, names and addresses of three references, and selected reprints to: Dr. Csaba Szabo, Research Director, Inotek Corporation, 3rd Floor, 3130 Highland Avenue, Cincinnati, OH 45219-2374. FAX: 513-221-8079.

HARVARD UNIVERSITY DIVISION OF ENGINEERING AND APPLIED SCIENCES

POSITIONS OPEN

Applications and nominations are invited for a tenuretrack faculty position in fluid dynamics, to begin in 1999. A Ph.D. is required.

Responsibilities include active participation in Harvard's undergraduate degree program in engineering as well as in research and teaching at the graduate level.

Harvard has a long tradition in applied mechanics and mechanical engineering, and allied disciplines of biomedical engineering, environmental engineering, applied physics, and earth and planetary sciences. We seek a creative, forward-looking individual with broad, interdisciplinary research interests spanning experimental, computational, and/or theoretical aspects of fluid dynamics. Examples of areas of interest include fluid transport processes, reactive flows, multiphase flows, materials processing, biomedical fluids, and complex fluids.

Applicants should submit, before February 15, 1999, a curriculum vitae, a statement of research and teaching interests, and the names, addresses (including e-mail), and telephone numbers of three references to:

Professor Howard A. Stone Fluid Dynamics Search Committee Pierce Hall 308 Division of Engineering and Applied Sciences Harvard University Cambridge, MA 02138

Harvard is an Equal Opportunity/Affirmative Action Employer. We welcome applications from qualified women and minority group members.

BIOMEDICAL ENGINEER PROGRAMMER ANALYST III

Position available in the laboratory of Dr. Brian Herman, Professor and Chair of the Department of Cellular and Structural Biology, for a Biomedical Engineer (Pro-grammer Analyst III). The Engineer will be responsible for developing automated data/image acquisition systems for various microscope imaging systems; and developing software, testing, debugging, and installing automated data collection and data analysis for multiparameter digitized video microscopy, wide-field fluorescence lifetime imaging microscopy, confocal microscopy, and automated fluorescence image cytometry.

Required experience includes a minimum of a Bachelor's degree in computer science, math, electronics, or related field and three years of experience in analysis, software development, and programming for electronic systems. Languages required include C/C++, Visual Basic, and assembler programming languages. Must be able to work with Microsoft Windows, DOS, and UNIX operating systems. Please forward your application and three letters of reference to: The University of Texas Health Science Center at San Antonio, Office of Human Resources, 7703 Floyd Curl Drive, San Antonio, TX 78284. Telephone: 210-567-2600. We offer excellent benefits. Visit our website: http:// www.uthscsa.edu/hr/ to learn more about our Health

Science Center. Please apply in person, download an aplication from our website, or call to have an application mailed

An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR PLANT BIOLOGY

The Department of Biological Sciences, University of Maryland Baltimore County (UMBC), is seeking an outstanding scientist for a tenure-track faculty position at the Assistant Professor level. Applicants must have a Ph.D., postdoctoral experience, and a strong record of publica-tions using molecular biology or genetics-based approaches to study fundamental problems in plant biology. Our department has broad research interests in development, physiology, molecular biology, and environmental science using plants, animals, and microorganisms. We offer Doctoral degrees in biological sciences and in molecular and cellular biology. UMBC is a medium-sized, public research university located in the Baltimore-Washington corridor (website: http://www.umbc.edu). Applications containing curriculum vitae, summary of research interests, and three references (name, address, e-mail, telephone) must be submitted by January 15, 1999, to: Dr. Mauricio Bustos, Chair, Plant Biology Search Committee, Department of Biological Sciences, University of Maryland Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250. UMBC is an Affirmative Action/Equal Opportunity Employer

ALLOGRAFT

Medical

Key leadership/research position with a global leader in bone grafting and allograft science

Osteotech, Inc., a publicly traded NASDAQ company and a global leader in the processing of bone and other human tissues for transplant and musculoskeletal surgery, is seeking an expert in bone repair to assume a lead research role. Primary responsibilities would include:

- Plan and execute scientific activities supporting Osteotech's allograft business, including pre-clinical research in-house and through external collaborations
- Public/industry relations including developing collaborative relationships, promoting Osteotech's presence in the scientific/ medical community, and presenting/ publishing new developments
- Participate in departmental management, including budgeting, intellectual property protection, general information management and organization
- Identify technology advances and potential product offerings; participate in development of patent applications

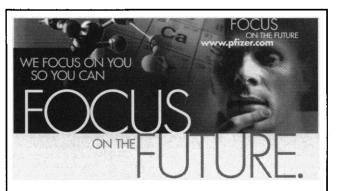
To qualify, you must have a PhD, MD or DVM, with 2-5 years of relevant work (post-doctoral training, academic or industrial position). Experience must include models of bone repair. Experience with bone growth factors, demineralized bone matrix and/or allografts, along with understanding of cell/molecular biology, is preferred. Demonstrated scientific achievement in the form of publications, presentations and/or patents is necessary.

As a global leader in an exciting, rapidly expanding field, Osteotech offers unparalleled challenge and professional opportunity, along with highly competitive compensation. Position is located in Eatontown, NJ (Monmouth County) and offers relocation assistance.

To apply, please send CV to:

Human Resources, Code AS Osteotech, Inc. 51 James Way Eatontown, NJ 07724 Fax: (732) 542-9312 EDE M/F/D/V





DRUG METABOLISM OPPORTUNITIES

Drug Metabolism is a rapidly evolving discipline that is playing a key role in Pfizer's strategies to successfully discover, develop and market new drugs. Our multidisciplinary drug metabolism teams are at the forefront of developing and implementing novel, highthroughput approaches to guide discovery and development projects, and predict essential human pharmacokinetic properties in preclinical and clinical settings. Our technologies and approaches in drug metabolism place us at the forefront of the pharmaceutical industry. There are excellent career opportunities within our Drug Metabolism groups at Pfizer for Ph.D. and BS/MS scientists in Bioanalytical Chemistry, Pharmacokinetics, Biochemistry, Drug Metabolism, Pharmaceutical Chemistry or related sciences. Your expertise and interest in drug metabolism can contribute to the goals of a number of Pfizer teams. These include:

DISCOVERY TEAMS

Apply state-of-the-art drug metabolism and mass spectrometry technologies in the conduct of drug metabolism and pharmacokinetic research to help discover new drugs to treat human disease, while working closely with colleagues in medicinal chemistry, pharmacology and molecular biology. **Job Code: 2915SC**

DEVELOPMENT TEAMS

Apply state-of-the-art drug metabolism and mass spectrometry technologies in the conduct of drug metabolism and pharmacokinetic research on specific drug candidates advancing from discovery nomination, through clinical development to regulatory filing and marketing. **Job Code: 2916SC**

TECHNOLOGY TEAMS

Collaborate in a multidisciplinary group to develop and implement novel, high-throughput in vitro screens and bioanalytical technologies to predict important human pharmacokinetic and drug metabolism endpoints. **Job Code: 2917SC**

All positions require excellent oral, written and interpersonal skills and the ability to work in a diverse, team-oriented, multidisciplinary environment.

To learn more about these opportunities in Drug Metabolism at Pfizer, please visit us at the AAPS meeting in San Francisco, CA the week of November 15, 1998, or submit your resume to the address lsited below.

For other Drug Metabolism opportunities, please also refer to our full page color ad in this issue.

Pfizer offers competitive salaries; tremendous growth potential; flexible, comprehensive benefits; and easy access to both the beautiful Connecticut seashore and the major cities of the Northeast. Please send your resume in confidence to: Employee Resources, Pfizer Inc., Job Code #_____, Central

Research Division, Eastern Point Road, Groton, CT 06340. Pfizer is focused on building a diverse workforce - an Equal Opportunity Employer.



DIRECTOR MICROSCOPY AND IMAGING CENTER TEXAS A&M UNIVERSITY

Texas A&M University is seeking applications and nominations for Director of the Microscopy and Imaging Center (MIC). The MIC is a faculty-driven facility supporting diverse interdisciplinary teaching and research. It has a sizeable annual budget for technical and service support for multiple electron microscopes and advanced light microscopy instrumentation. Applicants must be nationally and internationally recognized scholars with strong leadership and interpersonal skills and a vision for the future of microscopy and imaging technologies. An understanding of the multifaceted approaches to contemporary and emerging imaging technologies as well as an active research program engaged in the development and/or novel application of imaging technology will be necessary. Additionally, evidence for an appreciation of the opportunities to further enhance an interdisciplinary research environment that encourages scientific exchange between Materials Scientists, Engineers, and Life Scientists related to these technologies is required. The Director will have an earned Ph.D. with expertise in the life sciences area and will have a faculty appointment at the tenured Professor rank in one or more life science departments and credentials commensurate with an Endowed Chair position.

Applicants should send a complete curriculum vitae, statement of research interests, and names of five references no later than January 1, 1999. All correspondence should be addressed to:

Microscopy and Imaging Center Director Search Attn: Terry Thomas, Search Committee Chair Department of Biology Texas A&M University College Station, TX 77843-3258

Texas A&M University is an Equal Opportunity Employer.

