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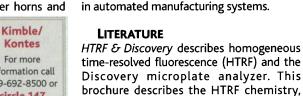
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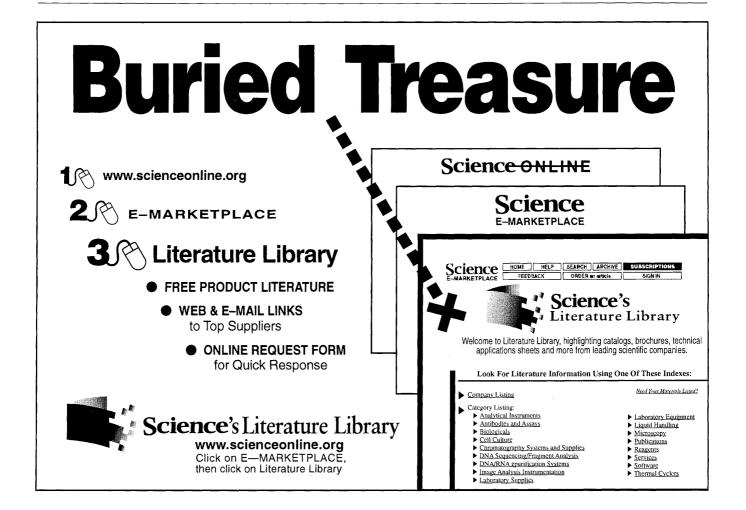
For an application and guidelines, contact Dr. Gary Machlis, Program Coordinator, Canon National Parks Science Scholars Program, Natural Resource Stewardship and Science, National Park Service, 1849 C Street, NW (MIB 3127), Washington, DC 20240, email <u>gmachlis@uidaho.edu</u> or visit <u>http://www.nps.gov/socialscience/waso/acts.htm</u>.

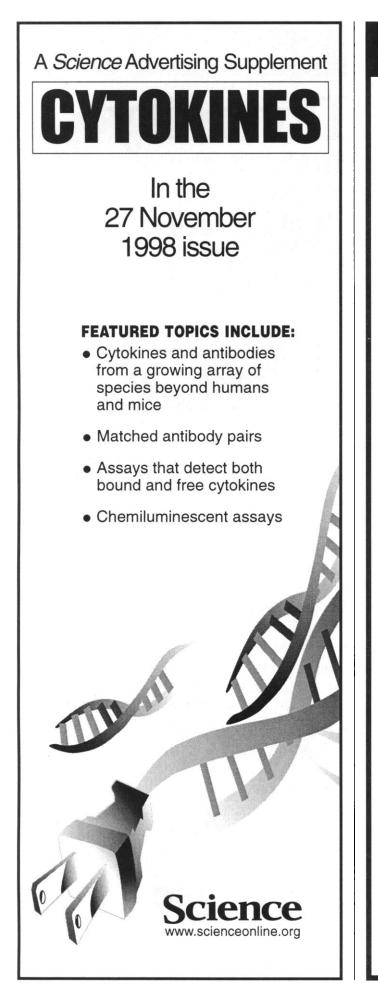
Applications are due June 15, 1999. Winners will be announced shortly after August 15, 1999.





American Association for the Advancement of Science





A Science Advertising Supplement

Diversity in the Workplace





Steady Gains... Further to Go

Turn to page 1524 in this issue of *Science*.





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Recruitment Advertisement Directory





The following organizations have placed full-page recruitment advertisements in the Diversity in the Workplace Supplement.

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Steady Gains... Further to Go by Michael Woods

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What could be a better summary of efforts to increase the number of underrepresented minorities and women in the biopharmaceuticals work force?

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Ethnic, cultural, and gender diversity is the rule, rather than the exception, in laboratories and offices across the biotechnology and pharmaceutical land-scape today.

Nevertheless, minorities, except for Asians, remain a small proportion of employed scientists, according to the National Science Board's Science and Engineering Indicators 1998. NSF found that blacks and Hispanics, for instance, made up 12 percent and 9 percent respectively of the U.S. population in 1995. Yet, they accounted for only 3.4 percent and 2.8 percent of the science and engineering work force. And there are indications that the supply of minority scientists available to fill biopharma positions may diminish in the years ahead. In September, an AAAS report found that the number of African Americans enrolled as first-year science/engineering graduate students dropped by more than 20 percent from 1996–1997. Hispanic enrollments dropped 16 percent.

For a reality check on work force diversity we visited two firms with thousands of employees and a multinational presence, Monsanto Company and Millipore Corporation. For contrast, we dropped in to talk with folks at GeneLogic, Inc., a new biotech that just passed the milestone of hiring employee number 100.

Michael Woods writes frequently on the biotechnology and pharmaceutical industries

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This advertisement has the core technical sections of the Federal Register Announcement DOE 99-04. The full text and detailed application process information can be accessed on the Internet through WWW page: http://www.er. doe.gov/production/grants/grants.html.

The goal of Topic 1, large insert DNA clone libraries and their characterization, is to provide additional resources in support of human and mouse genomics, and perform characterizations supportive of genomic sequencing. The vectors for the libraries should be of the generic BAC (Bacterial Artificial Chromosomes) type, supporting stable maintenance of their inserts in bacterial hosts. For a mouse library, the C51BI/6J strain should be the source of the DNA, with a 10-15 fold genome coverage sought. There should be two sub-libraries, with DNA fragments generated by different restriction nucleases to diminish representation biases. Also to diminish representation biases, DNA breakage by shearing only is a desired substitute to breakage by restriction. If this improvement can be implemented quickly, both mouse and human libraries produced from sheared DNAs are sought. Companion quality control analyses must be specified. Separate applications are sought for more extensive characterization of the BACs by restriction fingerprinting, end sequencing of inserts, cDNA mapping onto BACs and/or other high throughput methodologies supportive of genomic projects.

The goal of Topic2, chemistries and biochemistries for DNA sequencing, is to further bring speed and economies to DNA sequencing through improvements in reagents such as enzymes, their substrates, reporting labels, and related protocols.

The goal of Topic3, protocols and reagents for full-length messenger RNA to cDNA production and sequencing, is to address outstanding needs in characterizing messenger RNA populations of tissues, as represented by more stable derivative libraries of cDNAs. Particularly for human sources, obtaining mRNAs with minimal degradation remains troublesome. For longer mRNAs, faithful conversion to cDNAs is problematic. Within completed libraries, identifying optimal representatives for complete sequencing is still time consuming and expensive. For cDNAs in the few kilobase size range, full-length sequencing does not yet have the economies of sequencing longer DNAs. Applications that address these problem areas sought. Reports on recent workshops on cDNAs can be accessed on the Internet through the WWW site http://www.ornl.gov/meetings/wccs/index.html.

The goal of Topic4, characterizing exceptional chromosomal regions including those near telomeres and centromeres by sequencing and/or other relevant methodologies, recognizing that current sequencing strategies may prove inadequate for chromosomal regions which are troubled by abundant repeat structures, or are the boundaries of heterochromatin and euchromatin regions. Applications addressing these problem areas are sought.

Topic5, computational processing of sequence information including viewing, curating, and integrating, seeks ways to more efficiently and more accurately assemble partial DNA sequences, to identify regions of biological significance, and to more efficiently utilize previously determined DNA sequence to identify polymorphisms and to characterize related but not yet sequenced DNA. An additional interest is identification of useful standards, which may include (but is not limited to) controlled vocabularies, data types, and annotation types. Standards development must proceed with user community input. A report on a May 1998 workshop on informatics needs can accessed on the Internet at: http://www.ornl.gov/TechResources/Human_Genome/publicat/hgn/v9n3/02doenih.html.

Potential applicants are encouraged to submit a brief preapplication by December 3, 1998. The deadline for receipt of formal applications is 4:30 P.M., E.D.T., February 23, 1999. The preapplications referencing Program Notice 99-04, should be sent preferably by e-mail to joanne.corcoran@oer.doe.gov; however, preapplications will also be accepted if mailed to the following address: Ms. Joanne Corcoran, Office of Biological and Environmental Research, SC-72, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-1290, or transmitted by facsimile to (301) 903-8521. A response to the preapplications discussing the potential program relevance of a formal application generally will be communicated within several days of receipt. For more detailed information, first please access the WWW information and then if further necessary contact: Dr. Marvin Stodolsky if referencing topics (1-4) and Dr. Daniel Drell if referencing topic (5) and Ms. Joanne Corcoran for general program information.

Their e-mail addresses are marvin.stodolsky@oer.doe.gov, daniel.drell@oer.doe.gov and joanne. corcoran@oer.doe.gov with telephone exchange (301) 903 and respective extensions 4475, 4742, and 6488, and common facsimile 8051. E-mail communications are preferred. General HGP information can also be obtained with Internet browsers at: http://www.er.doe.gov/production/ober/hug_top.html, http://www.ornl.gov/ TechResources/Human_Genome/home.html, and sites linked to these WWW pages. The solicitation topics are in accordance with the 1998 revision of the 5-year goals of the U.S. HGP. It is published in the October 21, 1998, issue of the journal *Science*, volume 282, and is available on the Internet at WWW page http://www.ornl.gov/hg5yp.

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internship programs, and post-doctoral fellowships where graduates can gain valuable research experience. We also offer job-sharing, assistance with childcare and eldercare, and flextime schedules (including summer hours) to meet the needs of dual-income and single-parent households trying to balance careers and family.

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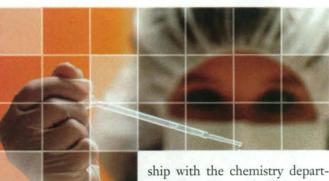
Joe Wiley, Monsanto: "Everyone Benefits from Investing in Diversity"

As director of affirmative action and equal opportunity for Monsanto Company, Joe Wiley regards diversity in the workplace as both a core corporate value and good business practice.

"If we're going to be effective in the global marketplace today and in the future, it requires a diverse work force people with different perspectives and approaches to solving problems," Wiley said. "Businesses must compete successfully for customers of different genders, cultural backgrounds, and other perspectives. That's one area where diversity adds real value."

Monsanto's efforts to recruit employees from diverse backgrounds begin with a wide range of endeavors to increase diversity in the pool of job applicants. This starts at the elementary school, middle school, and high school levels. One goal at these early stages is to increase recognition that science degrees can lead to many different gratifying, financially rewarding careers. "A lot of young minority students believe that the medical profession is the only way to use a science degree," Wiley said. "Medicine, of course, is a superb way of using a degree. By talking to classes, participating in high school science fairs, and other approaches, Monsanto scientists can serve as role models who spark interest in other science careers. These, of course, include careers in the biosciences."

The efforts continue with summer internships for minority college students, scholarship programs with several universities, and support of minority scientific organizations. Wiley expressed excitement over one decade-long partner-



ship with the chemistry department at Howard University. Howard, he said, produces about 25 percent of black Ph.D. chemistry graduates in the United States. Monsanto has invested

some \$2 million in the Howard partnership. Most of this money goes to fund scholarships. Funds also go to support research and laboratory equipment.

"Everyone benefits from investing in diversity," Wiley said. "The program helped Howard University students, and it helped Monsanto. We've hired a number of highly qualified Ph.D. chemists who went through this program."

Wiley believes that diversity recruitment programs designed to pipeline new scientists and engineers into a company will become increasingly important in the years ahead, as competition to recruit minority and female candidates intensifies. Recent declines in first-year graduate enrollment of African American and Hispanic science students could make recruitment of underrepresented minority scientists more difficult. Continued strong economic

Interview Advice: Making an Impression in the First 3 to 5

One axiom among job recruiters might be called the 3to-5 rule. It takes a recruiter roughly 3 to 5 minutes to start forming a positive or negative impression of the applicant. The next 30 to 50 minutes of the interview often support that initial impression.

How can female, minority, and other applicants grasp that slender window of opportunity and make that allimportant positive first impression? We asked Joe Wiley, director of affirmative action and equal opportunity at Monsanto Company, for pointers based on his 26 years of experience in the field.

"A person coming in for an interview should have the right attire, the right handshake, the right greeting, and the right preparation in terms of basic knowledge about the company. This applies across the board to applicants in general, not just underrepresented minority applicants or women. It is unbelievable how so many applicants, especially students, neglect to get some guidance on making that first impression.

"For a man, proper attire means a conservative business suit, perhaps a dark pinstripe. For a woman, appropriate business attire is required. Use a good, firm handshake, and be ready with a smile and a friendly, enthusiastic greeting that makes the recruiter feel your excitement about the opportunity.

"Do your homework and be sure to have basic knowledge about the company. Know its major products, research directions, perhaps a little about products still in the pipeline. The information is readily available, especially through company websites on the Internet. Be prepared to explain why you want to work for the company, and what you can contribute.

"If I could offer students just one piece of advice, it would be to use the resources of their schools' career placement offices to get a good basic preparation for job interviews."

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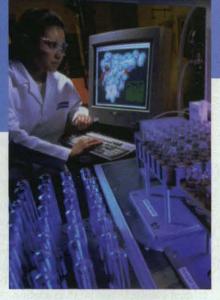
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University of Minnesota–Twin Cities Tenure-Track Assistant Professor Positions

The University of Minnesota is making a new \$123 million investment in cell and molecular biology that will result in the construction of a new Molecular and Cell Biology building, the hiring of new faculty, and the establishment of three new basic biological science departments. The Department of Biochemistry, Molecular Biology, and Biophysics (BMBB), the Department of Genetics, Cell Biology, and Development (GCD), and the Department of Neuroscience (NSc) are formed from strong existing faculty research programs and are committed to education at the undergraduate, graduate, and professional levels. Each of these departments seeks up to three candidates for three tenure-track positions at the Assistant Professor level, to begin on or around July 1, 1999.

Biochemistry, Molecular Biology, and Biophysics (BMBB)

The department plans to hire in each of its Molecular Biology, Regulatory Biochemistry, and Microbial Biochemistry and Biotechnology Divisions. The Molecular Biology Division seeks candidates who study basic mechanisms of transcription or genome replication and maintenance. The Regulatory Biochemistry Division seeks a scientist studying transmembrane signaling and second messenger systems or functional metabolics. The Microbial Biochemistry and Biotechnology Division seeks a scientist in either microbial genomics and biotechnology or microbial catalysis and biodegradation. For more information on BMBB, see http://biosci.cbs.umn.edu/BMBBSearch/

Genetics, Cell Biology, and Development (GCD)

All areas of research in these disciplines will be considered, but specific areas of expertise sought for Cell Biology include signal transduction, membrane trafficking, chromosome dynamics, nuclear-cytoplasmic interactions, growth control, and cell cycle. Those sought in Genetics include gene expression, genomics, DNA repair, chromosome organization and function, and human genetics in association with the Institute of Human Genetics. For more information on GCD, see http://www.gcd.med.umn.edu

Neuroscience (NSc)

The department is seeking faculty to strengthen its existing programs in cell, molecular, and behavioral neuroscience. Candidates are sought who address fundamental questions on the structure, function, and development of the nervous system using contemporary cell and molecular or behavioral approaches. Areas of interest include, but are not limited to, ion channels and synaptic function, signal transduction, neuronal growth and development, and cognitive neuroscience. Ideal candidates will complement existing departmental strengths in systems neuroscience. For more information on NSc, see http://neurosci.umn.edu

All candidates must have a Ph.D. and/or M.D. degree. Desired experience includes at least two years of postdoctoral or equivalent 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 a vigorous, independent research program that will lead to external funding. The ability to interact collaboratively among a variety of disciplines will be strongly encouraged, and teaching of undergraduate, graduate, and/or professional students will be expected. Successful candidates will receive a substantial start-up package to establish their laboratories and a salary 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 one of the following departments.