SCIENTIST PROTEIN IDENTIFICATION BY MASS SPECTROMETRY

A scientist position is available for an individual with a strong trace-level protein isolation and biochemistry background. The successful candidate will be responsible for preparation and digestion of proteins isolated from gels for subsequent mass spectrometric identification using either MALDI MS or ESI MS/MS. Qualifications: Ph.D. or M.S. with substantial laboratory experience and technical mastery of protein identification by enzymatic mapping of gel-isolated proteins. A high level of communication will be filled at a level commensurate with the background of the successful candidate. For consideration, please send a curriculum vitae and names of three references to:

Dr. Kenneth Tomer Laboratory of Structural Biology Mail Drop F0-03 National Institute of Environmental Health Sciences P.O. Box 12233 Research Triangle Park, NC 27709 USA E-mail: tomer@niehs.nih.gov FAX: 1-919-541-0220

ASSISTANT/ASSOCIATE PROFESSORS VIROLOGY AND IMMUNOLOGY TWO POSITIONS

As part of an ongoing rebuilding program in virology and immunology, the Creighton University School of Medicine's Department of Medical Microbiology and Immunology invites applications for two tenure-track positions. The positions are available now and should be filled by July 1, 1999. The appointees are expected to conduct a vigorous independent-research program and to have an interest and aptitude for teaching graduate students as well as medical, dental, and other allied health profession students. Laboratory space with equipment and start-up funding will be available. Applicants should send a curriculum vitae, a brief summary of research plans and teaching interests, and arrange to have at least three letters of recommendation sent to: Roderick Nairn, Ph.D., Search Committee Chair, Department of Medical Microbiology and Immunology, Creighton University, 2500 California Plaza, Omaha, NE 68178. Applications will begin to be screened immediately and will continue to be accepted until the positions are filled. *Creighton University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR HARVARD UNIVERSITY MOLECULAR AND CELLULAR BIOLOGY

The Department of Molecular and Cellular Biology (MCB) is seeking oustanding candidates for the position of Assistant Professor (entry-level appointment). Our department covers a broad range of topics including cellular biology, developmental biology, molecular biology, molecular evolution, molecular genetics, neurobiology, and structural biology. We are particularly interested in candidates working in the following areas: neurobiology; cell biological and evolutionary approaches to development; structural biology; genomics; and molecular approaches to understanding gene function. Applications should include curriculum vitae, reprints of publications, and a statement of present and future research plans (one to three pages). Complete applications and three letters of recommendation, solicited by the applicant, should be received no later than November 16, 1998. Mail applications to: Department of Molecular and Cellular Biology Search Committee, Harvard University, 7 Divinity Avenue, Cambridge, MA 02138. Harvard University is an Affirmative Action/Equal Opportunity Employer. We strongly encourage applications from women and minority candidates

PLANT DEVELOPMENT AND EVOLUTION

We invite applications for a faculty position in plant developmental biology. Applications are particularly en-couraged from individuals with research interests that integrate developmental with evolutionary aspects of plant form and function. The Botany Department is an integrative plant biology group with active, collaborative research in physiology/genetics/molecular biology, systematics/evolution, and ecology (website: http://www. public.iastate.edu/~botany.homepage.html), within an interactive network involving 200-plus Plant Biologists in other departments and interdepartmental programs. The successful candidate will have the opportunity to develop a competitive research program in an environment committed to plant biology research and will be expected to contribute to undergraduate and graduate teaching. Applicants should submit a curriculum vitae, statements of research/teaching interests and selected reprints, and arrange for three letters of recommendation to be sent to: Dr. Jonathan F. Wendel, Search Committee Chair, Department of Botany, Iowa State University, Ames, IA 50011-1020 by December 15, 1998. Iowa State University is an Equal Opportunity/Affirmative Action Employer.

Saint Louis University, an institution in the Catholic Jesuit tradition dedicated to education, research, and health care, is seeking applicants for tenure-track positions in the Department of Anatomy and Neurobiology at the levels of ASSISTANT or ASSOCIATE PROFES-SOR. Candidates with expertise in neuroscience, preferably cellular and molecular neurobiology, are strongly encouraged to apply. Associate Professor candidates must have an established, externally funded research program; Assistant Professor candidates must have at least three years of postdoctoral experience and the potential to develop an independent research program. Teaching re-sponsibilities involve both medical and graduate students. Competitive salary, laboratory space, and start-up funds are available. Send curriculum vitae, a research plan, and the names and addresses of three references by February 1, 1999, to: Dr. Michael Ariel, Search Committee Chairman, Department of Anatomy and Neurobiology, Saint Louis University, School of Medicine, 1402 South Grand Boulevard, Room #M306, St. Louis, MO 63104. Saint Louis University is an Affirmative Action/ Equal Opportunity Employer, and encourages applications of women and minorities

POSTDOCTORAL POSITION

Available to study a surveillance pathway that degrades and alternatively splices defective mRNAs (see review, *Immunity* 8:135, 1998). We use the T-cell receptor (TCR) gene as a model system to study this pathway, as a high percentage of TCR genes become defective when they undergo programmed rearrangements during normal Tcell development. The projects available involve studying the regulation of RNA splicing, RNA stability, and translation. Opportunity to train in both the immunology and gene expression fields. Seek motivated person with at least some background in molecular biology. Send curriculum vitae to: Miles F. Wilkinson, Department of Immunology, University of Texas M. D. Anderson Cancer Center, Box 180, 1515 Holcombe Boulevard, Houston, TX 77030. E-mail: mwilkins@notes.mdacc.tmc.edu.

1204

Boulevard Houston | 20892-0840 FAX:

POSITIONS OPEN

ASSISTANT LEADER BENTHIC MARINE ECOLOGIST Hawaii Cooperative Fishery Research Unit

The Unit (Biological Resources Division, U.S. Geological Survey), affiliated with the Zoology Department of the University of Hawaii at Manoa (UHM), is searching for an Assistant Leader (Federal GS-12 level).

The Unit seeks an individual with research expertise and field experience in working with benthic marine invertebrates. Familiarity with a broad range of taxa and interest in ecological relationships are important qualities. Experience in tropical shallow-water environments is an advantage. The successful applicant must meet the requirements to be appointed to the graduate faculty at UHM, as well as the requirements specified in the announcement of the position by the U.S. Office of Personnel Management (OPM).

Duties include teaching a graduate course in area of specialization, supervising graduate student research, and serving on/Chairing thesis/dissertation committees of graduate students.

The Assistant Leader is expected to develop his/her own research program in conjunction with the overall goals of the Unit, collaborate with state and federal Marine Resource Managers, and provide community service directly related to research on and management of Hawaii's marine resources.

For information on the Unit's affiliation with UHM, contact: **Zoology Chair**, **Telephone**: **808-956-8617**. Inquiries about job description and application deadlines and procedures should be directed to OPM. **Website**: http:// www.usajobs.opm.gov/wfjic/jobs/FW0145.HTM. Send application to:

U.S. Office of Personnel Management 700 Fifth Avenue, Suite 5950 Seattle, WA 98104-5012 Attn: Ecologist/Oceanographer/ Fishery Biologist/FW0145

RESEARCH OPPORTUNITIES. Clinical Micro Sensors (CMS) is an emerging biotechnology company poised to become a leader in the diagnostics industry. Based in beautiful Pasadena, California, CMS is currently expanding its research and development teams to further advance its proprietary electron-transfer detection technologies for application in molecular diagnostics, immunodiagnostics, and clinical diagnostics.

We are seeking innovative, motivated scientists and engineers with a wide range of skills. Applications are being accepted for **ALL LEVELS** including B.S., M.S., and Ph.D. in the following areas of expertise: molecular biology, organic chemistry, electrochemistry, surface chemistry, bioengineering, materials science, electrical engineering, and chemical engineering.

Clinical Micro Sensors offers competitive salaries and benefits packages, including stock options. Qualified candidates should submit a curriculum vitae with salary history to: Clinical Micro Sensors, Inc., Attn: Human Resources, Job Code CEN9810, 126 West Del Mar Boulevard, Pasadena, CA 91105. CMS is an Equal Opportunity Employer.

Excellent opportunities for qualified students to receive PH.D. and POSTDOCTORAL TRAINING in neuroscience. The Department has an outstanding faculty who explore current issues relating to basal ganglia, neurodegenerative diseases, cerebral cortex, vision, sensory systems, and nervous system development using a broad range of modern anatomical, electrophysiological, and molecular biological approaches. For more information, visit the departmental website: an.utmem.edu or contact: Graduate Program Director, Graduate Program in Neuroscience, Department of Anatomy and Neurobiology, University of Tennessee, Memphis, 855 Monroe Avenue, Memphis, TN 38163. E-mail: foehring@nb.utmem.edu; Telephone: 901-448-7450.

A POSTDOCTORAL POSITION is available to study the DNA damage checkpoint pathway and cell cycle regulation in budding yeast. This study will include the identification of proteins involved in these processes via genetic screens, and their characterization at the molecular and cellular levels. A strong background in molecular biology and/or biochemistry is required. Applicants must have Ph.D. or M.D. degrees, and should have less than five years of postdoctoral experience. Send curriculum vitae and contact information of three references to: Dr. Orna Cohen-Fix, NIH, NIDDK, Building 8, Room 323, 8 Center Drive MSC 0840, Bethesda, MD 20892-0840. FAX: 301-402-0053. E-mail: ornacf@ helix.nih.gov.

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SCHOOL of MECHANICAL ENGINEERING

CHAIR OF MATERIALS

Applications are invited for the newly created Chair of Materials. This is an established chair based in the School of Mechanical Engineering, within the Division of Engineering. The creation of this chair presents an exciting opportunity for candidates who can exploit the interface between research in engineering materials, and the broadly-based, interdisciplinary materials research carried out across the Faculty of Science and Engineering. Materials research at Edinburgh spans the engineering disciplines (mechanical, chemical, civil & environmental, and electronics & electrical), the biological sciences, chemistry and physics.

The holder of the Chair will also be expected serve as the first Director of the Faculty's new Centre for Materials Science and Engineering.

Applicants will establish and lead a materials group within the School of Mechanical Engineering and must be able to demonstrate a strong track record in research.

Please quote REF: 896806SI.

Informal enquiries to Dr W.J. Easson, Head of School of Mechanical Engineering, Tel: 0131 650 5688 (email bill.casson@ed.ac.uk) or Prof. N.A. Seaton, Head of School of Chemical Engineering, Tel: 0131 650 4867 (email n.seaton@ed.ac.uk).

obtained from

THE PERSONNEL DEPARTMENT, THE UNIVERSITY OF EDINBURGH, 1 ROXBURGH STREET, EDINBURGH EH8 9TB.

Tel: 0131 650 2511 (24 hour answering service). http://www.personnel.ed.ac.uk/recruit.htm

Closing date: 30 November 1998.

Further particulars including details of the application procedure should be

GLOBAL OPPORTUNITIES

STAFF SCIENTIST POSITIONS

Laboratory for Neuronal Circuit **Development Brain Science Institute** RIKEN

Staff Scientist positions are available for electrophysiological analysis of visual cortical circuitry. Applicants should have experience with whole-cell recording techniques in brain slices. Our laboratory uses gene-targeted animals to dissect cellular mechanisms underlying experience-dependent plasticity and development of the mammalian visual system (cf. J. Neurosci. 18:2108, 1998; Science, in press).

The RIKEN Brain Science Institute is a rapidly growing international research center located near Tokyo, Japan. Over 25 laboratories are engaged in molecular, cellular, and systems-level investigations of the CNS. Postdoctoral positions are well-funded and renewed annually for up to five years. Prospective candidates should have a Ph.D. degree and submit a curriculum vitae with two references to:

> Dr. Takao K. Hensch Lab for Neuronal Circuit Development **Brain Science Institute RIKEN** 2-1 Hirosawa, Wako-shi Saitama 351-0198 JAPAN

> > FAX: 81-48-467-2306

E-mail: hensch@postman.riken.go.jp

EUROPEAN OPPORTUNITIES

Call for Proposals

BMBF Competition "BioFuture"

The Federal Ministry of Education, Science, Research and Technology (BMBF) intends to give younger scientists from Germany and abroad who are already experienced in heading a research group the opportunity to work on new, basic research-oriented approaches in the biosciences in Germany, independently and in their own team in order to generally improve chances for a further career in science or economy in Germany or to aim at self-employment in the private sector (e.g., by setting up businesses or spin-out companies) in the medium term.

The teams (staff: 1 group leader, 1-2 postdocs, 1-2 doctoral students, 1-2 technicians; investments and expendable materials; depending on technical support required each) are to work for a period of 5 years on topics in the frontiers of biology and neighbouring disciplines such as chemistry, physics, mathematics, informatics, engineering sciences, nanotechnology, etc.

For the projects selected by a jury, nonrepayable grants will be awarded in the form of project funding.

Deadlines: May 15, 1998 (first call), July 15, 1998 (second call), January 15, 1999 (third call).

Eurther information:

Internet: http://www.kfa-juelich.de/beo/biofutur.htm or Forschungszentrum Jülich GmbH Projektträger Biologie, Energie, Umwelt D-52425 Jülich, Germany tel.: +49 2461 61-4296 or -3855; fax: +49 2461 61-2730 or -2690



Mayo Clinic, Rochester, Minnesota is establishing a Molecular Medicine Program with several new groups working on gene therapy using different vital systems. In the group of Dr. Roberto Cattaneo, motivated postdoctoral fellows and research technicians are required to continue developing measles virus molecular biology, in particular particle assembly and cell entry, with the aim of transforming a safe and effective vaccine strain in a vector for targeting deleterious (cancerous or HIV-infected) cells. Appropriate animal systems will be used to study the in vivo effects of the new viruses. Experience in molecular biology is required, training in virology is desirable. Applications along with curriculum vitae and bibliography should be sent to:

Dr. Roeberto Cattaneo **Molecular Biology Institute** University of Zurich

Winterhurerstrasse 190, 55-L34, 8057 Zurich, Switzerland

Positions are available beginning January 1999, for two years or eventually longer. An initial working period of several weeks in Zurich, Switzerland may be envisaged. Informal inquiries should be directed to Dr. Roberto Cattaneo by email at cattaneo@ molbio1.unizh.ch. The deadline for applications is December 1, 1998. Mayo Foundation is an Affirmative Action and Equal Opportunity Employer and Educator.

DIRECTOR OF RESEARCH AND CONSERVATION

The Zoological Society of San Diego seeks a scientist to direct its programs in research and conservation. This individual will be responsible for the eight laboratories of the Center for Reproduction of Endangered Species (CRES) and for the Society's various field research and conservation projects and programs. Applicants must have outstanding scientific credentials, management experience, and strong motivational and communication skills. Duties include oversight of the Society's scientific activities, interactions with other conservation organizations, and generation of extramural funding. The appointee will be expected to continue active involvement in his/her own research.

The Zoological Society is a not-for-profit organization that operates the San Diego Zoo, the San Diego Wild Animal Park, and CRES. An annual budget of approximately \$5 million is devoted to research applied to conservation, and this commitment to biodiversity conservation will continue to grow. A prominent scientist is needed to lead this effort.

The review of applications will begin immediately. The search will close on December 15, 1998. Submit curriculum vitae, a list of four professional references, and a summary of research, administrative, and leadership accomplishments to: The San Diego Zoo/Human Resources Office, P.O. Box 120551, San Diego, CA 92112-0551.

Equal Opportunity Employer.

BACTERIAL PATHOGENESIS

The University of Calgary Bacterial Pathogenesis Research Group invites applications for a full-time academic position offering excellent opportunities to develop a vigorous independent research program in bacterial pathogenesis within a multidisciplinary environment. Duties will include teaching and graduate student supervision.

Candidates should have a Ph.D. and/or M.D., a minimum of two years of postdoctoral experience, and demonstrated strong research achievements in the area of bacterial pathogenesis. Preference will be given to candidates investigating gram-positive bacteria.

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

Please forward a curriculum vitae, statement of research interests, and the names of three references by January 31, 1999, to:

Dr. D. E. Woods, Chair Bacterial Pathogenesis Research Group Department of Microbiology and Infectious Diseases 3330 Hospital Drive N.W. Calgary, Alberta T2N 4N1 Canada

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

SUPERVISING ENVIRONMENTAL SPECIALIST POSITION #43010716

Location: Palatka, Florida. Starting salary: \$39,600. This is advanced professional work performing research for technical projects in the restoration of wetlands and lakes, preparing and reviewing technical publications, coordinating the design and performance of technical projects between divisions, and supervising a staff of Environmental Specialists and Technicians. Qualifications include a Bachelor's degree in biology, limnology, chemistry, botany, or environmental science and five years of professional experience in the environmental field, one of which must have been in a supervisory capacity. Send résumé indicating source of advertisement and position number by November 30, 1998, to: St. Johns River Water Management District, P.O. Box 1429, Palatka, FL 32178-1429. Equal Employment Opportunity/Veterans Preference/Dung-free workplace.

POSTDOCTORAL POSITION. Available immediately to study protein phosphatase-1 and its regulatory proteins (website: http://www.nymc.edu). Experience in molecular biology is required. Send curriculum vitae and three letters of reference to: Dr. Ernest Y. C. Lee, Department of Biochemistry and Molecular Biology, New York Medical College, Valhalla, NY 10595. Email: ernest_lee@nymc.edu.

POSITIONS OPEN



POSTDOCTORAL POSITIONS IN MOLECULAR, CELL, AND STRUCTURAL BIOLOGY OF HUMAN NERVOUS SYSTEM DISEASE

The Nathan Kline Institute (NKI) and the Department of Psychiatry at New York University Medical School announce the establishment of a new program for molecular neuroscience and clinical research on the causes and treatment of Alzheimer's disease (AD) and related dementias. Visit the Nathan Kline Institute at website: http://www.rfmh.org/nki.

The Program provides a rich environment for Postdoctoral Training in fundamental neuroscience and its relation to neuropsychiatric disease. Support is provided by NIH grants and the New York State Office of Mental Health. Several openings currently exist for projects focusing on (1) cell biology of endocytosis; (2) glial-axon signaling; molecular contact of neuronal cytoskeleton dynamics; (3) molecular biology of striatal development; and (4) transgenic models of neurodegenerative diseases. Applicants with a strong background in molecular biology and/or immunohistochemistry are invited to apply.

A Téchnician/Postdoctoral Microinjectionist position is available to create transgenic lines for the study of Alzheimer's disease and other neurodegenerative disorders. The successful applicant should have experience of standard pronuclear injection of mice, animal husbandry, and colony management. Experience of blastocyst injections for creation of knockout mice, or microinjection of rat embryos would be an advantage.

Applicants should send curriculum vitae, a list of three references, and a statement of interests to: Ralph Nixon, Ph.D., M.D., Nathan Kline Institute, Dementia Research Program, 140 Old Orangeburg Road, Orangeburg, NY 10962. FAX: 914-398-5422. Equal Opportunity Employer/Affinative Action.