BMBB: Search Committee, c/o Mr. Jeff Schaub, University of Minnesota, Department of Biochemistry, Molecular Biology, and Biophysics, 435 Delaware St. S.E., Minneapolis, MN 55455-0392 USA *or* schaub@biosci.cbs.umn.edu **GCD**: Search Committee, c/o Ms. Bonita Bartholomew, University of Minnesota, Department of Genetics, Cell Biology, and Development, Box 206 Mayo, 420 Delaware St. S.E., Minneapolis, MN 55455-0392 USA *or* bonita@gene.med.umn.edu

NSc: Search Committee, c/o Ms. Alaine Siniff, University of Minnesota Medical School, Box 293 Mayo, 420 Delaware St. S.E., Minneapolis, MN 55455-0392 USA *or* asiniff@mailbox.mail.umn.edu

Electronic versions of the above required information may be e-mailed to the appropriate department but must be followed with a hard copy for the official search files. The review process will begin December 1, 1998, and continue until the positions are filled. *The University of Minnesota is an Equal Opportunity Educator and Employer.*

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Senior Biostatistics Scientist (Genetics)

This position is responsible for developing and applying statistical techniques for the design and analysis of genetic studies. You will be involved in collaboration with clinical and discovery scientists as well as providing leadership on statistical methodology in genetics to the global scientific community. Applicants should have a Ph.D. in Statistics, Biostatistics, or Biomathematics with a specialization in statistical genetics and a minimum of 3 years experience. The successful applicant needs to have a strong proven ability or potential for research and excellent communication skills. **Position # 980725**

Senior Biostatistics Scientist (Clinical)

This position is responsible for developing and applying statistical techniques to enable decision making in support of drug development efforts. You will be expected to provide leadership on statistical methodology to the clinical statistical community. Applicants should have a Ph.D. in Statistics or Biostatistics with at least 5 years experience in the pharmaceutical industry or a biomedical research environment. The successful applicant needs to have a strong proven ability or exceptional potential for research, excellent communication skills, enthusiasm, and leadership potential for the scientific community. **Position # 980703.**

Clinical Analyst/Programmer

This position is responsible for clinical systems design and program development to enable decision making in support of drug development efforts. Responsibilities include the design and implementation of systems, applications and reports to provide the necessary regulatory documentation in support of product candidates and approved products. A Bachelor's or Master's degree in computer science or a related field with at least 6 years of experience in the pharmaceutical industry or a biomedical research environment is required. Experience with SQL databases and SAS is required. Excellent analytical, technical, communications and interpersonal skills are also required. A knowledge of UNIX, C and Visual Basic is desirable but not necessary. **Position # 980493.** Join our growing drug discovery and development effort. We are among the world's largest pharmaceutical companies, employing over 30,000 people around the globe. At our Kalamazoo, Michigan research and development facility, we are expanding our efforts on genomics, proteomics, bioinformatics and clinical development. We would like to share this exciting opportunity with you.

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This position is responsible for developing and administering plans which govern Clinical Data Management activities, contributing to the achievement of worldwide registration of prescription human health care products. Accountabilities involve interacting with project teams to establish resource needs and project time lines, to schedule and prioritize tasks, and to coordinate data management activities. The position requires a Master's degree or equivalent in biological, clinical, health or computer science or statistics plus two years relevant clinical data management experience; or a Bachelor's degree in same plus four years relevant experience. An understanding of clinical trials, knowledge of data management or project management processes and proven problem-solving skills are desirable. Demonstrated human relations skills and good oral and written communication skills are required to enable interaction with individuals from various disciplines. Position # 980700.

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The detailed research profiles of participating faculty can be viewed at **http://www.sb.fsu.edu**. Supplementing experimental facilities at the Institute of Molecular Biophysics, close ties are enjoyed with the National High Field Magnetic Laboratory and the Supercomputer Computation Research Institute on campus. Concomitant with professional development, a generous travel allowance will be provided. Fellows will enjoy a stimulating intellectual environment, pleasant weather, national forests, and pristine gulf beaches.

Applications

Applications from individuals trained in all relevant fields are welcome, including biochemistry, molecular biology, biology, chemistry, physics, and mathematics. State the project(s) of interest in the application. Please send cv with the names of three references to: **Ms. Carolyn Moore, Institute of Molecular Biophysics, Florida State University, Tallahassee, FL 32306-4380**. Or e-mail applications to:

moore@sb.fsu.edu

The Florida State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. U.S. citizenship or permanent residency is mandated by NSF. The review process will begin on January 15, 1999. For further information, please contact **Professor P. Fajer at (850) 644-2600 or fajer@magnet.fsu.edu**.

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Identify novel targets and assays for drug development which relate to mechanisms of angiogenesis. Candidates should have a Ph.D. and/or MD with 3-5 years of postdoctoral experience, good oral and written communication skills, and an outstanding record of publication.

Receptor Biology

Identify novel receptors and develop assays to analyze receptor binding and function, including reporter based systems. Interact with various disease groups to understand the role of these receptors in disease progression. Requires a Ph.D. and/or MD with 3-5 years of postdoctoral experience, good oral and written communication skills, and an outstanding record of publication.

In Vivo Tumor Biology/Pharmacology

Millennium Biotherapeutics is focused on identifying the function and therapeutic utility of a growing portfolio of novel proteins. We seek a highly motivated, independent scientist with a good publication record to be a key member of our interdisciplinary therapeutic protein drug development effort. Requires Ph.D. in the biological sciences, with at least 3-5 years of experience in pharmacology, physiology, anatomy, or a related discipline. Extensive expertise in conducting *in vivo* studies and the evaluation of the in-life phase of studies is essential.

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Finishing Coordinator

Coordinate the activities of a 7+ member finishing team responsible for sequencing assembly, editing and polishing tasks on projects ranging from cDNAs to large genomic clones, plus contribute to the design of software and automation systems. 4+ years of fluorescent sequencing/finishing experience and strong sequencing chemistry troubleshooting skills are required.

INFORMATION TECHNOLOGY

Senior Software Systems Developer -Cheminformatics

Provide cheminformatics applications support to groups within the Drug Discovery organization, with a principle focus on database integration, scientific data management, and integration of off-the-shelf cheminformatics soft-Requires BS/MS in Computer Science, Computer ware products. Engineering, or Software Engineering Training, plus experience with software system integration, C++, PERL, Oracle, UNIX, Shell programming and Web/CGI programming experience.

Principal/Senior Software Engineer-**Informatics** Applications

Design, develop and maintain applications in the Genetic Research Applications group which supports the Genotyping, Human Genetics, Mouse Models, Molecular Pathophysiology and MPMx groups. Requires BS/MS in Computer Science/Math, plus 5-8 years of experience with object-oriented design and implementation, relational databases, and project management.

Software Engineer

Visual Basic/SQL developer to work with state-of-the-art sequencing instrumentation in a Windows NT environment. Duties include design, development, and testing of application software with well thought-out user interface and robust error handling.

Senior Systems Engineer

Support desktop users and manage specific projects such as user moves, evaluation of hardware/software, desktop projects, systems evaluation for upgrade, etc. Requires multiple years of experience with a software develop-er or service provider, i.e., WANG, IBM, DIGITAL, plus an understanding of and real experience with Help Desk management, UNIX, server technology, as well as HTML, Seq., Sybase, etc.

UNIX/NT Engineer

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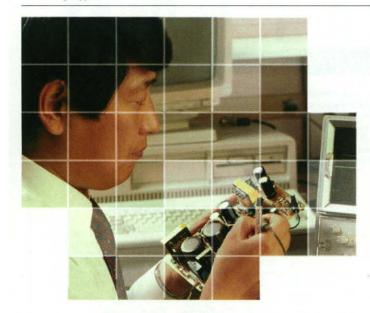
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growth is another factor that may sharpen competition for new employees, he noted. "Companies that do not position themselves with diversity programs like we have in place at Monsanto may have a rough time in terms of recruitment," Wiley added.

How have such efforts affected work force composition? "We've done a pretty good job," Wiley said. Women and minorities represent about 55 percent of Monsanto's total work force, and hold nearly 25 percent of the top 100 man-

agement jobs. During the last year, half of the individuals who moved to those top positions were female or members of minority groups. The success of minority employees in climbing the corporate ladder also reinforces recruitment efforts, Wiley noted. "Applicants see women and underrepresented minorities in top positions, and realize those career paths are open for them, as well."

Suppose that a new employee wants to get on the fast track, and advance to a management position as expeditiously as possible. What would Wiley advise?

"First, get recognized. The way to be recognized, to stand out among other employees, is by demonstrating strong, consistent

performance. It means making top-notch presentations, for example, and demonstrating that you have valuable ideas and can influence others to adopt them. It won't happen in a few months or even a year. I mean several years of consistently strong performance. Be patient and see how things unfold. Strong performance will lead to the second key element in job advancement—connecting with the right mentor."

Wiley believes that work forces in the science and technology industry will grow more diverse in the future, assuring job opportunities aplenty for highly qualified candidates.

Peter Lasky, Millipore Corporation: Growing Emphasis on Recruiting People from all Walks of Life

"Companies that embrace diversity are regarded as progressive, innovative, exciting places to work. Corporate America, including the biopharmaceutical industry, really has done so. It's not a fad or a trend anymore to have a work environment conducive to people from all walks of life. It's good business. It's the right thing to do, and it really brings the company the best and the brightest individuals."



Peter Lasky

Peter Lasky, director of human resources for Millipore Corporation, Bedford, Massachusetts, is positive about ongoing efforts at Millipore to recruit women and underrepresented minority workers. With facilities in many other countries in the world, Millipore draws on both domestic and international talent pools.

Millipore, for instance, has an active summer internship program that brings college students in the Boston area into its laboratories for hands-on experience. About half of last year's crop of interns were from underrepresented minority groups. The students do productive work. They also get acquainted with Millipore as a corporate entity, and may be inclined to return as full-time employees after completing their academic work.

The Millipore Foundation, a private nonprofit organization

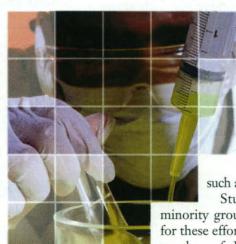
that oversees the firm's charitable and community activities, has a major role in efforts to increase the supply of wellqualified applicants from all walks of life. Its \$1.3 million in 1997 donations included minority scholarships, grants to colleges, and other efforts. In addition, Millipore supports national minority organizations,

such as the United Negro College Fund.

Students from underrepresented minority groups must, of course, reach college for these efforts to have an impact. Lasky cited a number of Millipore programs to get high

school students interested in science careers. They begin right in the Millipore neighborhood, with support for innercity and other charter high schools, and a program called SummerBridge, where inner-city students attend private schools during the summer to develop science skills.

Lasky feels that such programs need continued emphasis in the years ahead, as competition for well-qualified scientific and other personnel grows more keen. Already, companies that want to begin recruiting at some historically black colleges find themselves put on a waiting list, rather than in the college career center. The situation at minority-orient-





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CLINICAL SCHOLARS TRAINING PROGRAM IN BIOMEDICAL RESEARCH-Richard A. Rifkind, MD-Director

This program provides training for a select group of physicians who have completed their clinical training and demonstrate a commitment to careers in biomedical research. Training opportunities are available in molecular biology, cell biology, genetics, cellular biochemistry and biophysics, immunology and molecular pharmacology and therapeutics.

SURGICAL ONCOLOGY RESEARCH TRAINING

PROGRAM - Murray F. Brennan, MD - Director The program seeks to strengthen academic surgical oncology research by training surgical fellows in laboratory research related to biology of human cancer. Research opportunities include areas such as metabolism, neurophysiology, molecular biology, cell biology, immunology, immunopathology and genetics.

PSYCHIATRIC AND PSYCHOLOGICAL RESEARCH

TRAINING IN AIDS - Jimmie Holland, MD - Director This program seeks to train investigators to conduct research on the psychosocial adaptation and mental health of people infected by HIV and AIDS. This program draws upon faculty investigating psychiatric, neuropsychological, behavioral, cultural and social systems aspects of HIV/AIDS in diverse populations. Current investigations include trials of psychosocial and psychopharmacological interventions for infected individual and/or their families, research on adaptation to illness and end of life decisions, and large scale health services research projects examining the effects of advances in medical treatment and health care policy changes. Training provides fellows with grounding in clinical research issues through supervised independent research, seminars, rounds, and a visiting professors series.

PSYCHIATRIC AND PAIN RESEARCH TRAINING IN

CANCER - Jimmie Holland, MD - Director This program addresses the urgent need for a cadre of investigators with expertise in the supportive areas of pain, psycho-logical distress, supportive/palliative care, psychoneuroimmunology and behavioral medicine. The training program is open to psychologists and physicians with training in psychiatry, neurology, medicine and oncology. Research focuses on the psychiatric, neuro-psychological, behavioral, neuroimmunological and pain related (clinical and laboratory) aspects of patients with cancer. Curriculum includes didactic seminars, apprenticeship with clinical investigators in pain, psychiatry, psychology and neurology and supervised independent research.

HEAD AND NECK TRAINING PROGRAM - SURGICAL ONCOLOGY - Jatin Shah, MD - Director

This is a two-year program with dedicated clinical and research opportunities in head and neck oncology. A specific focus will be placed on cancer prevention and detection strategy for tobacco-induced cancer.

CANCER CHEMOTHERAPY TRAINING PROGRAM

George J. Bosl, MD and Dean F. Bajorin, MD - Co-Directors This program supports training of promising candidates for certification in Hematology and/or Medical Oncology for academic laboratory or clinical research careers in the treatment of neoplastic diseases. Available laboratory cancer research opportunities include molecular biology, genetics, cell biology, immunology, cellular biochemistry, and molecular pharmacology related to cancer. Clinical research training encompasses phase I, II and III trials of chemotherapy and immunologic agents, pharmacology and pharmacokinetics, correlative studies with molecular markers, and combined modality trials with medical, surgical, and radiation components.

IMMUNOLOGY RESEARCH TRAINING PROGRAM Alan Houghton, MD - Director

The program offers training in areas of modern immunology. These include T cell development and selection, decisions about life and death of lymphocytes, signals involved in lymphocyte activation and inhibition, new lipid-based signaling pathways and human immunogenetics. The program also has strong efforts in cancer immunology with an emphasis on understanding immunity and immune tolerance to cancer antigens and development of new therapies.

TRAINING PROGRAM IN MOLECULAR PATHOLOGY

OF HUMAN CANCER - Juan Rosai, MD - Director This two-year program aims to position pathologists committed to a career in biomedical research. Active areas include control of cell growth, receptor biology, molecular neuro-oncology and applied investigations on oncogenes and tumor suppressor genes.