POSTDOCTORAL FELLOWSHIPS IN SENSORY NEUROSCIENCE

The Training Program in Hearing and Multisensory Integration at Wake Forest University School of Medicine is seeking qualified applicants for Postdoctoral Fellowships to study the development and organization of sensory systems, and the interactions between these systems and with motor processes. Specific interests of the faculty, and a complete description of the program can be found at website: www.wfubmc.edu/nba/nba.html. Applicants must be U.S. citizens or permanent residents, and should send their curriculum vitae, a brief description of research interests, and the names of three references to:

Dr. Judy K. Burnso-Bechtold Department of Neurobiology and Anatomy Wake Forest University School of Medicine Winston-Salem, NC 27157-1010

Wake Forest University School of Medicine is an Affinnative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOW

Position available at Lawrence Berkeley National Laboratory, Berkeley, California. Participate in a program on senescence and immortalization in cultured human mammary epithelial cells involving regulation of telomerase activity; identification and isolation of differentially expressed genes; cell cycle controls; telomere and chromatin structure. See: *Mol. Biol. Cell* **8**:2391–2405, 1997. Reguires experience in molecular biology and biochemistry. Résumé and names of three references to: Dr. Martha Stampfer, Lawrence Berkeley Laboratory, Building **934**, Berkeley, CA **94720**. E-mail: mrgs@ml.lbl.gov. (Job# LSD10037/JSCI) View full job description and further information at our website: http://www. Ibl.gov/Ibl.html. *Equal Opportunity Employer*.

PH.D. POSTDOCTORAL FELLOW at the University of Pennsylvania Infectious Disease Division to study the role of HSV glycoproteins in immune evasion and pathogenesis. Experience in molecular biology and virology required. Experience in glycoprotein research and immunology is viewed as desirable. Send résumé and three letters of recommendation to: Harvey Friedman, M.D., Chief, Infectious Disease, 536 Johnson Pavilion, Philadelphia, PA 19104-6073. Equal Opportunity/ Affirmative Action/Females/Disabled/Veterans.

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POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS UNIVERSITY OF PENNSYLVANIA

Postdoctoral Fellowships are available immediately in our NIH-funded Specialized Center of Research (SCOR) Program in transfusion biology and medicine at the University of Pennsylvania Medical Center. Projects include the investigation of:

(1) Chemokine receptors in human hematopoiesis. Under the direction of **Dr. L. E. Silberstein, e-mail:** silbersl@mail.med.upenn.edu, studies will focus on characterizing the differential expression and function (e.g., chemotaxis, signaling pathways) of chemokine receptors in different stages of the B-cell lineage and in bone marrow progenitor cells.

(2) Human immune responses to auto- and alloantigens. Under the direction of **Dr. D. L. Siegel, e-mail:** siegeld@mail.med.upenn.edu, studies will use novel antibody and peptide phage display technologies to study the genetic and immunological properties of human pathogenic antibodies in the settings of autoimmune cytopenias, transfusion reactions, and hemolytic disease of the newborn.

Interested candidates with graduate training in immunology, biochemistry, or cell biology should send a cover letter and curriculum vitae to the respective Project Leader by e-mail or by: FAX: 215-898-4227.

POSTDOCTORAL POSITION LABORATORY OF DEVELOPMENTAL IMMUNOLOGY Massachusetts General Hospital Harvard Medical School

An NIH-funded position is available immediately to study receptors involved in blood cell development and phagocytosis, using the fruit fly *Drosophila* as a model system. Applicants should have experience in molecular biology; familiarity with *Drosophila* would be beneficial but is not essential. Please send a curriculum vitae, and arrange to have three letters of reference sent to:

Charles Dearolf, Ph.D. Jackson 1402 Massachusetts General Hospital 55 Fruit Street Boston, MA 02114 FAX: 617-724-3248 E-mail: cdearolf@partners.org

We are studying the effects of calorie restriction (CR) on aging processes in rodents and nonhuman primates. **POSTDOCTORAL POSITIONS** for Ph.D. applicants with less than five years of experience are available to study the role of glucose/insulin metabolism and molecular signaling in lifespan extension/retardation of aging by CR. Another position will investigate biomarkers of aging utilizing a multicenter database that includes data from several nonhuman primate species. These positions require research experience appropriate to the two areas of inquiry and a background in biogerontology. U.S. diteenship or pennanent resident status is required. Send curriculum vitae and three letters of reference to: Mark A. Lane, Ph.D., Intramural Research Program, Gerontology Research Center, National Institute on Aging, NIH, 5600 Nathan Shock Drive, Baltimore, MD 21224. Telephone: 301-594-1210; FAX: 301-480-0504; email: mlane@vax.grc.nia.nih.gov. NIH is an Equal Oppontulty Employer.

Two POSTDOCTORAL POSITIONS available for interdisciplinary project on designing, synthesizing, and derivatizing bioactive molecules for neuronal cell guidance. Background in chemistry, chemical engineering, bioengineering, or neural science desired. Send a curriculum vitae and references to: Wei-Shou Hu, Chemical Engineering and Materials Science Department, University of Minnesota, 421 Washington Avenue S.E., Minneapolis, MN 55455. E-mail: acre@cems.umn. edu; website: http://wsh2.cems.umn.edu/postdocs. html. The University of Minnesota is an Equal Opportunity Educator and Employer.

POSTDOCTORAL POSITION available immediately to study the interaction of human papillomavirus proteins with cellular pathways mediating growth control. Experience in molecular/cellular biology with emphasis on signal transduction, cell cycle, or apoptotic pathways preferred. Send curriculum vitae, research experience, and three letters of reference to: Ann Roman, Ph.D., Department of Microbiology and Immunology, Indiana University School of Medicine, 635 Barnhill Drive, Indianapolis, IN 46202-5120. E-mail: aroman@iupui.edu; FAX: 317-274-4090.

Post doc

Astra is an international, researchbased pharmaceutical company with subsidiaries in some forty countries. Every day millions of people all around the world use pharmaceuticals from Astra. Astra has approximately 22,000 employees, of whom a third are in Sweden. Sales in 1997 totaled approximately SEK 45 billion. For more information about Astra, see: www.astra.com

ASTRA HÄSSLE AB

Astra Hässle is situated in Göteborg, Sweden and is a research company with 1,300 employees. Research is aimed at developing new pharmaceuticals for cardiovascular and gastrointestinal diseases. Atacand®, (candesartan cilexetil), Imdur® (isosorbide-5-mononitrate), Logimax® (felodipine/ metoprolol), Losec® (omeprazole), Plendil® (felodipine) and Seloken® (metoprolol), are drugs developed by Astra Hässle scientists. The Department of Pharmacokinetics and Drug Metabolism at Astra Hässle AB consists of 45 persons working with pharmacokinetic evaluation of new Candidate drugs and documentation for IND and NDA filings. The department works closely with medicinal chemists, bioanalysts, biochemists and pharmacologists and represents the disciplines of pharmacokinetics, absorption and metabolism.

Duties for the post doc position include designing and conducting innovative research in molecular surface properties of drug molecules and the relation of these properties to drug absorption. The exploratory work includes working with models such as Caco-2 cells and excised tissues in the Ussing chamber as well as data based models for calculation of molecular surface properties. The position also involves close collaboration with medicinal chemists, pharmacokineticists and analysts and their techniques.

The successful candidate will be a highly motivated individual with a Ph. D in Chemistry, Pharmacokinetics, Biopharmaceutics or related topics. Experience in the field of drug absorption is a merit. The position will last for 24 months starting as soon as possible. Astra Hässle AB will provide opportunities for publications and research presentations during the assignment.

For further information please contact Dr Anna-Lena Ungell, tel.no +46 31 776 16 39, fax: +46 31 776 37 53.

Application with full details should be marked "151/98 Post doc" and sent to the following address no later than November 20, 1998: Astra Hässle AB, Human Resources, att: Erica Lundin, S-431 83 Mölndal, Sweden.



FELLOWSHIPS and POSTDOCTORAL TRAIN-ING in neural development, plasticity, and regeneration at The Ohio State University. Systems, cellular, and molecular approaches are available for trainces supported by an NINDS training grant. Faculty include M. Beattie, G. Bishop, J. Boulant, R. Boyd, J. Bresnahan, J. Bruno, R. Burry, H. Cooke, L. Fisher, M. Hadjiconstantinou-Neff, C. Heesch, L. Horrocks, J. King, J. Lucas, G. Martin, N. Neff, J. Oberdick, R. Rogers, A. Rotter, B. Stokes, J. Wood, and A. Yates. Fellows supported by the training grant must be U.S. cilizens or permanent residents.

Applications, including curriculum vitae, statement of research interests, and three letters of recommendation, should be sent to: Dr. M. S. Beattie and Dr. G. F. Martin, Department of Cell Biology, Neurobiology, and Anatomy, The Ohio State University, 333 West 10th Avenue #4072, Columbus, OH 43210. Telephone: 614-292-1781; e-mail: beattie.2@osu.edu. Potential applicants are encouraged to contact the Program Directors and prospective faculty sponsors for information and consultation prior to application. Website: http://www.med.ohio-state.edu/Neuro/

Website: http://www.med.ohio-state.edu/Neuro/ Neurohome.html.

The Ohio State University is an Affirmative Action/Equal Opportunity Employer and encourages women and minorities to apply.