TRAINING IN RADIATION ONCOLOGY SCIENCES

Zvi Fuks, MD and C. Clifton Ling, PhD - Co-Directors The program's objective is to promote development of full-time academic careers integrating clinical, biological and physical investigations with clinical radiation oncology. For radiation oncologists, this program will provide a two-year research rotation; for PhD biological scientists, the two-year training will be laboratory-based with interface to clinical oncology; medical physics trainees will participate in radiotherapy research for two years.

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Behavioral Neuroscience

We seek individuals interested in investigating CNS disease mechanisms for the discovery of new molecular targets and for the characterization of potential novel therapeutics to treat neuropathic pain, depression, anxiety, epilepsy and neurodegenerative disorders. These individuals will conduct *in vivo* and *in vitro* efficacy, lead finding and mechanism-ofaction studies to identify compounds with potential as novel medicines. Applicants should possess research training in behavioral neuroscience coupled with abilities in neuropharmacological, neurochemical, neuroanatomical techniques. Individuals experienced in establishing animal models of central or peripheral mechanisms of neuronal sensitization are preferred. Experience with electrophysiological, molecular biology, or surgical techniques is beneficial. **Code: SD-CNS1**

Pain Research

We seek scientists with experience investigating peripheral or central mechanisms of neuronal sensitization. This position will be pivotal in leading our discovery of new molecular targets, and characterization of potential novel therapeutics to treat pain disorders. Research experience in behavioral, physiological or electrophysiological methods in pain research, coupled with a neuropharmacological, neurochemical, and/or neuroanatomical background is sought. The ability to effectively interface with genomic/molecular biological/ chemistry teams is a critical facet of this position. Code: SD-CNS2

Obesity Research

We are expanding our research and drug discovery efforts in the area of central mechanisms of appetite and satiety. Individuals experienced in the neurochemical, neuroanatomical, molecular biological or metabolic aspects of CNS feeding control are sought. Experience in both basic research and drug discovery would be beneficial. **Code: SD-CNS3**

Neurochemistry

We seek individuals with experience in the *in vivo* pharmacology and neurochemistry of neurotransmitter systems. Rodent surgery and microdialysis for the analysis of neurotransmitter release will be required aspects of these positions, which will support multiple therapeutic projects. Additional training in functional brain imaging, molecular biology, receptor pharmacology or neuroanatomy/physiology is also required. Code: SD-CNS4

Molecular Pharmacology

We seek individuals with research experience investigating the G protein-coupled receptor cycle and the molecular pharmacology of these receptor systems. Investigators should be experienced in receptor binding assays, second messenger assays and in the characterization of transfected receptor systems. Familiarity with both theoretical pharmacology and molecular aspects of receptor function would be ideal. This position will be a pivotal resource in our efforts to discover new molecular targets, and to generate novel therapeutics to treat a number of CNS disorders including anxiety, depression, schizophrenia, neuropathic pain, and Alzheimer's Disease. Code: SD-CNS5

Associate/Staff Scientist

The ideal candidate must use cell culture, molecular biological and biochemical techniques, and work as part of a team, to support drug discovery in the area of Central Nervous System Disorders. Applicants must possess a BS/MS with a minimum of two years relevant experience. Code: SD-AR

Associate/Staff Scientist

The ideal candidate must have experience in receptor binding, autoradiography, in situ hybridization, and immunohistochemistry. Excellent oral and written communication skills are required. BS/MS or equivalent with a minimum of 2-3 years experience in academic or industrial lab is required. **Code: SD-MS1**

Associate/Staff Scientist

The ideal candidate must have experience with chromatographic techniques, microdialysis and small animal surgery is desired. BS/MS in life science s or related discipline with a minimum of 2-3 years experience in an academic or industrial lab is required. Code: SD-MS2

Positions containing CNS in the code have responsibilities which include interpretation and communication of findings through written and verbal reports, maintenance of detailed research records, preparation of publications, and for senior candidates, supervision of associates. The ability to contribute effectively within a team-oriented environment is essential. Please indicate your area of interest in your application letter, which should include your curriculum vitae and the names of three references.

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ed career fairs also has grown more competitive, he added.

What gives one biopharma an edge over another in recruiting a highly qualified scientist from an underrepresented minority group?

"When people from diverse backgrounds come for an interview, they want to see real-world evidence that the company supports diversity," Lasky said. "They want to see people from diverse backgrounds already working there, and in upper-level positions. If almost everyone on the interview schedule is a white male, then that tells the minority candidate a lot about the company. Recruiters should make sure that minority employees are an integral part of the interview process." Retaining and advancing minority and female employees also gets emphasis, Lasky noted. That means maintaining a work environment that welcomes people from diverse backgrounds. Millipore has a cultural diversity committee that serves as a focus for employee suggestions on maintaining a positive environment. The committee's recommendations go directly to upper management, Lasky noted. He is proud that *Working Mother* magazine listed Millipore among the 100 best places to work in 1998 for the third straight year. Informal mentoring programs also help in retaining and advancing employees from diverse backgrounds, he noted. \blacksquare

A Human Resources–Science Dialogue on Diversity: Al Lichtenstein and William Munger, Ph.D., GeneLogic, Inc.

GeneLogic, Inc., in Gaithersburg, Maryland, uses genomic analysis to provide new drug targets to pharmaceutical companies. In the less than 2.5 years since its organization, GeneLogic has received two key patents on differential display, a widely used genomics technology. It also has embraced work force diversity as a core corporate value since its very inception. We asked a GeneLogic scientist and a human resources professional to comment on diversity from their own perspective. Here are excerpts from a dialog with William Munger, scientific director of the renal program, and Al Lichtenstein, vice president of human resources and administration.

Munger (M): Ethnic, cultural, and gender diversity in the work force is important for a number of reasons. From a research standpoint, I know that it means scientific diversity, and helps us arrive at new ideas and approaches to keep our technology hot. People with different ethnic backgrounds, life experiences, and insights bring different approaches to problem solving.

Lichtenstein (L): From a corporate standpoint, it promotes a diversity of ideas and helps create a more challenging and productive environment. Nobody wants the cookie-cutter approach in which every scientist thinks in the same way. There's a very healthy skepticism in which people question existing approaches, and make sure that we're using the best possible technology and most effective procedures.

M: We've never had a formal program for recruiting people from specific backgrounds. Our objective always has been to hire individuals with scientific skill sets that best fit with the company's research goals. It works very well here because we already have a diverse work force and strong employee referral program. Employees receive a bonus if someone they refer for a job opening is hired.

L: GeneLogic benefitted greatly by starting out with a diverse employee base when the company was just beginning. We operate based upon an overall philosophy of hiring the best qualified person and having a workplace environment that treats everyone with respect. Once a company forms this critical mass, recruiting individuals from diverse backgrounds gets a little easier. Minorities and females see the composition of our work force, and recognize that they won't be the token representative from a certain background who has to be a trail-blazer. Since we already have the role models, that helps to perpetuate diversity. **M**: In a laboratory environment, we try to work actively to promote an awareness/sensitivity among team members that honors and values diversity because this is necessary for effective teamwork. Scientists set goals and objectives, establish a time line, and work together to achieve objectives in a timely fashion. You try to separate any peripheral issues that might interfere with that process. This is one of the most culturally diverse companies in my experience, and we demonstrate daily that with teams of highly qualified individuals, gender and ethnicity disappear into the background. We're scientists using our training to solve problems.

L: When I look at our population, I feel good about the level of diversity we've been able to achieve in the infancy of this company. Approximately half of our professional staff is composed of minorities and females. Competition for highly qualified women and minority scientists with skills in bioinformatics and genomics is intense. Fortunately I think this solid foundation will help us continue to maintain a qualified and diverse work force in the future.

M: Biotechnology is an intensely competitive industry, and the work force is inherently diverse from a cultural, ethnic, and gender standpoint. Companies must be aware of differences that can arise among employees, and address them effectively so that research moves ahead.

L: The the bottom line is work forces are growing more diverse. In the biopharmaceutical world of the 21st century, companies will have many more employees from around the world working together in the same facility. How well will they interface with each other? How will companies manage diversity issues that arise? To be competitive, companies must find the right answers to their diversity issues. Visit our web site and access the latest information on research and training opportunities at the National Institutes of Health



Student Training Programs

College

• Summer Internship Program in Biomedical Research

Postbaccalaureate

- Postbaccalaureate Intramural Research Training Award (IRTA) for recent college graduates who plan to apply for graduate or medical school
- Technical IRTA for individuals with a bachelor's or master's degree who aspire to careers as research support professionals

Graduate

- Summer Internship Program in Biomedical Research
- Predoctoral IRTA for students in doctoral programs
- Interim or Year-Off IRTA for graduate students who desire an interim or year-off research experience
- NIH/George Washington University Graduate Program in Genetics
- NIH/University of Maryland Predoctoral Visiting Fellow program
- Technical IRTA for individuals with a bachelor's or master's degree who aspire to careers as research support professionals

Medical and Dental School

- Summer Research Fellowship Program for first and second year medical and dental students
- Clinical Electives Program clinical rotations for third and fourth year medical and dental students
- Interim or Year-Off IRTA for medical students who desire an interim or year-off research experience
- Clinical Research Training Program for fourth year medical and dental students

Postdoctoral Fellows Program

The focus of this program is on biomedical laboratory research. It is designed to provide advanced research training to doctoral level scientists who are at the beginning stages of their research careers.

Clinical Fellows Program

This program allows physicians and dentists the opportunity to combine subspecialty and advanced residency training with biomedical research training in a variety of disciplines. The first year is spent engaged in clinical rotations on wards at the NIH. Certain subspecialty programs utilize clinical opportunities at affiliated hospitals in the Washington, D.C. area. In the second and optional third year, the fellow is trained in basic and clinical research and subspecialty training requirements are completed as appropriate.

Tenure-Track Program

The Tenure -Track program is intended to provide a uniform and equitable mechanism for identifying and promoting outstanding scientists to the ranks of permanent intramural researchers at the NIH. The goal of the program is to provide the necessary resources and encouragement to tenure-track scientists, thus providing them an opportunity to demonstrate their creativity and productivity as independent investigators.

National Institutes of Health

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Research Biologist

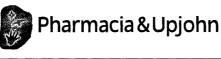
Pharmacia & Upjohn Animal Health has a position for a Research Biologist. This position functions as part of a multidisciplinary team devoted to targeted discovery of novel anthelmintics. The successful candidate will contribute research in diverse areas of invertebrate pharmacology, including design and performance of neuromuscular and cell membrane-level physiological assays; development and implementation of ligandreceptor binding assays; electrophysiological analysis of heterologous receptors expressed in Xenopus laevis ooctyes; and molecular biological efforts for cloning genes.

Qualifications include a BSc or MSc degree in a biological discipline relevant to the work described above; demonstrated accomplishments in neuromuscular physiology and/or pharmacology; and a working knowledge of protocols in receptor biology, including molecular techniques.

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 us provide. For confidential consideration, please send your resume to: Pharmacia & Upjohn, Ad# 980528, Recruiting, 5045-88-81, 7000 Portage Road, Kalamazoo, MI 49001. Or you

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POSTDOCTORAL FELLOWSHIPS at the WOODS HOLE OCEANOGRAPHIC INSTITUTION

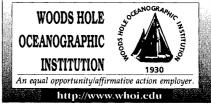
Applied Ocean Physics & Engineering **Biology, Marine Chemistry & Geochemistry** Marine Geology & Geophysics **Physical Oceanography**

Applications are invited from new or recent doctorates in the fields of biology, molecular biology, microbiology, chemistry, engineering, geology, geophysics, mathematics, meteorology and physics, as well as oceanography. Recipients of awards are selected on a competitive basis, with primary emphasis placed on research promise

Fellowships are awarded for 18 month appointments with a stipend of \$42,000 per year, a modest research budget and eligibility for group health insurance. Recipients are encouraged to pursue their own research interest in association with resident staff. Completed applications must be received by January 15, 1999 for the 1999-2000 awards. Awards will be announced in March. Write for application forms to:

Dean of Graduate Studies, Education Office, MS #31 Woods Hole Oceanographic Institution Woods Hole, MA 02543-1541

Or call (508) 289-2219 or e-mail education@whoi.edu



Director, The Cancer **Institute of Long Island**

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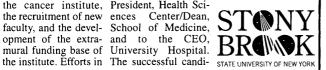
The Director will lead The University Hos- Interested candidates a major interdiscipli- pital and Medical nary effort in basic and clinical research research and teaching, Meek, M.D., Chair, and in clinical cancer tertiary-care medical Cancer Institute of care, and will develop center. It is a signifi- Long Island Search a cancer research and cant component of the Committee, Office of care network on Long Island. This initiative Stony Brook, a leading Health Sciences Center, includes newly-created research-intensive, research and clinical publicly funded instispace, faculty positions, core faculty recently recognized as support, and a competitive recruitment American public instipackage. The Director tutions for faculty will be responsible for research. The director ly will be maintained the administration of reports to the Vice AA/EOE the cancer institute, President, Health Scithe recruitment of new ences Center/Dean, faculty, and the development of the extra- and to the CEO, mural funding base of University Hospital.

The State University fundraising, commu- date is required to of New York at Stony nity relations with hold a M.D. or a affiliated institutions, M.D./Ph.D. degree, tions or nominations cancer specialists, and and will qualify for a for the position of the lay public will be tenure faculty appoint-Director of the Cancer the responsibility of ment within an acade Institute of Long the Director and the mic department in the Cancer Institute staff.

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School of Medicine.

should send their curriculum vita to: Allen the Vice President, SUNY at Stony Brook, Stony Brook, New 11794-8430. Review of applicawill commence on 1/15/99. Confidential-





DIRECTOR AND ENDOWED PROFESSOR, CENTER FOR HUMAN AND MOLECULAR GENETICS

The Medical College of Wisconsin, located on the campus of the Milwaukee Regional Medical Center, is expanding research in functional genetics. We are recruiting a senior investigator to provide leadership and direction to these efforts as the Genetics Center Director. Candidates may have varied research backgrounds and expertise, but must have an active, funded research program and the ability to foster scientific growth and collaboration between clinical and basic science disciplines.

The Director will hold the Warren Knowles Endowed Professorship and play a pivotal role in expanding genetics research through recruitment of new faculty. Newly constructed dedicated research facilities, including modern core facilities, and a generous program development package have been committed.

Review of applications will begin immediately. Please send a letter of interest and a current CV to:

Allen Cowley Jr., Ph.D. Chair, Genetics Search Committee **Department of Physiology** Medical College of Wisconsin 8701 Watertown Plank Road Milwaukee, WI 53226-0509

The Medical College of Wisconsin encourages applications from women and minority candidates. Equal Opportunity / Affirmative Action Employer M/F/D/V

Biogen has established a unique record of success as one of the world's premier biotechnology companies. Pioneering research by our scientists has led to the introduction of several important new medical therapies, including AVONEX® (Interferon beta-1a), the most prescribed therapy in the U.S. for relapsing forms of multiple sclerosis. We are staking our future growth on the development of our next generation of pharmaceutical products, five of which are currently being tested in human clinical trials. Today, we are seeking the following committed professionals to join our expanding team in Cambridge.

M BIOTECHNOLOGY

MANAGER, DEVELOPMENT

This is a senior scientific position responsible for the design, conduct, reporting and management of IND, BLA and NDA enabling programs. Position is responsible for all scientific issues related to preclinical and clinical ADME, toxicology, pathology, biopharmaceutics and associated product development strategies. Position requires a minimum of 7 - 10 years of relevant experience in the biopharmaceutical industry with direct involvement and responsibilities in the development of small molecules and biotechnology-derived products. A Ph.D., specific expertise in toxicology, pharmacology, or pharmacokinetics, and a strong publication record is required. The ability to perform independently and collaboratively in a matrix environment is essential for a successful candidate. Prior experience working with inter-disciplinary project teams and with CROs is essential. Code: JTMD

ANALYST, VIROLOGY

As a dynamic member of a newly formed group, you will have responsibility for performing GLP compliant viral clearance studies, validating and performing cellular-based virus assays and overseeing growth and testing of virus stocks. Essential skills include a strong background in cellular-based virology, BS/MS in Biological Science or related field and five years of directly related laboratory experience. Working familiarity within a cGMP/GLP environment is preferred. **Code: TLJS215**

BIDASSAY ANALYST

As a key member of our team, you will perform bioassays and immunoassays to analyze release, stability, and clinical trial samples. Specific responsibilities include assay troubleshooting, assay validation and transfer, providing training and guidance to junior analysts, writing protocols and reports. Position requires GMP compliance and detailed documentation skills. You must have a BS or MS in Biological Sciences, and possess experience in cell culture, aseptic technique, ELISA, bioassays, and PC-based data analysis. Position requires 5 years' relevant laboratory experience in the pharmaceutical or biotechnology industries. Code: TLLP139

Scientist High Throughput Screening Automated Data Specialist

This position requires developing software components for the control of scientific instruments and laboratory robotics, automated data analysis tools, and database development. Familiarity with laboratory processes and data generated by an automated laboratory is required. Programming fundamentals and relational database systems is preferred.

Qualified candidates will possess a BS/BA or MS/MA degree(s) in Chemistry, Biochemistry, or Engineering, and have 2-3 years' experience in a high throughput drug screening environment. Working knowledge of Excel macros, Access, Visual Basic, HTML, NT and Oracle is required. Familiarity with RS3, CSAP, and TCP/IP networking is desirable. Strong verbal and written communications skills and the ability to work with scientists in multidisciplinary teams are essential. Code: RC-SCI-AUT

SCIENTIST HIGH THROUGHPUT SCREENING ASSAY DEVELOPMENT

This position requires conduct of HTS assay technologies that include fluorescence detection, SPA, ELISA, assay miniaturization, and liquid handling robotics programming. Responsibilities will include electrical and mechanical aspects of robotic operations and implementation of the HTS assays.

Qualified candidates will possess a BS/BA or MS/MA degree(s) in Chemistry, Biochemistry, or Engineering, and have 2-3 years' experience in a high throughput drug screening environment. Preference will be given those candidates with excellent computer and mechanical skills. Experience with Beckman/Sagian hardware and software is desired. Code: RC-SCI-AD

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St. Jude Children's Research Hospital, a premier research center for biomedical research. offers postdoctoral fellowship opportunities available in the basic and clinical sciences. Recent M.D., Ph.D., D.V.M., or Pharm D. fellows are eligible to train with leading scientists in several basic biomedical research laboratories, including biochemistry, biostatistics, developmental neurobiology, experimental oncology, experimental hematology, genetics, immunology, molecular therapeutics, molecular pharmacology, structural biology, genetacy, cell biology, and virology and molecular biology. Additional opportunities are also available in the clinical sciences, including infectious diseases, hematology/oncology, pharmaceutical sciences, pathology and laboratory medicine, radiation oncology, surgery, and diagnostic imaging. An interdisciplinary effort in cell and gene therapy is orgoing. SJCRH currently has 200 postdoctoral fellows funded from peer-reviewed grants, outside fellowships and institutional sources. Stipends are highly competitive.

Qualified candidates send a completed application [for application materials, please visit our website at, www.stjude.org see Research and Science: Education and Training, or contact the office below for a brochure], a curriculum vitae, a brief description of research interests and three letters of reference to:

Office of Academic Programs St. Jude Children's Research Hospital 332 North Lauderdale Street, Memphis, TN 38105-2794 Tel: (901) 495-2750; Fax: (901) 525-2720 AA/EOE

BROWN UNIVERSITY

MOLECULAR PHARMACOLOGIST/ PHYSIOLOGIST

A position is open at the rank of Assistant Professor (tenure-track) or Associate Professor (tenured) for an innovative individual with research interests in signal transduction or in structure-function relations of drug targets such as cell surface receptors and ion channels. Applicants should have an M.D., Ph.D., or equivalent degree, at least two years of postdoctoral training, and the potential or demonstrated ability to develop an independent, externally funded research program. General teaching responsibilities include pharmacology instruction for medical students, as well as participation in undergraduate and graduate education. Opportunities exist for interactions with a wide range of excellent faculty throughout the University. The appointment will begin on or after July 1, 1999. Applications received by January 31, 1999, will receive full consideration. Applicants should submit a résumé including research and teaching experience, future research plans, and a list of publications; enclose representative reprints; and have three letters of reference sent to Dr. Edward Hawrot, Chairman, Department of Molecular Pharmacology, Physiology, and Biotechnology, Box G-B3, Division of Biology and Medicine, Brown University, Providence, RI 02912. Applicants for a tenured position need not provide the three letters of reference with the application but should be prepared to provide the names of five references if requested.

We encourage women and minority candidates. Brown University is an Equal Opportunity / Affirmative Action Employer.



FACULTY POSITIONS

ALBERT EINSTEIN COLLEGE OF MEDICINE (AECOM) DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

This department has faculty positions available on a tenure track for innovative investigators studying all aspects of immunology and the molecular pathogenesis of infectious organisms. Candidates can be at the beginning of their independent careers or more advanced in their academic pursuits. The Department has NIH Training Grants available to support pre- and postdoctoral students including MSTP students studying toward both the Ph.D. and M.D. degrees. AECOM provides core facilities including nucleic acid synthesis and sequencing, ultrastructure analysis, production of transgenic and knockout mice, generation of monoclonal antibodies, FACS analysis, peptide synthesis and sequencing, and mass spectroscopy. There is a P3 facility available for handling infectious agents. Interested scientists should send a curriculum vitae, bibliography, a statement of research interests, and the names of three references to Ms. Georgia Veroutis, Department of Microbiology and Immunology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. AECOM is located in a pleasant residential section of the Northeast Bronx in close proximity to Westchester County and all the cultural activity of Manhattan.

ALBANY MEDICAL COLLEGE TENURE-TRACK FACULTY POSITIONS IN VASCULAR BIOLOGY

The Vascular Biology Interdisciplinary Research Group at the Albany Medical College seeks applications for three tenure-track positions at the rank of Assistant Professor. Candidates should have demonstrated research productivity and the capability of establishing an independent nationally funded research program in a cardiovascular-related field. Highly qualified scientists with established extramurally funded research programs may also be considered at a higher rank. Individuals with research interests in cardiovascular development or vascular smooth muscle cell growth, differentitation, or motility are encouraged to apply. Successful applicants will be appointed in an appropriate basic science department and will be expected to participate in teaching activities within the graduate program and medical school.

Organization and expansion of the Vascular Biology Research faculty are part of a larger Strategic Research Plan initiated in 1996 by the Albany Medical College Board of Directors to develop and promote biomedical research and graduate student training within four thematic areas. A generous start-up package, recently renovated research space, and access to Molecular Biology, Protein Chemistry, Flow Cytometry, and Imaging Core Facilities will be available to the successful applicant. Opportunities for collaboration with members of the Cell and Molecular Biology Theme, Molecular Basis of Disease Theme, and Neuropharmacology and Neuroscience Theme, and with scientists at the New York State Wadsworth Laboratories, SUNY Albany, and Rensselaer Polytechnic Institute provide a diverse and fertile research environment.

Applicants should send a letter of application indicating their research interests and plans, a curriculum vitae, and the names and addresses of three references by January 15, 1999, to:

Dr. Harold A. Singer Director, Vascular Biology Research Group **Albany Medical College** 47 New Scotland Avenue (MC-8) Albany, NY 12208 An Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

HEAD, HIV Drug Resistance Core Laboratory

HIV Drug Resistance

The National Cancer Institute (NCI) is initiating an interdisciplinary program aimed at a fundamental understanding of HIV drug resistance. This new program, under the direction of Dr. John Coffin will bring world-leading investigators conducting basic and clinical research to the NCI in order to create a unique center for increasing our understanding of the crucial problem of development of drug resistance by HIV. This program will draw upon existing, world-class retrovirus research being conducted at the NIH and add a new cohesive dimension of high clinical significance. The Program in HIV Drug Resistance will include several dimensions including:

- (a) Basic understanding of the molecular biology and biochemistry of viral replication and interaction with infected cells, with an emphasis on mutational mechanisms for development of resistance and how mutant viruses arise and persist in the infected organism
- (b) Structural studies of viral proteins and muteins which confer resistance to particular classes of drugs
- (c) Clinical research on the types of drug resistance which evolve and the development of effective treatment strategies
- (d) Computational model development for the generation, survival, and transmission of drug-resistant viral mutants and their spread in the human epidemic

The Core Laboratory, which will be operated for the NCI by Science Applications International Corporation (SAIC) under the OTS contract at the Frederick Cancer Research and Development Center (Frederick, Maryland), is regarded as a key resource in support of the principal laboratories in the program. It will have the following capabilities:

- · Containment facilities for isolation and manipulation of clinical and other HIV isolates
- PCR amplification, and quantitation of particular HIV types; complemented by a high-throughput sequencing capability and other techniques for viral genotyping
- FACS instrumentation for analysis of infected cell types and other functions
- Computational facilities to support the viral genotyping and molecular, population, and genetic modeling studies; bioinformatics to create relational databases for analysis

Head, HIV Drug Resistance Core Laboratory

We are looking for a seasoned investigator with demonstrated research accomplishments in the area of genetic analysis at the nucleotide level, preferably in viruses. The individual should have a sound understanding of genomic data management to make an informational database of genetic types readily available for analysis by the research laboratories. Understanding of bioinformatics is highly desired since relational databases will be a key component of tracking particular mutations as a function of drug regimen, clinical information, and various types of basic research findings.

The position requires a person who can interact, communicate, and collaborate at a high scientific standard with laboratory heads in the Program. It requires the managerial skill to hire and supervise several excellent staff specializing in diverse aspects of the core laboratory functions. We are seeking an individual with a PhD degree or equivalent, with considerable postdoctoral experience in the areas of molecular biology or genetics, including work at the nucleic acid level. Demonstrated ability to supervise technical staff is important. Applicant should be resourceful in seeking out other core facilities offering technologies that would support the core laboratory effort. The ability to stay abreast of new approaches which would augment the performance of the laboratory is crucial. This position represents a unique challenge for a bright individual who aspires to playing a key role in a program likely to gain worldwide recognition, and which can contribute mightily to our understanding of HIV and therapeutic approaches to conquer the disease. Science Applications International Corporation (SAIC) is a science-intensive international company specializing in a number of high technology fields.

We are a contemporary biotechnology organization dedicated to the development of knowledge and tools for the diagnosis, treatment, and prevention of human cancer and AIDS. The working environment provided by SAIC, NCI-FCRDC is a campuslike setting in scenic Frederick, Maryland, near Baltimore and Washington, DC. SAIC offers a salary commensurate with credentials and an attractive fringe benefits program, including a 401(k) savings plan, stock purchase plans, and relocation assistance. For consideration, please send resume, references, publications list, and salary requirements, on behalf of the Search Committee, to: **SAIC Frederick**, ATTN: Ms. Barbara Norton-Gill, NCI-FCRDC, P.O. Box B, Frederick, MD 21702; e-mail.ncifcrf.gov

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TWO FACULTY POSITIONS ECOLOGY AND EVOLUTIONARY BIOLOGY UNIVERSITY OF KANSAS

Fungal Biologist: Assistant/Associate Professor. Required qualifications: 1) Ph.D. in appropriate discipline that provides a strong background in the biological sciences, 2) an active research program in one or more areas of whole-organism fungal biology (e.g., biodiversity, ecology [especially inter-organism interactions], physiology, systematics, or development), 3) ability to teach a comprehensive, general mycology course and other courses including general biology as well as seminars in areas of expertise.

Plant Community Ecologist: Assistant Professor. Required qualifications: 1) Ph.D. in appropriate discipline (to be completed by time of hiring), 2) an active research program in plant community ecology, 3) ability to teach courses in plant ecology, principles of ecology, and areas of expertise. Preference will be given to individuals with an interest in developing links between plant community ecology and other areas in the biological sciences, demonstrable quantitative skills, and empirical research experience focused on terrestrial systems.

Candidates for both positions must be committed to excellence in teaching and mentoring at undergraduate and graduate levels, able to interact with colleagues in related disciplines, and willing to contribute to the overall service of the University. Preference will be given to individuals with postdoctoral experience, demonstrated teaching ability and experience, and the ability to attract external funding. Positions are 9-month appointments beginning August 18, 1999, have salaries commensurate with experience, and are contingent upon budgetary approval.

Review for both positions will begin 18 December 1998 and will continue until they are filled. Application materials include 1) curriculum vitae; 2) concise statements of (a) research interests and future directions, and (b) teaching philosophy, experience, and interests, to include description(s) of course(s) the applicant hopes to teach; 3) copies of selected publications and/or manuscripts; 4) Letters of reference from at least three persons to be submitted to: Christopher Haufler, Chair, Fungal Biologist Search Committee, Voice: 785-864-3255; e-mail: vulgare@ukans.edu OR Helen Alexander, Chair, Plant Community Ecologist Search Committee, Voice: 785-864-3221; e-mail: h-alexander@ukans.edu, Department of Ecology and Evolutionary Biology, Haworth Hall, University of Kansas, Lawrence, KS 66045-2106, FAX: 785-864-5321, URL: http://www.ukans.edu/~eeb. EO/AA Employer.

PURDUE UNIVERSITY FACULTY POSITION IN CANCER RESEARCH

The Department of Medicinal Chemistry and Molecular Pharmacology, in conjunction with the Purdue University Cancer Research Center and with support from the Walther Cancer Institute, invites applications from outstanding investigators for a tenure-track position at the level of ASSISTANT, ASSOCIATE, or FULL PROFESSOR. This search represents part of an extensive, campus-wide expansion in basic cancer research programs at Purdue. The successful candidate will have established or will demonstrate the potential to establish a strong, extramurally funded research program focusing on the cancer problem at the molecular level. The candidate will participate in one of three program areas of the NCI-designated Purdue Cancer Center (http://www.pharmacy. purdue.edu/~center/): Cell Growth and Differentiation, Experimental Therapeutics and Diagnostics, or Structural Biology. The Department of Medicinal Chemistry and Molecular Pharmacology (http:// www.pharmacy.purdue.edu/mcmp/mcmpdept. html) offers a vigorous research environment with first-rate analytical instrumentation. The candidate will have the opportunity to participate in excellent undergraduate and graduate educational and training programs. Minority and women scientists are especially encouraged to apply. Applicants should submit a curriculum vitae, a detailed description of research plans, and the names and addresses of three references to: Professor Robert L. Geahlen; Chair, Faculty Search Committee; Department of Medicinal Chemistry and Molecular Pharmacology; Hansen Life Sciences Research Building; Purdue University; West Lafayette, IN 47907. Review of candidates will begin on December 1, 1998, and continue until the position is filled. Purdue University is an Equal Opportunity / Equal Access Employer.