MULTIDISCIPLINARY POSTDOCTORAL FELLOWSHIPS NONLINEAR DYNAMICS IN BIOLOGY

NSF-funded Research Training Group in "Nonlinear Dynamics in Biology" at University of California, Davis seeks one Postdoctoral Fellow in biofluiddynamics and another in cell biology, neurobiology, ecology, or population biology. *Positions are open to U.S. citizens or permanent residents* interested in multidisciplinary training and student mentorship, and are renewable for a second year. For application information see website: http://www.itd. ucdavis.edu/rtg/. Review of applications will begin on 1 December 1998; positions open until filled.

POSTDOCTORAL POSITIONS are available to study the function of ATM and ATR in the DNA damage check point pathway. The research emphasizes on an interdisciplinary approach, where mass spectrometry will be used extensively to aid in cloning of new components in this pathway (see the paper in *Cell* 94:35–44, 1998). Candidates should send curriculum vitae, description of research experience, and three letters of reference to: Dr. Jun Qin, Department of Biochemistry, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030-3498. E-mail: jqin@bcm.tmc.edu; Telephone: 7.13-798-1507; FAX: 713-796-9438. *Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer*.

POSTDOCTORAL RESEARCH SCIENTIST positions available to study the role of proteinases in development and morphogenetic programs relating to angiogenesis, tumorigenesis, and inflammation (*Nature* **375**: 244–247, 1995; *JBC* **271**:9135–9140, 1996; *Cell*, in press, October 1998). Strong background in cell or molecular biology required. Send curriculum vitae and letters of reference to: **Stephen J. Weiss, M.D., Upjohn Pro**fessor of Medicine, University of Michigan Cancer **Center, 5301 MSRB III, 1150 West Medical Center Drive, Ann Arbor, MI 48109-0640**.

Columbia University, Center for Neurobiology and Behavior. **POSTDOCTORAL POSITION** available to study the molecular basis of learning and memory, focusing on the role of ubiquitin-mediated proteolysis in the process. Ph.D. or M.D. and previous experience in molecular biology and biochemistry required. Send curriculum vitae to: **Dr. James H. Schwartz, Center for Neu**robiology, Columbia University, 722 West 168th Street (P.I. Annex), New York, NY 10032. FAX: 212-543-6059; e-mail: jhs6@columbia.edu. Affirmative Action/Equal Opportunity Employer.

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

POSITIONS OPEN

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

The National Institutes of Health has both! For more information, visit our website which lists an array of clinical and postdoctoral opportunities, including tenure-track positions. http://www.training.nih.gov

The NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION EUNICE KENNEDY SHRIVER CENTER/ HARVARD MEDICAL SCHOOL

A Massachusetts-based research, service, and training facility has a Postdoctoral position in developmental neuroscience available immediately for projects on the mammalian visual system. The research focuses on retinoic acid-related processes in normal eye and brain development, and on several aspects of developmental defects and diseases of the visual system. The work involves cell-biological, biochemical, and molecular-biological techniques. Recent graduates with strong interest in developmental neurobiology and training in the above-mentioned techniques should send a letter of application with curriculum vitae and names of three references to: Ursual Drager, Eunice Kennedy Shriver Center for Mental Retardation, Inc., 200 Trapelo Road, Waltham, MA 02452.

We offer a comprehensive benefits package, including health, dental, life, and long-term disability insurance, plus a generous vacation policy.

plus a generous vacation policy. The Shriver Center is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/VISITING SCIENTISTS PROTEIN MD SIMULATION AND LIGAND-PROTEIN INTERACTIONS

Uncover structure-function-dynamics relationships using molecular dynamics simulations, modeling of proteinligand interactions, and homology modeling experience useful. SGI workstation and computer server experience a plus. Programming and theory background a plus. Stipend depending on experience: \$37,000 to \$46,000 per year, plus medical benefits, plus relocation. One-year position, but renewable for up to three or four years with mutual consent. Assuming very favorable performance, there is a good chance for a long-term position. Must have strong publication record. Send résumé, up to three reprints, and e-mail addresses of three professional references to: Dr. Rick L. Ornstein, Pacific Northwest National Laboratory, Battelle-Northwest, Mailstop K2-21, Richland, WA 99352. FAX: 509-375-6904; e-mail: rl.ornstein@pnl.gov.

POSTDOCTORAL FELLOWSHIPS. Harvard Medical School/VA Medical Center. NIH- and VAfunded position; available now; studies on the regulation of cell adhesion molecules by BMPs, effects of ethanol on cell adhesion and opioid receptor gene expression. Research involves PCR, Northern analysis, site-directed mutagenesis, cell transfection, primary cell culture, cell adhesion assays, neurite outgrowth, neural migration. Expertise in molecular biology required, experience with primary neuronal culture preferred. U.S. ditizen or resident alien prefered. Send curriculum vitae to: Dr. M. E. Charness, Department of Neurology, Harvard Medical School, 1400 VFW Parkway, West Roxbury, MA 02132. FAX: 617-363-5592; e-mail: michael_charness@hms. harvard.edu.

POSTDOCTORAL/RESEARCH ASSOCIATE/ YOUNG FACULTY POSITION(S) available in autoimmune arthritis research. Understanding of the relevant area and documented experience in molecular cell biology/immunology are absolute requirements. Research areas are (1) genome-wide screening and positional cloning of disease-responsible genes, (2) transgenic/knockout approaches, and (3) immunoregulation of autoimmune diseases. Applicants should send a curriculum vitae, brief summary of research experience, names and addresses of current preceptor, and at least two additional referees to: Tibor T. Glant, M.D., Ph.D., Professor, Section of Biochemistry and Molecular Biology, Department of Orthopedic Surgery, Rush University, 1653 West Congress Parkway, Chicago, IL 60612.

POSITIONS OPEN

POSTDOCTORAL POSITIONS BIOPHYSICAL CHEMISTRY/ STRUCTURAL BIOLOGY

The University of Texas Medical Branch at Galveston (UTMB) has Postdoctoral positions available to study the relationship between macromolecular structure and function with an emphasis on elucidating the role of dynamics in both protein folding and molecular recognition. Our approach combines calorimetry, CD, fluorescence, and hydrogen exchange NMR with structural analysis. Successful candidates will be expected to collaborate with a variety of groups in the X-ray, NMR, and computer centers. Applicants should have a Ph.D. with a strong background in biological thermodynamics and/or structural analysis. Computer programming (C, Fortran, or Mathematics) and molecular biology experience is helpful, but not necessary. Send curriculum vitae, statement of research interests, and the names of three references who can provide recommendations to: Dr. Vincent J. Hilser, Department of Human Biological Chemistry and Genetics, University of Texas Medical Branch, 5.166 Medical Research Building, Galveston, TX 7755-1055. Telephone: 409-747-6813; FAX: 409-772-4298; e-mail: vince@hbcg.utmb.edu. UTMB is an Equal Opportunity/Affirmative Action Employer. Minorities/Females/ Disabled / Veterans.

POSTDOCTORAL POSITIONS (two). Department of Microbiology and Immunology, Penn State College of Medicine. Positions available immediately to study nonclassical MHC class Is related to gut immunity and iron absorption (hemochromatosis). Interested candidates with experience in cellular biology or immunology should send their curriculum vitae to: Dr. Michael Chorney, Position#: S-3755W, H107 Department of Microbiology and Immunology, The Pennsylvania State University College of Medicine, 500 University Drive, Hershey, PA 17033. For your health, Hershey Medical Center is a snoke-free campus. Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its work fore.

POSTDOCTORAL POSITIONS in neurobiology. Several Postdoctoral positions available immediately to study (1) the use of transgenically modified cells in animal models of Parkinson's disease. Candidate must have previous experience in stereotaxic surgery/transplantation. (2) The regulation of neurotransmitter genes, receptors, second messengers during development and disease. Candidate must have previous experience in molecular biology/protein biochemistry.

Send curriculum vitae and names of three references to: Dr. Lorraine Iacovitti, Department of Neurology, Thomas Jefferson University Medical College, 1025 Walnut Street, Philadelphia, PA 19107.

A POSTDOCTORAL POSITION is available to study RNA transport and localization in yeast. Experiments will focus on targeting of ASH1 mRNA to the bud tip (*Science* 277:383–387, 1997) and its visualization in living cells. Skills involve yeast genetics, molecular biology, and high-resolution real-time microscopy. Required background in molecular biology, genetics, or cell biology. Salary based on experience. Submit curriculum vitae and three references to: Dr. Robert Singer, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, Golding Room 601, 1300 Morris Park Avenue, Bronx, NY 10461. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS. We seek two Postdoctoral Research Associates to join a National Science Foundation plant genome project to characterize plant centromere cloning in *Arabidopsis* and *Chlamydomonas*. Functional analysis of centromeres will be performed in both native and artificial plant chromosomes.

Positions are available in molecular cloning of Chlanydomonas centromeres, and comparative analysis of Arabidopsis centromere sequences. A strong background in molecular biology is essential. Contact: L. Mets or D. Preuss, University of Chicago, 1103 East 57th Street, Chicago, IL 60637. Affinnative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSISTANT

Postdoctoral position. Electrical equivalent circuits in living tissue and surface characterization. Ph.D. in chemistry (electrochemistry desirable). Applied physics (surface science) or electrical engineering required. Background in thin films desirable. Some animal experimentation. Reply to: Box 83, Science, 1200 New York Avenue N.W., Washington, DC 20005 USA. Equal Opportunity Employer/Minorities/Feundes/Disabled/Veterans.

Hoechst Marion Roussel

HMR is a global healthcare company whose pharmaceutical research is focused on the delivery of the most effective medicines to treat the unmet medical needs of the next millenium.