Department of Biology

FOX CHASE CANCERCENTER **POSTDOCTORAL POSITIONS** Postdoctoral positions are available on our NIH training grants.* The training programs include: **Biomolecular Structure and Function**

Cellular and Developmental Biology Immunology Molecular and Genetic Epidemiology Molecular Oncology Pharmacology Virology

To obtain detailed information about research activities of our faculty visit our website: http://www.fccc.edu/programs/postdoc.html

Interested candidates should send a CV and a brief statement describing research interests to:

Postdoctoral Program c/o Dr. Christoph Seeger Fox Chase Cancer Center 7701 Burholme Avenue Philadelphia, PA 19111

*Applicants must qualify under the NIH guidelines which include US citizenship or permanent residency.

Fox Chase Cancer Center is an Equal Opportunity Employer



QUANTITATIVE ECOLOGIST AND BEHAVIOURIAL PHYSIOLOGIST

The Department of Biology of the University of Waterloo invites applications for a Quantitative Ecologist (tenure track) and a Behaviourial Physiologist (definite term-5 years) at the ASSISTANT PROFESSOR level. Applicants should have a Ph.D. and postdoctoral experience, and be prepared both to establish an independent research program and to collaborate with the newly established <u>NSERC Industrial Research Chair in Biotelemetry</u>.

For the **Quantitative Ecologist**, the ideal applicant will have an established publication record in the field of environmental and ecological modeling, a familiarity with applied statistical methods, and a strong commitment to interdisciplinary research. Duties will include teaching at the undergraduate and graduate level and graduate student supervision.

For the **Behaviourial Physiologist**, the ideal applicant will have an established publication record in the field of fish behaviour, a familiarity with environmental physiology and quantitative ethology, and a strong commitment to interdisciplinary research. Duties will include teaching at the undergraduate and graduate level, and graduate student supervision.

Salary will be commensurate with qualifications and experience. Applicants should send their curriculum vitae, the names of three individuals willing to furnish letters of reference, and an outline (1-2 pages) of their proposed research program to: Dr. William D. Taylor, Professor and Chair, Department of Biology, Faculty of Science, University of Waterloo, Waterloo, Ontario N2L 3G1 Canada. The closing date for applications is December 31, 1998.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disability. These appointments are subject to the availability of funds. Additional information on the Department, the positions, and the Waterloo Biotelemetry Institute is available at: http://www.science.uwaterloo.ca/ biology/biology.html and http://www.science.uwaterloo.ca/research_ groups/wbi/pages.

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We are seeking individuals with experience in several therapeutic areas including Cancer, Cardiovascular, Endocrine, Infectious Diseases, Neuroscience, as well as in Research Technologies and Proteins, Toxicology and Drug Disposition. Successful candidates will have a Ph.D. with cross-functional expertise in the following disciplines - Molecular Biology, Biochemistry, Cell Biology, Receptor Biology, Bioinformatics, Molecular Pharmacology (experience in cytotoxic anti-tumor agents desired), and/or Toxicology. Lilly provides an excellent training ground for Postdoctoral scientists to develop innovative strategies for drug discovery.

As a recipient of the 1998 U.S. Department of Labor EVE award, Lilly has proven dedication to developing strength in the workplace through diversity.



For confidential consideration, please send your resume and cover letter indicating the position of interest to: Eli Lilly and Company, ADSCMPD11, DC 1818, Lilly Corporate Center, Indianapolis, IN 46285.



Careers@Lilly We are an equal opportunity employer.

Merck Research Laboratories, a world leader in biological and pharmaceutical research, has the following opportunity available in the Department of Infectious Diseases in our Rahway, New Jersey facility.

STDOCTORAL SEARC

A 2-year postdoctoral position is immediately available in the Department of Infectious Diseases. The selected individual will study emerging antibiotic resistant organisms. The research interest will be in the patterns of resistance dissemination and the molecular mechanisms of resistance. Particular attention will be paid to extended spectrum B-lactamases (ESBLs). Applicants should be competent molecular biologists with an interest in clinical microbiology. Experience in genetic manipulation in any of the following organisms would be highly desirable: Esherichia coli, Staphylococcus aureus, Streptoccus pneumoniae, Klebsiella pneumoniae and/or Heamophilus influenza.

Merck offers a competitive salary, an excellent benefits package, opportunities for professional growth and pleasant working conditions at our Rahway, NJ facility approximately 25 miles from New York City. For consideration, send your resume with cover letter to Merck Research Laboratories, P.O. Box 2000, AD #77, R80-A3, Rahway, NJ 07065. EEO/AA/VH/Employer.





at the

National

of Health

Tenure-Track Position in the Molecular Mechanism of Disease National Human Genome Research Institute (NHGRI)

into the Future.

National Institutes of Health (NIH) The intramural program of the National Human Genome Research Institute (NHGRI), the National Institutes of Health (NIH) in Bethesda, Maryland, has an opening for a tenuretrack scientist to direct an independent research program in genetic studies of disease or development. The successful applicant will become a member of the Genetic Disease Research Branch (GDRB) and will be provided the space and Institute resources needed to pursue a vigorous research program including access to clinical research within the NIH Clinical Center and to core facilities for transgenic and knock-out mice, FACS, confocal microscopy, and genomic mapping and sequencing technology. We are particularly interested in scientists who can take a multidisciplinary approach to the study of genetic disease mechanisms in humans and/or model systems.

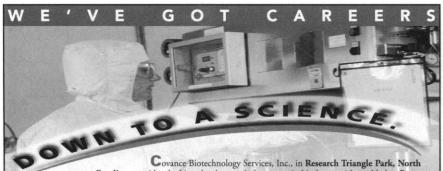
> Candidates must have a Ph.D. and/or M.D. or V.M.D. as well as advanced training in developmental genetics, embryology, and cell biology. We are seeking to recruit an individual who is ready to pursue an independent research program that combines several of these areas, taking advantage of interactions with the members of the GDRB working in the areas of developmental biology, cell biology, and neuroscience and with scientists within the NHGRI and the NIH campus as a whole.

Competitive salary and benefit packages are available. Please forward curriculum vitae and three references to: Institutes

> Leslie Biesecker, M.D. NHGRI Building 49, Room 4A80 49 Convent Drive Bethesda, MD 20892-4472 leslieb@helix.nih.gov



Closing Date: March 1. 1999 -NIH is an equal opportunity employe For more information see: http://www.nhgri.nih.gov/DIR/GDRB



Covance Biotechnology Services, Inc., in Research Triangle Park, North Carolina, provides the biotechnology and pharmaceutical industry with world-class Process Development and cGMP Manufacturing for recombinant products. These services are provided for preclinical through commercial production allowing our client companies to leverage their capital by tapping into our process development and cGMP manufacturing capabilities. Join us in North Carolina as we put our clients' products and your career onto the fast-track.

Our Process Development group supports our clients' requirements in the areas of cell culture and fermentation, purification, formulation and analytical methods development. This group is also responsible for small-scale (generally up to 100-Liter scale) cGMP manufacturing to meet our clients' requirements for toxicology and Phase I/II clinical trials. These positions offer an opportunity for significant interaction with the best research scientists from client companies as well as with the outstanding process scientists at Covance. We are currently recruiting for the following key positions:

SENIOR SCIENTIST/SCIENTIST, **CELL CULTURE PROCESS DEVELOPMENT**

CELL COLIURE PROCESS DEVELOPMENT In this position, you will be responsible for the development of cell culture processes (mammalian, hybridoma and insect cell) for the manufacture of biopharmaceuticals. These processes may be used internally by our group for Phase I/II clinical material cGMP production or transferred to our large-scale cGMP manufacturing facility. We are looking for candidates with hands-on experience in the areas of cell banking, adaptation to serum and protein-free medium, fed-batch and perfusion process development, operation of small and large bioreactors. Knowledge of rele-vant analytical techniques and a good understanding of cell biology and cell line development are also essential. You should have a Ph.D. (or equivalent experience) in Cell Biology, Microbiology, or Biochemical Engineering and 5+ years of relevant experience. Job Code: SC-1101

■ RESEARCH ASSOCIATES, CELL CULTURE PROCESS DEVELOPMENT

In this position, you will be responsible for day-to-day maintenance of ongoing cell culture processes for biopharma-ceutical manufacture. You will work closely with the Senior Scientist/Scientist in the cell line adaptation, media devel-opment and cell culture process development. You may also be assigned to our Phase I/II cGMP manufacturing activ-ities. Good sterile technique is a must. BS or MS in Cell Biology or Microbiology or Biochemical Engineering with 1+ years of experience in a similar position is essential. Job Code: SC-1102

RESEARCH ASSOCIATES, FERMENTATION PROCESS DEVELOPMENT

In this position, you will be responsible for day-to-day maintenance of ongoing bacterial and yeast processes for bio-pharmaceutical manufacture. You will work closely with the Senior Scientist/Scientist on cell line screening, media development and fed-batch fermentation process development. You may also be assigned to our Phase I/II cGMP manufacturing activities. BS or MS in Cell Biology, Microbiology, or Biochemical Engineering with 1+ years of experi-ence in a similar position is essential. Job Code: SC-1103

SENIOR SCIENTISTS/SCIENTISTS, PURIFICATION DEVELOPMENT

In these positions, you will develop processes for the recovery and purification of proteins from bacterial, yeast and mammalian recombinant sources. These processes will be used to isolate biopharmaceuticals for use in human clini-cal trials. A Ph.D. and 5 years of appropriate experience in Biochemistry or Protein Chemistry is required. A success-ful record of purification process development leading to the preparation of human clinical trial materials in an indus-trial setting will be considered a significant plus. **Job Code: SC-1104**

RESEARCH ASSOCIATE, PURIFICATION DEVELOPMENT

In this position, you will be responsible for monitoring the progress of purification processes developed for the manufacture of biopharmaceuticals. You should have at least 2 years of experience in protein purification and/or protein chemistry in a GLP environment and enjoy working in a fast-paced environment with highly motivated coworkers. Job Code: SC-1105

■ SCIENTIST, FORMULATION DEVELOPMENT

In this position, you will be responsible for the development of formulations and formulation processes for protein therapeutics. You should be knowledgeable in the field of biophysical chemistry and in techniques to achieve protein formulations with long-term stability. You also should have experience in developing formulations for lyophilization as well as lyophilization cycle development. Analytical experience should include methods for quantitation of protein degradation and characterization of degradation products. A Ph.D. (or equivalent of the should be achieved by the should b experience) in Biochemistry or Protein Chemistry and 5+ years of relevant experience required. Relevant cGMP experience a significant plus. Job Code: SC-1106

MANUFACTURING ASSOCIATES, FERMENTATION/CELL CULTURE/PURIFICATION

In these positions, you will be responsible for the manufacture of cell culture and/or fermentation products including protein purification. A BS degree in a technical area (or equivalent job related experience) is required, along with 2+ years of hands-on experience in a cGMP environment, including experience with fermentors, bioreactors, centrifugation equipment, chromatographic and/or ultrafiltration systems. Job Code: SC-1107

Please send resume, indicating Job Code, to: Covance Biotechnology Services, Inc., Director—Human Resources, P.O. Box 13865, Research Triangle Park, NC 27709-3865; FAX: (919) 468-9070; Email: joe.mcmahon@covance.com Only those selected for further consideration will be contacted. PRINCIPALS ONLY. Covance is an equal opportunity employer.



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

Research Associate or **Staff Research Scientist** position available at the J. David Gladstone Institute of Cardiovascular Disease. Generate transgenic animals and help supervise a transgenic core facility. Candidates should possess a B.S./M.S./ Ph.D. in biological sciences and have at least one year successful experience with transgenic mice technologies.

Please send CV and references to: #C98-048 **Gladstone Institutes** P.O. Box 419100 San Francisco, CA 94141 or fax to (415) 431-4039 Website: http://gladstone.ucsf.edu EqualOpportunity/Affirmative

Action Employer

HOWARD HUGHES HHMI **MEDICAL INSTITUTE**

The Howard Hughes Medical Institute conducts biomedical research in the areas of cell biology, genetics, immunology, neuroscience and structural biology at over seventy locations around the United States. HHMI regularly has positions open for research and administrative personnel.

Laboratory Positions:

- •Postdoctoral Fellowships
- •Research Specialists/ Technicians
- Research Secretaries

Administrative Positions:

- Managers
- •Administrative Assistants
- Purchasing Coordinators
- Receiving Clerks

Institute employees enjoy competitive salaries and an excellent benefits package. HHMI is an equal opportunity employer. Please visit our website at www.hhmi.org/jobs for a listing of available positions.

Health Scientist Administrator Division of Basic Research NATIONAL INSTITUTE ON DRUG ABUSE NATIONAL INSTITUTES OF HEALTH Department of Health and Human Services

The National Institute on Drug Abuse (NIDA) invites applications for a Health Scientist Administrator GS-601-13/14, with an annual salary range of \$55,969-\$85,978. The position is located in Rockville, Maryland in NIDA's Division of Basic Research.

The Division is seeking a creative and dynamic scientist in molecular and cellular neurobiology to plan, develop and administer a program in basic neurobiology. This position involves overseeing a research portfolio of grants and contracts investigating cellular and molecular processes associated with addiction in areas such as signal transduction, cell trafficking, cell death, synaptic release, gene expression, plasticity, development, and neuroimmune function.

Applicants should have a Ph.D. or equivalent in an academic field of the health or pertinent sciences. Applicants should possess professional knowledge of molecular biology research approaches and techniques and demonstrate an ability to manage research programs. Applicants also must demonstrate an ability to write clearly, and to effectively communicate orally on complex scientific issues.

Complete information is provided in vacancy announcement DA-98-54, available at http://www.nida.nih.gov/Employment.html, or by calling (301) 443-9663 or the NIDA Personnel Office at (301) 443-9593. Applications must be submitted to:

M.A.S.B. 5600 FISHERS LANE, ROOM 10A-03 ROCKVIILE, MARYLAND 20857 ATTN: EARLE STALFORT

NIH is an Equal Opportunity Employer. U.S. citizenship is required. The position is included in the Federal Affirmative Action Program and is targeted to EEO recruitment efforts. Applications must be postmarked by the closing date of the announcement.





We are Sanofi Research, a division of Sanofi Pharmaceuticals, Inc., the global leader in the discovery, development and marketing of new therapies with one of the strongest pipelines in the industry.

We believe a promising future can be a reality and we have made a commitment to serve the cause of life and good health for people throughout the world.

Sanofi Pharmaceuticals, Inc., a major developer and marketer of ethical pharmaceuticals, is the North American division of Sanofi, a diversified healthcare company with headquarters in Paris, France. We are a global company with over 40,000 men and women in more than 100 countries and hold leading positions in world markets.



Our Pharmaceutical Research facility, located in Malvern, Pennsylvania, is home to over 400 dedicated researchers, scientists and administrative personnel.

At Sanofi, you will enjoy a progressive work environment that provides opportunity for personal growth and career development. We also offer a highly competitive salary, flexible work programs and a comprehensive benefits package. For confidential consideration, please forward your resume and salary requirements to: Human Resources, Sanofi Pharmaceuticals, Inc., Sanofi Research, Dept. NCC, 9 Great Valley Parkway, P.O. Box 3026, Malvern, PA 19355. An Equal Opportunity Employer, M/F/D/V

Bringing the Art of Science



Molecular Biology & Bioinformatics in Pharmacogenetics

Novartis Pharmaceuticals Corporation, a global leader in exploring new frontiers in Life Science, innovating research techniques and facilitating shorter pipelines through the Novartis Institute for Biomedical Research, is launching a new Pharmacogenetics Department in Gaithersburg, Maryland. As a result, we have several key opportunities available for Scientists to join our advanced team. This team will focus on the study of genetic factors underlying drug responses, utilizing the latest cutting edge technologies. All positions require excellent communication skills and the ability to work effectively within a team environment.

Bioinformatic Specialist, MS or Ph.D. Level

Apply your knowledge of molecular biology or genomics to develop a relational database and provide bioinformatic support to the research team. Extensive experience with UNIX/Oracle or Sybase database management systems, computational DNA and protein analysis, and programming in C, Pearl, Java, SQL and html essential.

Research Scientists, Ph.D.s

Doctoral-level scientists who qualify will have a Ph.D. in molecular genetics, cellular biology or a related field, with up to 3 years of postdoctoral training. As a member of our research team, you will draw on your strong background in molecular genetics and genomics. Experience in state-of-the-art high throughput technologies (chip, microarrays) and database search is an advantage. Demonstrated record of scientific publishing desirable.

Research Assistants/Technicians, BS & MS

Draw on your degree in molecular genetics or a related discipline and your laboratory experience in DNA techniques and mammalian cell culture. Experience with automated high throughput genotyping and DNA sequencing equipment and chip technology is an advantage.

If you are ready to join our spirit of discovery in Pharmacogenetics, we invite you to send a cover letter, full CV, list of publications, and a short statement of research interest in confidence to: Pharmacogenetics Dept., Novartis Pharmaceuticals Corporation, 938 Clopper Road, Gaithersburg, MD 20878. Please indicate position title on resume and envelope. We are an equal opportunity employer M/F/D/V. We appreciate your interest in our Company. Unfortunately, we will only be able to respond to those candidates chosen for interviews or additional follow-up.

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The Spirit of Discovery



Washington University invites applications for the tenure-track or tenured position of DIRECTOR of its Tyson Research Center. We are particularly interested in qualified women and minority applicants. The Tyson Research Center is a fenced 2,000-acre tract of oak-hickory forests, savannahs, and glades on a karst landscape surrounded by another 5,500 acres of protected land. Although on the boundary of the Ozarks, Tyson is located only 20 miles from the main campus and on the edge of the 16th largest metropolitan area in the United States. Tyson offers a unique opportunity to identify the processes that affect biodiversity and ecosystem functioning in urban-suburban settings.

The Director will be a faculty member in an appropriate department or program of the school of Arts & Sciences and is expected to develop a research program in some area of ecology or other environmental sciences. In addition, the Director will be responsible for overseeing the operation of the field station. Candidates must have a distinguished record of scholarship. Experience in the use and administration of field stations is desirable. This is a 12-month appointment with a competitive salary and level of appointment depending upon qualifications and experience. Letters of application should be accompanied by a curriculum vitae and a brief statement of experience and research interests. Applicants should also arrange to have three letters of recommendation sent to:

Jonathan B. Losos Chair, Tyson Search Committee Department of Biology Campus Box 1137 Washington University 1 Brookings Drive St. Louis, MO 63130-4899

Review of applications will begin January 15, 1999. Washington University is an Affirmative Action / Equal Opportunity Employer.

UNIVERSITY OF KANSAS

THREE TENURE-TRACK POSITIONS IN MOLECULAR BIOSCIENCES

The Department of Molecular Biosciences, University of Kansas, plans to recruit twelve faculty in the next few years. For fall 1999 the Department invites applications for three tenure-track positions.

- Microbiologist—Assistant Professor—Research interests in the area of microbial pathogenesis and disease. Contact person: Dr. Stephen Benedict.
- 2. Neurobiologist—Assistant Professor—Research interests in cellular neurobiology. Contact person: Dr. Robert Palazzo.
- 3. Structural Biologist—Assistant or Associate Professor research interests in the experimental or computational aspects of macromolecular structure, function, and dynamics. Contact person: Dr. Krzysztof Kuczera.

For a full position announcement contact the person noted above at the **Department of Molecular Biosciences**, **7042 Haworth Hall**, **University of Kansas, Lawrence, KS 66045-2106**. Application materials are to be sent to the contact person and should include a letter of application, statements of research and teaching interests, and a curriculum vitae. Applicants should also arrange to have three letters of recommendation sent to the contact person. Review of applications will begin on December 15, 1998. An EO/AA Employer. Positions are contingent upon budgetary approval. Departmental homepage address: http://www.ukans.edu/~bcmic/ bcmb.html.



Associate Dean Research and Graduate Studies

The University of Maryland, Baltimore, School of Medicine/Dean's Offices, has an immediate opening for an experienced Associate Dean for Research and Graduate Studies. This position will be responsible for strategic and long-term planning for research and graduate student programs in an institution that has experienced extraordinary recent growth in research funding. Responsibilities of this position include coordination of institutional research resources; stimulation of interdisciplinary research; oversight of medical school graduate student programs including M.D./Ph.D. program; identification of external funding opportunities for support of research and infrastructure; review and oversight of intellectual property, material transfers, and faculty consulting matters; supervision of human and animal research review committees; and oversight of core laboratory and veterinary facilities.

Candidates must have an M.D. and/or Ph.D. and several years of experience in a related field that should include a strong track record of success in the area of funded research and administrative experience in research and graduate studies. Candidates should be computer literate with a knowledge of various software packages. Excellent written and oral communication skills a must. Experience in developing interprofessional programs across traditional academic lines is highly desirable. Salary for this position will be commensurate with experience.

The University of Maryland offers an excellent benefits and leave package. Submit résumé, along with a list of 3 references, no later than December 15, 1998, to:

University of Maryland, Baltimore School of Medicine James B. Kaper, Ph.D., Chair Associate Dean Search Committee Center for Vaccine Development 685 West Baltimore Street Baltimore, MD 21201 AA/EOE/ADA

HUBBARD BROTHERS CHAIR IN THE BIOLOGICAL SCIENCES

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

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

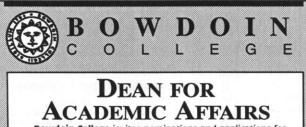
The University is located one hour north of Boston on a semi-rural campus in the Seacoast region of New Hampshire. UNH is a public Land-, Sea-, and Space-Grant research university. It is home to more than 10,000 undergraduate and 1,700 graduate students. Additional information about the University and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

We especially encourage applications from women and minorities for this position.

Review of applications will begin January 1, 1999, and will continue until a suitable individual is found.

Applicants should send a letter describing current and future research activities, names of three or more references, as well as a c.v. and copies of five relevant publications to: Genomics Search Committee, College of Life Science and Agriculture, Taylor Hall, UNH, Durham, NH 03824.

UNH supports diversity among its faculty and strongly encourages women and minority candidates to apply.



Bowdoin College invites nominations and applications for the position of **Dean for Academic Affairs.** Review of materials will begin in December 1998.

Founded in 1794, Boudoin College is a private, four-year coeducational liberal arts college located on the coast of Maine. Its approximately 1550 students include a first year class of 450 selected from 4000 applicants. The College continues a program of faculty growth begun during a planned expansion of the student body now completed. A successful capital campaign completed in June has funded major improvements of science and arts facilities.

The Dean is the College's chief academic officer and is broadly responsible for the academic mission of the College. As the leader of the faculty, the Dean oversees the academic programs of the 30 departmental majors and 7 interdisciplinary programs as well as all aspects of faculty recruitment, appointment, promotion, evaluation, and compensation. Reporting directly to the President, the Dean supervises the Bowdoin library and 2 museums, educational technology, institutional research and off-campus study.

The successful candidate should possess the highest degree relevant to his or her academic discipline; demonstrated excellence in teaching and in scholarship; and experience in academic administration, curricular policy-making, and program building.

Bowdoin College is committed to equal opportunity through affirmative action. Applications from and nominations of women and members of minority groups are encouraged. Nominations and applications should be sent to: **President Robert Edwards, Chair, Dean's Search Committee, Bowdoin College, 3501 College Station, Brunswick, ME 04011-8426.**

Human Genome Sciences is the Maryland-based emerging pharmaceutical company that created and introduced genomics as the new paradigm for drug discovery. Our technology is based on the rapid discovery, DNA sequencing and demonstration of medical utility of novel human and bacterial genes.

HGS holds exceptional career challenge for world-class scientists and professionals who share our vision of the future.

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HGS is located in Rockville, Maryland, and employs scientists, physicians, and business professionals and occupies well-equipped research and development facilities.

isit our Web site to learn more about us: http://www.hgsi.com

HGS encourages the pursuit of excellence in science and pharmaceuticals and offers competitive benefits including educational reimbursement, subsidized health club membership, medical/dental/life/disability insurance programs and a 401(k) plan with employer match.

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Responsible for developing and evaluating new technologies to remove viruses from pharmaceutical therapeutic products. Deliver technical presentations to end-users of virus removal technology, regulatory agencies, and general technical audiences; and serve as a primary technical resource within Millipore. A Ph.D. in Virology is required. Code: SM/000293

Applications

Engineering Manager Provide key technical support to all North American customers and sales people for membrane filtration and chromatography applications. Primary responsibilities include: developing new applications, resolving technical application issues, and troubleshooting field problems. An M.S. in Chemical Engineering is required. Code: SM/000399

Protein Purification Scientist Responsible for the purification of proteins by chromatography. Duties include: evaluating existing methads, resulting in enhanced separations. A B.S./M.S. in Biochemistry or Chemical Engineering is required. Code: SM/000383

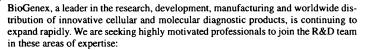
> Other positions are available. Please see our website for details.

Pure success. Experience it...at Millipore. We offer an excellent salary and benefits package, as well as the opportunity to be recognized for your achievements. Qualified candidates, please send your resume to: Millipore Corporation, Human Resources, Job Code ______ 80 Ashby Rd., Bedford, MA 01730. E-mail: careers@millipore.com. As an equal opportunity employer, we believe in the power of diversity.

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Research Scientist, In Situ Hybridization

Requires 2-4 years' experience in molecular biology, oncology, immunohistochemistry, genetic research, or related fields; strong bench work and technical skills; and a Ph.D./M.D. or equivalent. FISH or cytogenetics experience is required.

Research Associate/Assistant, In Situ Hybridization (2 multiple position)

Requires 2-4 years' lab experience in molecular biology, immunohistochemistry, or cell pathology; familiarity with DNA cloning/sequencing/amplification; knowledge of mammalian cell cultures, cytogenetics/ISH/FISH; and a B.S./M.S.

Research Scientist, Cellular and Molecular Pathology

Requires 2-4 years' experience in molecular/cell biology, oncology, immunohistochemistry, and hybridoma development, cell culture; and a Ph.D./M.D.

Research Associates/Assistants (multiple positions)

Requires a B.S./M.S. and experience in one or more of these areas: molecular cloning, protein expression, western blotting, ELISA, immunohistochemistry, cell culture, and hybridoma development.

Organic Chemists (multiple positions)

Requires a B.S./M.S. in Organic Chemistry or a related field, with experience in nucleic acid synthesis and oligonucleotide modifications. Strong knowledge in experimental design/data analysis. HPLC, TLC and NMR skills preferred.

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THE UNIVERSITY OF ARIZONA. HEALTH SCIENCES CENTER

ASSISTANT/ASSOCIATE PROFESSORS TENURE TRACK

The Department of Pharmacology & Toxicology, College of Pharmacy, University of Arizona invites applications for tenure-track positions at the assistant/ associate professor level for the 1999-2000 academic year.

Applicants must have a Doctoral degree and postdoctoral experience. Areas of preferred interest include but are not limited to: molecular toxicology related to drug metabolism or environmental toxicology; synthetic medicinal, combinatorial or natural products chemistry; molecular pharmacology. Experience with computer-assisted drug design, QSAR or molecular modeling is of additional interest.

Successful applicants must demonstrate the potential to develop/maintain a research program, obtain extramural funding and participate in teaching medicinal chemistry, toxicology, and/or pharmacology. Applicants for associate professor level must have current extramural funding. Faculty are affiliated with a large and highly competitive interdisciplinary graduate program and opportunities exist for participation in the Center for Toxicology and Arizona Cancer Center.

Review of applications will begin January 15, 1999, and will continue until the positions are filled. An application letter, curriculum vitae, copies of two publications, statement of research interests, and names and addresses of 3-5 references should be sent to:

Search Committee Department of Pharmacology & Toxicology College of Pharmacy/University of Arizona P.O. Box 210207 Tucson, AZ 85721-0207

The University of Arizona is an EEO/AA Employer, M/W/D/V.

4th Public Symposium THE CHANGING CHARACTER, USE, AND PROTECTION OF INTELLECTUAL PROPERTY

The German-American Academic Council, in cooperation with the National Academy of Sciences and the Max Planck Society, will hold a symposium **December 3–4, 1998,** in the **auditorium** of **the National Academy of Sciences**, 2101 Constitution Ave. N.W., Washington, D.C.

Themes include, among others, Information Technology and Data Base Protection, Genetic Information and Research Tools in Biotechnology, and Economic Impact of Intellectual Property Issues.

Jack Halpern, National Academy of Sciences and Ernst-Joachim Mestmäcker, Max Planck Institute for Foreign Private and Private International Law, are the Co-Chairs. A keynote address will be delivered by Kenneth Dam, University of Chicago

Session Moderators and Speakers include Purnell Choppin, Howard Hughes Medical Institute, Francis Collins, NIH, Thomas Dreier, Max Planck Institute for Foreign and International Patent, Copyright and Competition Law, Harold Forsen, National Academy of Engineering, Erich Gahrau, Bertelsmann AG, M.R.C. Greenwood, Uni versity of California, Santa Cruz, Karl-Heinz Hoffmann, Technical University of Munich, Hans-Georg Landfermann, Federal Ministry for Justice, Bonn, Bruce Lehman, Asst. Secretary of Commerce and Commissioner USPTO, Ulrich Loewenheim, J. W. Goethe University Frankfurt, Richard Nelson, Columbia University, Kenneth Prewitt, U.S. Census Bureau, Jerome Reichman, Vanderbilt University, Gerhard Selmayr, University of Karlsruhe, Joseph Straus, Max Planck Institute for Foreign and International Patent, Copyright and Competition Law, Jack L. Tribble, Merck & Co., Inc, Craig Venter, Celera Genomics Corporation, Harold Wegner, George Washington University, Carl-Christian von Weizsäcker, University of Coloane.