HMR Anti-infectives research is based in Romainville, near Paris, France, in new purpose built laboratories. The Anti-infectives Group is a dynamic international team dedicated to the discovery of novel antibacterials and antifungals that are effective against pathogens resistant to clinical agents.

To meet the rapidly changing needs of our Genomics driven anti-infectives research, we constantly seek to improve our skills base. In this context we offer the following opportunities.

Microbiologists - 2 positions

The ideal candidates will have a PH. D in Microbiology or Pharmacology with a minimum 2-year experience in the in vivo and in vitro evaluation of anti-infective compounds. (Individuals with B. Sc. qualification and more extensive laboratory experience will also be considered).

The successful candidates will:

Develop new in vivo models

- · Apply in vivo models to the validation of new targets for antimicrobial drug discovery
- Profile the in vitro and in vivo activities of new compounds in preclinical development

For one of the positions, experience of working with pathogenic yeasts would be an advantage.

Applicants are expected to have a good knowledge of English. The ability to communicate in French is desirable (training will be given).

If you are interested, please forward your resume and list of publications to: HOECHST MARION ROUSSEL - Jacqueline CARRERE Tour Hoechst Marion Roussel - 1 Terrasse Bellini 92910 Paris - La Défense cedex.



Hoechst Marion Roussel The Pharmaceutical Company of Hoechst



Biocenter Oulu, affiliated to the University of Oulu, is one of the leading centers for bioscience in Finland. Biocenter Oulu (http://www.oulu.fi/~biocweb) contains eleven groups that have a broad base of expertise in molecular, cellular, and structural biology and biochemistry. The University of Oulu is the second largest university in Finland with a stimulating scientific environment. The City of Oulu is the regional center of the northern half of Finland; it has excellent connections to other cities.

In our newly established protein crystallography research unit we are looking for a postdoctoral

PROTEIN CRYSTALLOGRAPHER

to work on structural studies of CoA-dependent enzymes. The work will concern changing the substrate specificity of enzymes of known structure or solving completely new structures. The work will be integrated in collaborations with organic chemists, molecular biologists, and computer modelers. The work will be done in the Dept. of Biochemistry, University of Oulu. The X-ray laboratory is excellently equipped for these studies, including Xray data collection equipment, computers, and wet-lab space for molecular biology and protein biochemistry.

Further information: Please contact Dr Rik Wierenga (rik.wierenga@oulu.fi; Tel. +358-8-5531199; Fax+358-8-5531141; http://biochem.oulu.fi/research.html). The salary will be based on qualifications and experience. The position will be initially for two years. Financial assistance concerning the relocation costs will be provided.

Applications with a CV, a list of publications, a short description of research interests, and the names and addresses of two referees should be sent by December 31, 1998, to Dr R. Wierenga, Dept. of Biochemistry, University of Oulu, FIN-90570 Oulu, Finland.

FRENCH "ACADÉMIE DES SCIENCES" PROFESSORSHIPS

The French Académie des Sciences, the Centre National de la Recherche Scientifique and Elf Aquitaine will open a limited number of one-year professorships for the fall 1999 to fall 2000 period. The positions are to be held in France at an academic institution or at an Elf laboratory, or both, and are reserved for research professionals at all levels, from Associate to Full Professor. They may be held in conjunction with a sabbatical leave.

They include benefits such as medical insurance and travel expenses for the candidate and his/her family, and depend upon the candidate's experience. Selection criteria include the quality of research achievements and the relevance of the proposed program to Elf research activities, namely:

-Earth Sciences, with emphasis on oil and gas exploration: geophysics, sedimentology, organic and mineral geochemistry, physics of hydrocarbons, including their interactions with rocks, and reservoir modeling.

-Chemical Sciences, with emphasis on polymer sciences, halogen and thiochemistry, catalysis, photo-chemistry and process engineering research.

-Environmental Sciences, with emphasis on the methodology of biological indicators.

-Life Sciences, with emphasis on the biochemistry of receptors as applied to the central nervous system, and cardiovascular, thrombotic and degenerative diseases.

Prearranged agreements with French academic laboratories are eligible for these professorships and will be appreciated although not mandatory. Some preference will also be given to candidates whose research programs include significant interaction with Elf R&D staff. There are no citizenship restrictions. Mastery of French is not required, although some familiarity with French culture is expected to be helpful.

There is no application form. The proposals should include a detailed résumé, with name, address, telephone and fax numbers; place, date of birth and citizenship of the candidate and of his/her family who would accompany him/her; description of the research project and any contacts with Elf Aquitaine or academic labs in France; possible partial financial support by the candidate's university. They should be sent before January 29, 1999:

 For North America-based candidates: to J. BODELLE, V.P. R&D, Elf Aquitaine, Inc., 1899 L Street N.W., Suite 500, Washington, DC 20036, Fax 202-872-8201.
 For other candidates: to C. JABLON, Chief Scientist, Elf Aquitaine, DRTE, Tour Elf, Cedex 45, 92078 Paris-La Défense, FRANCE, Fax 1 -47-44-44-94.

Some discussion with the candidates about the program may then be suggested by the selection committee before the final announcements scheduled for the end of April 1999 at the latest.

YEAST TBP-TAF STRUCTURE, FUNCTION, AND DYNAMICS

POSTDOCTORAL POSITIONS are available to examine the role of the TATA-Box Binding Protein TBP and its associated factors (TAFs) in transcription initiation complex formation using the *Sacharomyces cerevisiae* system. We are currently using a combination of biochemical, genetics, and biophysical methods to study the regulation and interactions of these proteins with each other, DNA, and other transcription factors (see: *JBC* **271**:13706; *JBC* **272**:9436; *JBC* **273**:19884; *Biochemistry* **34**:8005; *PNAS* **92**:8224; *MCB* **17**:3081; *Yeast* **14**: 813–825). Interested parties should send a curriculum vitae to: Dr. Tony Weil, Department of Molecular Physiology and Biophysics, Vanderbilt University, School of Medicine, Nashville, TN **37232-0615**. FAX: **615-322-7236**; e-mail: tony.weil@mcmail. vanderbilt.edu.

Vanderbilt University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS AT EMORY UNIVERSITY

Postdoctoral positions at Emory University are available immediately to study the molecular basis of IL-8 function and regulation in intestinal epithelium as part of a large multidisciplinary group. Background in molecular biology necessary and individuals with interest in transcriptional regulation, signal transduction, or transgenic technology are particularly encouraged to apply.

Applicants must be permanent residents or U.S. citizens. Interested individuals should send curriculum vitae and names and home telephone numbers of three references to: Dr. Andrew Neish or Dr. Ifor Williams, Epithelial Pathobiology Unit, Department of Pathology, Emory University, Woodruff Memorial Building, Room 2337, Atlanta, GA 30322.

Emory University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION MOLECULAR NEUROSCIENCE ALZHEIMER'S DISEASE

A Postdoctoral position is available immediately to study mechanisms of inflammation in Alzheimer's disease and transgenic mouse models of Alzheimer's disease at the level of gene expression. Candidates with molecular biological, neuroanatomical, and cell culture expertise are strongly encouraged to apply for this position.

Qualified candidates should forward curriculum vitae and the names of three references to: Giulio Maria Pasinetti, M.D., Ph.D., Director, Neuroinflammation Research Laboratory, Department of Psychiatry, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. Telephone: 212-241-5579. We are an Equal Opportunity Employer fostering diversity in the workplace.

POSTDOCTORAL POSITIONS in aging are available immdiately to generate and study effects of targeted deletion/multiplication of candidate genes to modulate aging processes in mice. Experience in molecular biology/physiology is desirable. Only U.S. ditzens and permanent residents are eligible. Send letter of interest, curriculum vitae, and names of three references to: James Nelson, Ph.D., Department of Physiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7756. E-mail: nelsonj@uthscsa.edu. For more information, website: http://age.uthscsa.edu/research/ AgeTrain.html.

UTHSCSA is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE

Position available for a Ph.D. **BIOCHEMIST/EN-ZYMOLOGIST**. The candidate should have a strong background in protein purification and enzymology, with experience in microbiology. Experience using state-of-the-art instrumentation for protein purification and characterization a plus. Excellent written and verbal skills important. Send a current curriculum vitae, bibliography, a one-page description of research experience, and three letters of recommendation to: Vincent A. Fischetti, Ph.D., Laboratory of Bacterial Pathogenesis and Immunology, Rockefeller University, 1230 York Avenue, New York, NY 10021. Rockefeller University is an Affinnative Action/Equal Opportunity Employer.