Registration/information: http://www.gaac.org/ipsymposium.html Tel.: (202) 296-2991 Fax: (202) 833-8514 E-mail: tuch@gaac.org or contact@gaac.org

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Gilead, an independent biopharmaceutical company, is proud to be an equal opportunity employer and extends employment to men and women from culturally diverse backgrounds. Our environment celebrates individual differences and respects each employee as an integral member of our team. We currently have the following opportunities available:

RESEARCH SCIENTIST Drug Delivery & Metabolism

PhD with 4+ years industry experience in clinical pharmacogenetics. Job Number: SCI-125

RESEARCH CHEMIST Drug Delivery & Metabolism

BS/MS degree in Pharmaceutical Science, Analytical Chemistry or Biochemistry and 2+ years PK/ADME experience. Job Number: SCI-113

RESEARCH CHEMIST Structural Chemistry

PhD with 3+ years experience, including knowledge of conformational analysis of small molecules, QSAR techniques, and statistical analysis skills. Job Number: SCI-050



RESEARCH CHEMIST Analytical Chemistry

PhD in Analytical Chemistry and experience with chromatography and mass spectrometry. Job Number: SCI-130

RESEARCH CHEMIST Medicinal Chemistry

Master's degree in Organic Chemistry and related experience with multi-step organic synthesis and current spectroscopic techniques. Job Number: SCI-150

www.gilead.com

Gilead discovers, develops and commercializes proprietary therapeutics for important viral diseases. For more details on these opportunities, our current programs, and our unique corporate culture, we invite you to visit our website. Interested candidates may also send a resume, indicating the appropriate Job Number, to: Human Resources, Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404, fax (650) 573-4800.





UNIVERSITY OF LOUISVILLE Cancer Center Director

The University of Louisville has recently received a state commitment to make UofL a nationally preeminent metropolitan research university. The UofL Health Sciences Center is comprised of the schools of Medicine, Dentistry, Nursing, and Allied Health Sciences, and is located in the heart of the downtown Louisville Medical Center. The

Medical Center has the largest concentration of health care providers in the commonwealth of Kentucky, including leading-edge tertiary care programs.

The University of Louisville School of Medicine invites nominations and applications for the position of Director, James Graham Brown Cancer Center. Candidates should demonstrate strong leadership skills in building a multidisciplinary, integrated cancer program. The James Graham Brown Cancer Center opened in 1981 with the mission to provide the people of the region comprehensive cancer care and state-of-the-art research, education, and community outreach. The University's goal is to achieve NCI designation for the Center as a regional cancer center.

The Director should have a solid background with nationally recognized achievement in research, scholarship, teaching, and clinical service. A distinguished record in basic clinical, behavioral, or population-based cancer research as demonstrated by NIH, NCI, NSF, or equivalent peer-reviewed support is desirable. Major administrative experience and a proven record of leadership are required. The Director will have Health Sciences Center-wide responsibility and will report directly to the Vice President for Health Affairs. Key responsibilities will include integrating oncologic specialities and instituting seamless care, developing nationally recognized research programs, and obtaining NCI cancer center status.

For full consideration, please send nominations and applications along with Curricula Vitae by February 15, 1999. Please send to: Mark P. Pfeifer, M.D., Chair, Cancer Center Director Search Committee, c/o Muffin M. Fleming, Office of the Vice President for Health Affairs, University of Louisville, Abell Administration Center, 323 East Chestnut Street, Louisville, KY 40202-3866.

The University of Louisville is an Equal Opportunity, Affirmative Action employer and especially encourages the candidacies of women and members of racial and ethnic minorities.



Graduate Studies in Environmental Health Sciences The University of North Carolina at Chapel Hill School of Public Health Department of Environmental Sciences and Engineering

The Environmental Health Sciences program offers research-based graduate education leading to the Master's and Ph.D. degrees, with options for specialization in:

Biomarkers of exposure Chemical carcinogenesis Children's health DNA and protein adducts Dermal toxicology and immunology Human exposure monitoring Microbial water- and food-borne pathogens Molecular carcinogenesis Risk assessment Xenobiotic metabolism and bioactivation

Graduate and postdoctoral Cooperative Research Training opportunities with the National Health and Ecological Effects Research Laboratory of the U.S. Environmental Protection Agency, in:

Environmental Carcinogenesis Experimental Toxicology Neurotoxicology Reproductive Toxicology

(EPA traineeships are open to U.S. citizens and permanent residents only)

For more information see our website www.sph.unc.edu/envr Contact lmball@sph.unc.edu, 919-966-7306 UNC-CH Graduate School Application Information and Forms are available On-line: http://gradschool.unc.edu

The University of North Carolina at Chapel Hill is an EO/AA Employer, and encourages applications from women and minorities.

EXECUTIVE DIRECTOR PENNINGTON BIOMEDICAL RESEARCH CENTER

The Louisiana State University System is seeking an outstanding candidate to serve as Executive Director of the Pennington Biomedical Research Center. The Center was opened in 1987 and is located on a 237-acre site in Baton Rouge. It comprises eight buildings with an approximate total area of 319,000 square feet, providing excellent facilities for clinical and basic biomedical research with an emphasis on nutrition and preventive medicine. The Center has an annual budget of approximately \$17 million with 67% of that total arising from grant funds.

The Executive Director must possess a Ph.D. and/or M.D. degree and have administrative experience in biomedical research. The candidate should have a demonstrated record of superior performance in research. This must include an outstanding publication record, a history of extensive research support and international recognition for their research in a clinical or basic science area. The individual also should have a record of superior academic achievement and possess the qualifications for appointment as a full professor in a related department.

The Executive Director will be expected to provide leadership and planning for the continued development of the Pennington Biomedical Research Center and its clinical and basic science research programs. He/she also has the responsibility for providing leadership in the acquisition of governmental and private grants and contracts to support the clinical and basic science operations of the Center. The Director will facilitate and plan joint research programs with the other campuses of the Louisiana State University System.

Applications and nominations should be submitted as soon as possible and the review of candidates will begin on November 30 and continue until the position is filled. Applications should include a letter expressing philosophy for the continued development of a preeminent national research laboratory. The application should also include a curriculum vitae. References will be requested.

Send application or nominations to:

H. Douglas Braymer, Ph.D., Chair Search Committee for Executive Director of Pennington Biomedical Research Center Louisiana State University System P.O. Box 16070 Baton Rouge, LA 70893 Phone: (225) 388-6118

The Louisiana State University System is an Affirmative Action, Equal Opportunity Employer.



JOSIAH MACY, JR. FOUNDATION FELLOWSHIPS At the Marine Biological Laboratory Woods Hole, Massachusetts

1999 Summer Fellowships sponsored by the Josiah Macy, Jr. Foundation at the Marine Biological Laboratory (MBL) are available to three minority junior or senior faculty members to pursue independent research projects at the MBL. A unique feature of these fellowships provides for each faculty member to select a student to accompany him or her in this research undertaking. These fellowships provide travel, housing, laboratory, and research expenses for investigators and students as well as a weekly stipend for students.

Application Deadline: January 15, 1999. Applications will be reviewed by the MBL Fellowship Committee. Notification of decisions will be mailed by March 15.

For forms and additional information, please contact: Fellowship Coordinator, Office of Research Administration, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543-1015; Voice: (508-289-7441); Fax: (508-457-1924); E-mail: <skaufman@mbl.edu>; Web: <www.mbl.edu>





UNIVERSITY OF MICHIGAN BIOLOGICAL SCIENCES SCHOLARS PROGRAM

The University of Michigan Medical School announces the continuation of the Biological Sciences Scholars Program to enhance investigational strength in the life sciences at the University of Michigan.

Now entering its second year, this program led to the recruitment of outstanding young scientists in the areas of human transposable elements, molecular virology, protein folding and translocation, and stem cell biology in its initial phase. Individuals recruited will have the following qualifications: PhD, MD, or MD/PhD degrees; two years minimum postdoctoral experience; and evidence of superlative scientific accomplishment and scholarly promise. Successful candidates will be expected to establish and maintain personal and collaborative research programs; to be accompanied by or develop substantial external research funding; and to become leaders in departmental and program activities, including teaching at the medical, graduate, and/or undergraduate levels. Primary department affiliation and rank will be determined by the applicant's qualifications. Although preference will be given to appointments at the Assistant or Associate Professor levels, candidates whose appointments would be at more senior levels also will be considered.

Applicants should send their current curriculum vitae (including bibliography), three letters of support, and a two to four-page summary of their current research program and future research plans to:

Jack E. Dixon, PhD c/o Nili Tannenbaum University of Michigan Medical School Office of Research and Graduate Studies M7300(S) Medical Science Building I Ann Arbor, MI 48109-0624

The University of Michigan Medical School is an Affirmative Action/Equal Opportunity Employer.

STAFF SCIENTIST

Schleicher & Schuell, Inc., a leading manufacturer of products used in life science research, clinical diagnostics, and filtration, is seeking to fill an applied scientist position in the area of high-throughput genomics technologies.

This entry-level position, reporting to a Senior Scientist, requires a working knowledge of molecular biology. The successful applicant will be experienced in the construction of nucleic acid–based macro/microarrays and high-throughput gridding robotics, library construction and analysis, and/or mRNA expression analysis. Knowledge of non-isotopic detection methodologies would be beneficial.

The position of Staff Scientist requires a Ph.D. Postdoctoral experience would be desirable. Excellent interpersonal and organizational skills, plus initiative and motivation to succeed are required.

If you meet these qualifications and desire to join a professional team as part of a growing company in a dynamic marketplace and are looking for excellent compensation, a comprehensive benefit plan that includes a bonus, 13 paid holidays, 401(k), health, and dental, please forward your résumé and salary history to:

> Human Resources Manager Schleicher & Schuell, Inc. 10 Optical Ave. Keene, NH 03431 Fax: 355-6516 E-mail: hrdept@s-and-s.com "An Equal Opportunity Employer."

Research Associate Applied Limnologist/Wetland Scientist Natural Resources Research Institute University of Minnesota Duluth

The Natural Resources Research Institute (NRRI) at the University of Minnesota Duluth (UMD) seeks applications for a new Research Associate position in applied limnology.

Responsibilities: The person is expected to develop a research program in the general area of applied ecology with attention to Minnesota's lakes, rivers, streams, wetlands, and watersheds. The person will be expected to develop collaborative relationships with researchers at NRRI, the University of Minnesota Duluth, Vermilion Community College, federal and state resource agencies, and other profit and nonprofit organizations within the state.

Minimum Qualifications: Ph.D. degree in Aquatic Biology, Limnology, Wetland Ecology, Hydrology, Fisheries Science, Environmental Engineering, or other Biological and Environmental Sciences, 3 years of experience in developing strong integrative research programs, 3 first authored peer-reviewed journal articles. The applicant must demonstrate abilities to work effectively with state, federal, and private organizations, obtain research grants, publish in peer-reviewed journals, and have a high potential for national and international recognition. Excellent communication skills. Demonstrated ability to obtain research grants and build and manage a research program.

This position offers an initial three-year contract with renewal based on performance. To apply send a letter of application with name, address, e-mail, and phone number of 5 references; statement of research experience and interests, including a description of collaborative relationships; curriculum vitae; and reprints or preprints of up to 3 best peer-reviewed papers. Applications will begin to be reviewed after December 15, 1998, and continue until the position is filled. Apply to: Research Associate Applied Limnologist/Wetland Scientist Search Committee, Natural Resources Research Institute, 5013 Miller Trunk Hwy., Duluth, MN 55811. Website: http://www.nrri.umn.edu/

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

RESEARCH OPPORTUNITIES WITHIN CELGENE CORPORATION

Celgene, a leading organization in the development and commercialization of human pharmaceuticals, has the following openings due to the considerable success of our drug discovery program.

Senior/Research Scientists-Biology

We are seeking highly motivated scientists to participate in our drug discovery program in the areas of inflammation, angiogenesis and cytokine regulation to identify new targets. Experience in molecular biology, immunology, signal transduction and assay development is desired. Knowledge in current animal models for inflammation and/or angiogenesis is a plus. Position requires a Ph.D. with post-doctoral and/or industry experience. Job Code: #98-06

Research Associates-Biology

Candidate will be involved in research in the areas of inflammation, angiogenesis and cytokine biology. Experience in molecular biology, signal transduction pathway proteins and tissue culture is desired. Position requires BS degree with 2 years' experience or MS degree. Ability to work independently a must. **Job Code: #98-35**

Scientist-Medicinal Chemistry

The design and synthesis of New Chemical Entities will be the primary responsibility for an active experimentalist Medicinal/Organic Chemist who will join our drug discovery group. A Ph.D. in Organic or Medicinal Chemistry with a strong background in small molecule organic synthesis is required. Excellent organic chemistry lab skills are essential as well as standard organic chemistry analytical techniques such as TLC, HPLC, and NMR. Experience in drug discovery is required. Job Code: #98-23

Celgro is a recognized leader in the field of biocatalysis for chiral agrochemical production. Our innovative R&D team utilizes protein engineering, enzymology and process optimization to develop applications of new and improved enzymes.

All candidates interested in the positions below should have specified degrees, relevant experience, and be motivated to work in multi-disciplinary teams.

Molecular Biology (MS/Ph.D.)

For cloning, *E. coli* genetics, mutagenesis, sequencing and protein expression. **Job Code: #98-27**

Microbiology (MS/Ph.D.)

For fermentation process development, metabolism/physiology studies, and to formulate strain selection strategies. Job Code: **#98-28**

Biochemistry (MS)

For enzyme kinetics, protein purification and biocatalysis studies. **Job Code: #98-29**



Division of Celgene Corporation

We offer competitive salaries and benefits and environments conducive to personal growth and achievement.

Qualified area candidates interested in a job at CELGENE should send a detailed resume indicating position and salary requirement to: HR Manager, Dept. SCI, Celgene Corporation, 7 Powder Horn Drive Warren, NJ 07059; e-mail: hr@celgene.com; fax: (732) 271-4184 Qualified area candidates interested in a job at CELGRO should send a detailed resume indicating position and salary requirement to: HR Manager, Dept. SCI, Celgro, 1545 Route 22 East, PO Box 598, Annandale, NJ 08801-0598; e-mail: hr@celgene.com; fax: (908) 730-1412

At Monsanto, we share a common goal-to help people lead longer, healthier lives. We are pioneering the use of life science technologies to understand how the connections between human health, nutrition and agriculture can be used to develop products to improve the quality of life for everyone, everywhere.

Protein Modeler

Working in a multidisciplinary team, you will use your experience and expertise in computational structural biology or structural bioinformatics to construct, evaluate and manipulate protein models in an effort to engineer biomolecules with improved physical and biological properties. The successful candidate will excel in this team-based environment through the ability to clearly and concisely communicate ideas to an array of team members consisting of microbiologists, biochemists, plant biologists and food chemists. Prior experience with macromolecular assemblies is beneficial. Job Code: NCP-PM

Gene Expression (Ph.D.)

In an effort to identify unknown genes which have been identified from microarray experiments, you will develop a rapid and robust expression system to functionally express plant proteins. Success will depend on your experience in expression systems such as viral expression systems, yeast, hairy root, etc. In addition, you must bring a unique approach to problem solving, excellent communication skills, and a thorough understanding of biochemistry. Job Code: NCP-GE

For consideration, please submit your resume to: Job Code:____(select from above), The Monsanto Company, 700 Chesterfield Parkway North, Mail Code: BBSB, St. Louis, MO 63198 or fax: 314/737-6419. Visit our website at www.monsanto.com. EEO/AA Employer M/F/D/V.