POSITIONS OPEN

Two POSTDOCTORAL POSITIONS in microbial pathogenesis are available to investigate virulence mechanisms of *Haemophilus ducreyi*, the etiologic agent of chan-croid and a cofactor in transmission of HIV infection. Emphasis will be placed on characterization of H. ducreyi gene products involved in the regulation of expression of virulence factors, especially toxins (see: PNAS 94:4056, 1997). Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis in conjunction with a relevant animal model. Positions include salary, fringe benefits, and the opportunity to work in a dynamic research environment. First position available after January 1, 1999. Second position available after June 1, 1999. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9048. FAX: 214-648-5905; e-mail: hansen01@utsw. swined.edu. UT Southwestern is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL AND RESEARCH FACULTY PHYSICAL CHEMISTRY, BIOPHYSICS, BIOLOGY, AND PHYSICS EXPERIMENTALISTS

The Wilson group, at the University of California, San Diego, Department of Chemistry and Biochemistry, has positions available for exceptionally talented experimental scientists in the following areas: ultrafast X-ray diffraction and absorption applied to chemical and biochemical dynamics and function, and new techniques in optical microscopy for spatially and temporally resolved imaging as applied to the understanding of dynamics of cellular and intercellular biomolecular and biological processes (including interneuronal communication and function). For more information about these positions and the group, or to receive application process information, visit our website: http://www-wilson.ucsd.edu or e-mail: wgjobops@ucsd.edu. Positions commensurate with experience and qualifications, with salaries based on University of California payscales:

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POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL DANA-FARBER CANCER INSTITUTE

The Dana-Farber Cancer Institute has the following position available:

Position and instruction. Position available to study the viral and host mechanisms involved in HTLV-1 infection and leukemogenesis of adult T-cell leukemia (ATL) as well as gene therapy strategies to treat ATL. Project includes the development of intracellular antibodies (*Gene Therapy* 4:11, 1997) for ATL (*PNAS* 92:3137, 1995; *Virology* 237:209, 1997; *Gene Therapy* 5:635, 1998). Recent Ph.D. and experience in molecular biology are required.

Send curriculum vitae, brief description of research experience, and names of three references to: Dr. Wayne Marasco, Dana-Farber Cancer Institute, JFB 824, 44 Binney Street, Boston, MA 02115. FAX: 617-632-3889. We are an Equal Opportunity Employer.

The National Eye Institute, National Institutes of Health, has a **POSTDOCTORAL POSITION** available to study the role of cyclin-dependent kinases in differentiation and apoptosis. A background in molecular/ cellular biology is desirable. *Applicants must be U.S. citizens* or pennanent residents. Applicants must have a Ph.D. or M.D. and less than five years of postdoctoral experience. Starting salary ranges from \$27,500 to \$38,000 per year depending upon experience. Please send curriculum vitae, bibliography, and names of three references to: Dr. Peggy S. Zelenka, Laboratory of Molecular and Developmental Biology, Building 6, Room 214, MSC-2730, Bethesda, MD 20892-2730. Telephone: 301-496-7490; FAX: 301-435-7682; e-mail: zelenka@ helix.nih.gov.

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POSTDOCTORAL POSITION is available immediately to join an ongoing interdepartmental collaborative project characterizing gene expression differences in ovarian cancer. Previous experience in molecular biology, protein expression, and tissue handling are highly desirable. Send cover letter, curriculum vitae, and names of references to: Dr. David Chang, Division of Hematology/ Oncology, Department of Medicine, University of California, Los Angeles, CA 90095. FAX: 310-825-6192; e-mail: dchang@medicine.medsch.ucla.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION IN MICROGLIA AND BRAIN MACROPHAGE CELL BIOLOGY Harvard Medical School

New England Regional Primate Research Center

A Postdoctoral position is available immediately to study the role of brain macrophages and microglia in central nervous system inflammation using EAE and the simian immunodeficiency virus (SIV) infection model of AIDS. These studies will include gene cloning, protein sequencing and expression, multiparameter flow cytometry, immunohistochemistry and in situ hybridization, cloning and sequencing retroviral genes, and the con-struction of chimeric viruses. Candidates should hold a Ph.D., D.V.M., or M.D. degree and have experience in molecular biology, virology, or immunology. Send a cover letter, curriculum vitae, and names of three references to: Dr. Kenneth Williams, Division of Comparative Pathology, Harvard Medical School, New England Regional Primate Research Center, One Pine Hill Drive, P.O. Box 9102, Southborough, MA 01772. E-mail: kenneth_williams@hms.harvard.edu. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer. Woman and minority candidates are particularly encouraged to apply.

POSTDOCTORAL POSITION available immediately to study olfactory influences on a simple motor system. Studies will encompass multiunit recording of central nervous system and EMG spiking patterns from flying moths, *Manduca sexta*, with synchronous recording of behavior. Our ultimate goal is to record from freely flying moths. Intra- and extracellular recording and data analysis experience is preferred. Experience with insects is preferred but not required. Please submit a complete curriculum vitae and the names and telephone numbers of three references (please refer to Job# 12628) to: Mark A. Willis, Ph.D., Arizona Research Laboratories Division of Neurobiology, P.O. Box 210077, University of Arizona, Tucson, AZ 85721. Further information may be obtained from: Dr. Willis, e-mail: maw@ neurobio.arizona.edu.

POSTDOCTORAL POSITION. Dr. Louis DeFelice and Dr. Randy Blakely solicit applicants for a Postdoctoral position in the Department of Pharmacology and the Center for Molecular Neuroscience at Vanderbilt. The projects will involve patch clamp and amperometry to study the regulation of catecholamine and serotonin transporters. The position requires experience with wholecell and detached-patch methods and will involve the use of purified kinases, phosphatases, and transporter mutants. Please submit a letter of interest, curriculum vitae, and the names of three references to: Dr. Louis J. DeFelice, Ph.D., Professor, Department of Pharmacology, Vanderbilt University Medical Center, Nashville, TN 37232-6600. FAX: 615-343-6278; e-mail: lou.defelice@memail.vanderbilt.edu; website: http:// www.mc.vanderbilt.edu/vumc/centers/neuro. VSM is an Equal Opportunity/Affinative Action Employer.

A POSTDOCTORAL POSITION is available starting December 1, 1998. This USDA-funded position involves development of RNA ligands that inhibit visna virus replication, with the ultimate goal of expressing these ligands in transgenic sheep. Molecular biology and tissue culture experience is absolutely required; experience with SELEX and/or surface plasmon resonance/ BIA is highly desirable. Please send a curriculum vitae and three references to: Dr. Robert V. Schoborg, East Tennessee State University, James H. Quillen College of Medicine, Department of Microbiology, Box 70579, Johnson City, TN 37614. Telephone: 423-439-6295; FAX: 423-439-8044; e-mail: schoborg@ etsu.edu. Equal Employment Opportunity. /Affirmative Action Employer.

The Dana-Farber Cancer Institute/Harvard Medical School has the following position available:

POSTDOCTORAL POSITION

You will study control of cell interactions by transmembrane protein tyrosine phosphatases. Experience in molecular and cell biology is desired.

Send curriculum vitae and names of three references to: Dr. Michel Streuli, Department of Cancer Immunology and AIDS, 44 Binney Street, Boston, MA 02115. FAX: 617-632-5951; e-mail: michel_streuli@dfci. harvard.edu. We are an Equal Opportunity Employer. The Paul Scherrer Institute (PSI) in Villigen and the Department of Biology of the Swiss Federal Institute of Technology (ETH) in Zurich invite applications for the joint position of

Head of the Life Sciences Department at PSI and Professor of Protein Crystallography at ETH

The Life Sciences Department at PSI has a leading position in research on and application of radiopharmacy and radiation in cancer therapy, with strong links to the ETH and the University of Zurich in the areas of molecular biology, radiobiology, and clinical medicine. We seek applicants to fill the position of Head of the Life Sciences Department at PSI in conjunction with a newly created professorship in protein crystallography in the Department of Biology at the ETH. The Swiss Light Source X-ray synchrotron will open to users in 2001 and will complement the existing SINQ neutron source at the PSI, offering excellent facilities for research in the field of structural biology. Applicants must have a strong research record in

structure determination of biological macromolecules, be highly motivated towards creative research, and have proven leadership abilities and interests in biomedical research beyond structural biology. A firm commitment to teaching in the Biology Department of the ETH Zurich is expected.

Applications with a curriculum vitae, a list of publications, a summary of current and future research interests, and names and addresses of three references should be submitted **no later than December 31, 1998, to the President of ETH Zurich, Prof. Dr. O. Kübler, ETH Zentrum, CH-8092 Zurich.** PSI and ETH Zurich specifically encourage female candidates to apply with a view towards increasing the proportion of female professors.

THE UNIVERSITY of York

DEPARTMENT OF BIOLOGY LECTURER IN BIOINFORMATICS

The Department of Biology at York is a large successful

Department awarded grade 5 in the recent RAE and well recognised internationally as a centre of research excellence.

This position has been created to contribute to the molecular biology research of the Department, including the

new inter-disciplinary Initiative in Biomolecular Sciences, and to the development of inter-departmental graduate

teaching in Bioinformatics (with the Departments of

Computer Science and Chemistry - Protein Structure Group).

Applicants will have already demonstrated significant

creative research potential in an area of Bioinformatics; applicants with interests in aspects of genomics are especially

encouraged. The successful candidate may well currently be

a recipient of an independent research fellowship and/or

Informal enquiries may be made to Dr John C. Sparrow,

Chair of the Search Committee, on (+44)-1904-432826,

The appointment is available immediately and the salary will

be within the Lecturer Grade A (£16,655 - £21,815 pa) or

For further information and details of how to apply, please write

to the Personnel Office, University of York, Heslington, YORK YO10 5DD or e-mail: jobs@york.ac.uk, quoting reference number 5/3072. The closing date for applications is

Lecturer Grade B (£22,726 - £29,048 pa) scale.

other funding.

e-mail: jcs1@york.ac.uk.

Friday, 11th December 1998.

Faculty of Medicine, Health and Biological Sciences

University Orthopaedics

Lecturer (Non-Clinical)

Applications are invited from scientists or clinicians with a strong background in molecular biology and an interest in the biology of skeletal tissues. You will join the University Orthopaedic group of Mr NMP Clarke and Dr HI Roach at Southampton General Hospital. This group forms part of the Musculo-skeletal Research Group within the Faculty of Medicine, Health and Biological Sciences.

University Orthopaedics is a small but, very research-active department which successfully combines clinical and basic scientific research. You will have some teaching responsibilities but you are mainly expected to contribute to the research of the department. Facilities for all aspects of histology, tissue culture and RT-PCR are available, as well as easy access to electron and confocal microscopes and image analysis.

Further information can be obtained from http://www.soton.ac.uk/~ortho or by email from Dr Roach hr@soton.ac.uk

Salary in the range of £16,655 - £29,048 per annum on Lecturer Grade A/B.

Application forms and a job description may be obtained from the Personnel Department (M), University of Southampton, Highfield, Southampton SO17 IBJ, UK, telephone: +44 (0) 1703 592750, email: recruit@soton.ac.uk or minicom: +44 (0) 1703 595595. To be returned no later than 26 November 1998. Interviews to be held on 17 December 1998. Please quote reference number M/175.

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Heidelberg, Germany

Position for a **POSTDOCTORAL** fellow (no 124/98)

is available for a chemist/biochemist with experience in structure determination of proteins/peptides using NMR; for analysis of the structure of synthetic peptides in connection with an HIV project (Lit. Lindemann et al., *Proteins* 29, 1997; Reed et al., *PNAS* 90, 1993). Continuation of a close collaboration with an external NMR group.

Applications should include a Curriculum vitae and the addresses of two references.

The position is available for three years.

German Cancer Research Center, Im Neuenheimer Feld 280, D-69120 Heidelberg, Germany.

RESEARCH ASSOCIATE. Immediate. As part of a new multidisciplinary initiative, the Atlanta Veterans Af-fairs Medical Center (VAMC) is seeking a non-tenuretrack scientist in the area of gene therapy relevant to bone formation. Applicants must have a Ph.D. and four years of postdoctoral experience in molecular biology and gene transfer. The successful candidate will be expected to play a pivotal role in project development, training of Fellows, and in attracting extramural funding. Supplies and tech-

nical assistance will be provided. Salary negotiable. **POSTDOCTORAL POSITIONS** available in the new Atlanta Veterans Affairs multidisciplinary program in gene therapy. Our group will investigate basic and trans-lational research using gene transfer to promote bone formation. Applicant must have Ph.D. with expertise in molecular biology or gene transfer. Competitive salary and benefits.

Send curriculum vitae, reprints, and three letters of reference to: J. Rubin, M.D., VA Medical Center-151, 1670 Clairmont Road, Decatur, GA 30033. FAX: 404-728-7780.

POSTDOCTORAL POSITION IN NEUROSCIENCE Harvard Medical School and Children's Hospital

Cellular and molecular controls over differentiation of projection neuron precursors in cortex; cellular circuit reconstruction and development projects. Recent Ph.D. and strong background in molecular and cellular neuroscience required. Experience in neuronal/precursor culture and/or neocortical development desired. Reply with statement of research interests to: Jeffrey D. Macklis, Division of Neuroscience, 320 Longwood Avenue, Boston, MA 02115.

POSTDOCTORAL POSITION available immediately in the Emory University Physics Department to develop a SQUID nuclear quadrupole double resonance spectrometer for the study of metalloproteins. Experience with conventional field cycling techniques (or equivalent) is required. Biophysics background is desirable. Send curriculum vitae and the names, addresses (including e-mail). and telephone numbers of three references to: Dr. Edand telephone numbers of three references to: Dr. Ed-mund P. Day, Physics, Emory University, 1510 Clifton Road, Atlanta, GA 30322-2430. FAX: 404-727-0873; e-mail: phsepd@physics.emory.edu. Emory University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION is available to study RNA/protein interactions in translational regulation in the green algae Chlamydomonas reinhardtii. Expertise in molecular biology and genetics is essential. A description of the project can be found at website: http:// scripps.edu/c6/mayfield. Please send a curriculum vitae and the names of three references to: Stephen Mayfield, Department of Cell Biology, BCC283, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037.

GLOBAL OPPORTUNITIES

IDEAL FOR YOUR SABBATICAL!

When: Four to 12 months starting from January 1999. Where: Tokyo Medical and Dental University located in the middle of Tokyo. One of the most prestigious national medical schools in Japan.

What: Research related to orthopedics, electrophysiology, molecular biology, etc. The department is going to obtain a Magneto-Encephalo-Graphy (MEG) machine soon. A person who is interested in this new technology will be highly appreciated, but it does not mean that the

field of research is confined to this technology. Who: (1) ASSISTANT PROFESSOR, ASSOCI-Who: ATE PROFESSOR, PROFESSOR, or a person who is equally capable even without such academic titles. (2) M.D.-Ph.D., M.D., or Ph.D. (3) Native English speaker or bilingual. Japanese language is not required. (4) Cooperative, amicable personality. Stipend: ¥480,000 monthly.

Apartment: Not available through the program.

Apartinent: Not available through the program. Travel fare: Not available through the program. Contact: Prof. Kenichi Shinomiya, Department of Orthopaedic Surgery, Tokyo Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo 113-8519 Japan. Telephone: +81-3-5803-5271; FAX: +81-3-5803-0142; e-mail: shinomiya.orth@med.tmd. ac.jp.

Send: (1) Curriculum vitae, (2) bibliography, (3) cover letter/personal statement, and (4) three recommendation letters.

POSITIONS OPEN

POSTDOCTORAL POSITIONS TO BLOCK HIV INFECTIVITY

Position(s) available to prevent HIV infectivity by blocking the host cell protease for gp160 maturation. Looking for ambitious Cell/Molecular Biologists, Immunologists for T cell antisense therapeutics, mutagene-sis, protein expression, microscopy. Includes connections to starting biotechnology company. Send curriculum vitae, summary of current research, and names of three references to: Alex Franzusoff, University of Colorado Health Science Center, Box B-111, 4200 East 9th Avenue, Denver, CO 80262. E-mail: alex.franzusoff@ uchsc.edu.

POSTDOCTORAL FELLOWSHIP LIMNOLOGY/AQUATIC MICROBIOLOGY

The Biological Sciences Center of the Desert Research Institute (Reno, Nevada) is seeking a Limnologist or Aquatic Microbiologist to assume a Postdoctoral Fellowship to study microbial consortia in extreme Antarctic environments. For position and application details, visit us at website: www.dri.edu or Telephone: 702-673-7431.

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EUROPEAN OPPORTUNITIES

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Instructors: Prof. Larry Wackett, e-mail: wackett@ cbs.umn.edu. Prof. Lynda Ellis, e-mail: lynda@email. labmed.umn.edu.

Class website: www.cee.umn.edu/biodeg/.

COURSES & TRAINING

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

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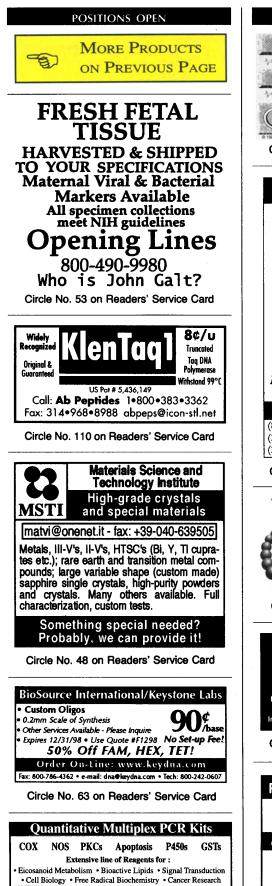
In the following four categories: Basic Research; Clinical Research; Special Achievement in Medical Science; and Public Service.

Call: The Lasker Foundation, Telephone: 212-286 0222 to receive a nomination form. Or e-mail: nhunt@ laskerfoundation.org; website: www.laskerfoundation.

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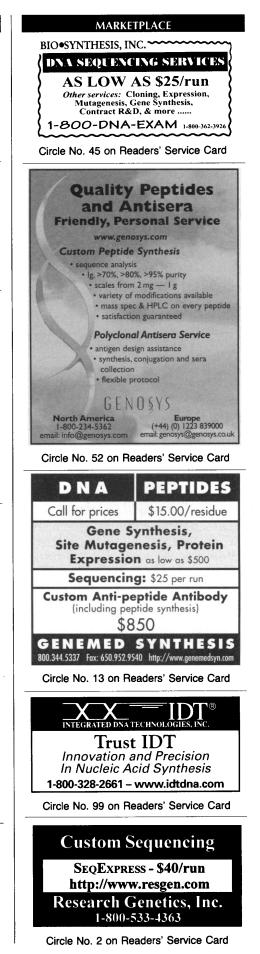
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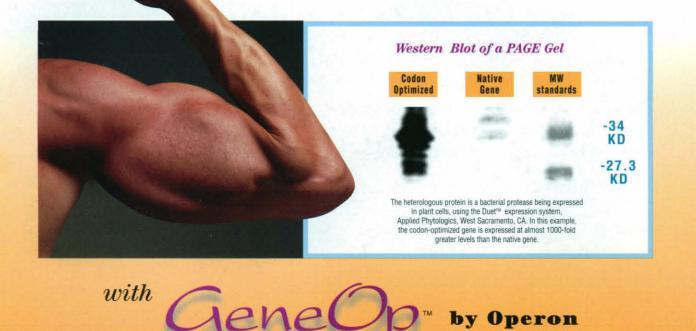
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