ADVISORY: As a consequence of the discontinued merger between Monsanto and AHP, Monsanto cannot solicit, recruit, hire, or offer or agree to hire any employee of AHP or its subsidiaries until July 13, 1999. If you fall within that group, please DO NOT send inquiries at this time.





The University of Kentucky invites applications for the position of Chair of the Pharmaceutical Sciences in the College of Pharmacy. Applicants must have a Ph.D., be a nationally and internationally recognized scholar with a strong record of research funding. and have strong leadership and interpersonal skills. Applicants should also have demonstrated success in promoting excellency in research, scholarship, and teaching. An understanding of basic and applied science in contemporary formulations and drug delivery, drug discovery and design, pharmecokinctics and drug metabolism, and molecular and cellular approaches to pharmacology is essential. Special consideration will be given to applicants who complement and collaborate with existing strengths at the University of Kentucky including the Sanders-Brown Center on Aging, the Gill Heart Institute, the Markey Cancer Center, the Center on Neuroscience, and the emerging initiative in Biopharmaceutical Engineering.

The College of Pharmacy is undergoing dramatic growth as a result of new Research Challenge Funds. As part of this growth, the Chair will have the opportunity to influence the selection of several new faculty members and embark on new initiatives (see companion ad). Applicants are invited to view the College of Pharmacy Web page (http://www.uky.edu/Pharmacy) for more information about our programs.

The Search Committee will begin reviewing applications December 15, 1998, and will continue until the position is filled. Submit curriculum vitae and three letters of recommendation to: Dr. Patrick J. McNamara, College of Pharmacy, University of Kentucky, Lexington, KY 40536-0082; telephone (606) 257-8856; FAX (606) 257-7564; e-mail pmcnamar@pop.uky.edu.

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

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



The College of Pharmacy has an extraordinary opportunity to take a nationally ranked program into the next millennium by expanding its research strength in the clinical pharmaceutical sciences. The Clinical Pharmaceutical Sciences initiative at the College of Pharmacy is a broad-based research program across the spectrum of drug discovery and design, drug formulation and delivery, and drug evaluation. The College of Pharmacy will hire up to four tenure-track or tenured scientists at the assistant, associate, or full professor level.

Creative, successful individuals who want to rate to vibrant, growing research programs and participate in teaching and service missions are invited to apply. Successful candidates at a tenured level are expected to possess established, externally funded research programs. Successful candidates at the tenure-track level are expected to develop and maintain innovative, externally funded research programs encompassing translational approaches to the pharmaceutical sciences. Applicants must demonstrate the potential for making a significant contribution to our graduate and professional training programs.

Competitive start-up funds, state-funded salary commensurate with experience, and modern research facilities will be provided. Special consideration will be given to applicants using translational approaches to pharmaceutical science research and who complement and collaborate with existing strengths at the University of Kentucky including the Sanders-Brown Center on Aging, the Gill Heart Institute, the Markey Cancer Center, the Center on Neuroscience, Graduate Center for Biomedical Engineering, Graduate Center for Toxicology, and the emerging initiative in Biopharmaceutical Engineering. In edition, opportunities exist for the successful applicant to utilize several programs designed to support translational research activities including the Center for Pharmaceutical Sciences and Technology, the Kentucky Center for Clinical Research and Investigator Services (KCCRIS), and the General Clinical Research Center (GCRC). Pharmaceutical science interests sought in this search include but are not limited to:

- Drug Design, Discovery, Delivery, or Evaluation of Macromolecular Therapeutic Agents
- Pharmacogenomic or Pharmacogenetic Approaches to Drug Discovery or Evaluation
- Study of the Pharmacology and Evaluation Membrane Transporters
- Formulation and Novel Delivery of Therapeutic Agents

Applicants must have a Ph.D., Pharm.D., or M.D. and should have at least two years of postdoctoral experience. Interested individuals should send a curriculum vitae, future research plans, and arrange for three letters of recommendation to be sent to the search committee chair noted below. Applicants are invited to view the College of Pharmacy Web page (http://www.uky.edu/Pharmacy) for more information about our programs.

Expansion of research and doctoral training in the clinical pharmaceutical sciences results from an award to the College of Pharmacy through the Research Challenge Trust Fund Program of the Commonwealth of Kentucky. This award is also associated with the addition of eight graduate student fellowships dedicated to support this clinical pharmaceutical sciences research initiative.

The Search Committee will begin reviewing applications December 15, 1998, and will continue until the positions are filled. Submit curriculum vitae and three letters of recommendation to: Dr. Robert A. Blouin, College of Pharmacy, University of Kentucky, Lexington, KY 40536-0082; telephone (606) 257-5736; FAX (606) 257-7664; e-mail: rblou1@pop.uky.edu.

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

Florida State University Department of Computer Science

The Florida State University is entering a period of significant growth both in Computer Science and allied areas (e.g., computational science): The Department of Computer Science invites applications for tenure-track positions at all ranks. New faculty will have the opportunity to help shape the department's future.

Applicants are required to have completed a Ph.D. in computer science, computer engineering, or a closely related field by the date of the appointment.

Exceptionally qualified individuals in any area of computer science are encouraged to apply. Priority will be given to applicants with strengths that will contribute to the development of new research groups. We are especially interested in research in trusted systems (including safety, reliability, and security); computational science (especially visualization); architecture of computing and networked systems; massive data storage, processing, and archiving; and other research areas that would be supportive of education in software engineering and computer and network system administration. Selection will be based on evidence of outstanding research accomplishments and teaching ability.

Please send a résumé and arrange for at least three letters of reference to be sent to the following address.

Faculty Search Committee Computer Science Department P.O. Box 4530 Florida State University Tallahassee, FL 32306-4530

The Florida State University is an Equal Opportunity/Affirmative Action Employer that encourages applications from minorities and women and complies with the Americans with Disabilities Act. It is a public records agency persuant to Chapter 119, Florida Statutes.

The university has about 30,000 students and is located in the Florida capital — a city of approximately 250,000, surrounded by forests, lakes, and farms, and about an hour's drive from the Gulf Coast. It has excellent public schools and affordable housing. The department offers degrees at the B.S., M.S., and Ph.D. levels. Further information about the university and the department can be found at the **websites: www.fsu.edu and www.cs.fsu.edu**.

Procter&Gamble

The Procter & Gamble Company has an opening for a Ph.D. with a specialty in vascular biology. This position will be located at our new, state-of-theart Health Care Research Center in Cincinnati. Ohio, in Procter & Gamble Pharmaceuticals' Cardiovascular Research Section.



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

> Equal Opportunity Employer

Ph.D. Molecular Biologist

We seek an individual with demonstrated expertise in the molecular biology of vascular smooth muscle and/or endothelium. The successful candidate will conduct research activities to identify and develop targets for novel cardiovascular therapeutic agents with particular emphasis on angiogenesis. A strong background in biochemistry and molecular biology is required, and knowledge of vascular physiology and/ or screening assay development is desirable. The ability to provide individual technical leadership in their chosen area of expertise and to interact well in team settings are critical to success. Good organizational, interpersonal skills, excellent communication skills, and general computer skills are required.

Procter & Gamble is a Fortune 20 company that has been consistently rated as one of the "most admired" corporations in the U.S. Our support for research and development has increased substantially in recent years, with growing emphasis being placed in expanding the Health Care area. This is evidenced by P&G's recent construction of a world-class Health Care R&D facility outside of Cincinnati, Ohio, that is capable of housing 2000-2500 researchers by the end of the decade. In addition, our top-rated benefits package serves to support the company's commitment to obtain and retain the best qualified scientists.

If you meet the qualifications for this position, please send a letter of introduction, resume, and list of publications by mail or e-mail (doctoral.im@pg.com) to:

Dr. G. D. Owens The Procter & Gamble Company Doctoral Recruiting, Dept. KP P.O. Box 538707 Cincinnati, OH • 45253-8707

ASSOCIATION FOR CHEMORECEPTION SCIENCES (AChemS)

TRAVEL FELLOWSHIPS

AChemS is pleased to announce the availability of fellowships for individuals interested in the chemical senses. The minority and clinical fellowships are funded by the National Institute on Deafness and Other Communication Disorders to defray cost of travel, meals, lodging, and registration to attend the twenty-first meeting of AChemS, which will take place in Sarasota, FL April 14–18, 1999

Minority Fellowship: Students, postdoctoral fellows and faculty who identify themselves with a minority group can apply for the minority fellowship.

Clinical Fellowship: Resident clinicians (dentists and physicians) can apply for the clinical fellowship.

Awardees will be selected according to their academic background, experience, and research interests. Applicants need not be AChemS members, but must be U.S. residents. Applicants are requested to submit a brief statement of research interests, vitae, two letters of recommendation, and, for the minority fellowship, an indication of the minority group with which they identify by January 11, 1999, to: Travel Fellowship Committee, AChemS Business Office, 744 Duparc Circle, Tallahassee, FL 32312-1409. Please indicate in your cover letter which fellowship you are applying for.



Apply to several Life Science Ph.D. programs using one application to the **Molecular Biology Program** University of Missouri-Columbia.

Four-year graduate fellowships are \$16,000 per year, plus full tuition and fee waivers.

Our faculty may individually sponsor Postdoctoral Fellowships for two-year awards of \$24,000 per year.

For more information, contact our website at http://www.missouri.edu/~mbp/

or call toll free 1•877•Gene•PhD (436-3743).

> E-mail address: mbp@missouri.edu

An equal opportunity Institution.



UNCF•MERCK SCIENCE INITIATIVE



UNDERGRADUATE

SCIENCE RESEARCH SCHOLARSHIP AWARDS

- 15 Awards Annually
- Scholarships up to \$25,000
- Two Summer Internships at a Merck Research Facility

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)

GRADUATE

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

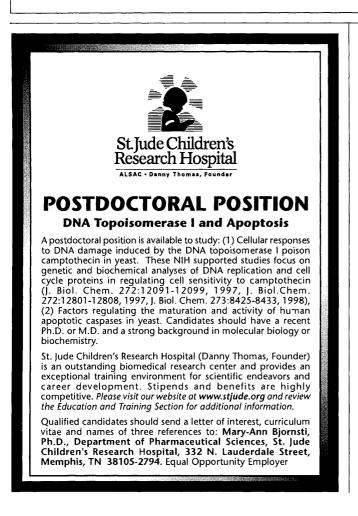
SCIENCE RESEARCH **FELLOWSHIPS**

- 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





The NATIONAL HUMAN GENOME RESEARCH INSTITUTE (NHGRI), part of

the National Institutes of Health, seeks candidates for a research grants program administrator position in the Ethical, Legal, and Social Implications (ELSI) Research Grants Program. The ELSI Research Grants Program, which was established in 1990 as part of the US Human Genome Project, supports basic and applied research that identifies and analyzes the ethical, legal, and social issues surrounding human genetics research.

Candidates should be experienced researchers in the social sciences, ethics or law, who have special expertise in examining the impact of genetic research, technologies, and information on individuals from diverse sociocultural and socioeconomic groups. The responsibilities of the position include management of a grant portfolio, development and evaluation of new initiatives for grant support and promotion of new areas of research.

Candidates who wish to pursue this opportunity on a temporary basis (1 or 2 years) and those who are seeking a longer term commitment are welcome to apply. Salary will be commensurate with experience.

Interested candidates should submit a curriculum vitae and a list of references to: NHGRI Personnel Office, Attn: Terri Messick, 9000 Rockville Pike, Bldg. 31, Room 4B25, Bethesda, Md 20892, CVs must be received by February 1. 1999. For additional information contact Ms. Terri Messick at (301)594-0953 or e-mail at tm17w@nih.gov.

NIH is an Equal Opportunity Employer

Research Opportunities

At Amgen, you'll discover a research environment that emphasizes collaboration, intellectual honesty, scientific integrity, and a supportive culture. This unique approach has helped us grow into a global biotechnology leader in just 18 years. We are seeking research associates with a background in cancer-related research to work in our Cancer Biology program at Amgen.

Research Scientist

You will work in an exciting, fast-paced, state-of-the-art environment to discover novel genes and pathways that regulate specific aspects of tumor genesis. Positions are available for scientists with research experience in areas related to apoptosis, angiogenesis, cell adhesion, tumor biology and development of in vitro and in vivo assays for high-throughput screens. The cancer biology group collaborates with multiple groups within Amgen including: protein chemistry, small molecule chemistry, high-throughput screening, microarray and microprocessing, functional genomics and proteomics. The wide range of resources available at Amgen enables scientists to rapidly discover, characterize and validate potential therapeutic targets. You must posses a Ph.D. in a molecular, biochemistry or cell biology program, with a minimum 3 years of postdoctoral experience in cancer-related research. A strong background in cancer research, a proven publication track record, a drive to succeed and an ability to work in a team-oriented environment are key to your success.

Research Associate (Job Code: 0000000138)

You will work with a select group of scientists who are discovering novel genes and examining signal transduction pathways that are altered during tumor genesis. We are seeking highly motivated individuals who are not only able to work efficiently in a team-oriented environment, but also capable of designing experiments and thinking independently. You must possess technical experience in one or more of the following areas: molecular biology, protein biochemistry, genomics, mammalian cell culture and protein purification. A research background in apoptosis, angiogenesis, cell cycle, in vivo tumor models and tumor biology is preferred. A minimum of a Bachelor's degree in Science is required, a Master's degree or research experience in an academic or industrial setting is highly desirable.

At Amgen, your accomplishments are rewarded. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center and three weeks' vacation. For immediate consideration, please mail your resume on plain white paper (indicating appropriate job code, using standard type and fonts, no bullets, italics, underlining or bolding), to: Amgen, Staffing, P.O. Box 2569, Thousand Oaks, CA 91319-2569, or email your ASCII text resume to: jobs@amgen.com. Please consult our Web Site at: www.amgen.com for information on other career opportunities available at Amgen. Principals only, please. We recognize that diverse perspectives are a key in the process of discovery.



EOE/AA Employer M/F/D/V.





Applicants should submit a CV, summary of research accomplishments, a research proposal and names of 3 references to:



Dr. Bruce Stillman, Director Cold Spring Harbor Laboratory 1 Bungtown Road Cold Spring Harbor, NY 11724

Cold Spring Harbor Laboratory is an equal opportunity employer and encourages applications from women and minorities.



Global In Reach, Local In Care

POSTDOCTORAL TRAINING FELLOWSHIP Angiostasis Research

Challenging position available at the Blood Research Institute of the Blood Center of Southeastern Wisconsin to pursue studies of the regulation of endothelial cell proliferation and angiogenesis. Other investigations concern the pathogenesis of heparininduced thrombocytopenia and thrombosis. Motivated candidates with a strong background in cellular biology, molecular biology, signal transduction, and cell cycle control are especially encouraged to apply. Inquiries should be directed to Human Resources (e-mail: djkahl@bcsew.edu; phone: 414-937-6311; Fax: 414-937-6470).

The NIH funding for this training fellowship is restricted to U.S. citizens and permanent residents. Position immediately available. Interested/qualified individuals with a M.D. or Ph.D. degree should direct applications including CV, list of references, and a cover letter explaining research interest and expertise to:

Dept. of Human Resources #981004 The Blood Center of S.E. WI, Inc. P.O. Box 2178 Milwaukee, WI 53201-2178

AA/EOE Employer, minorities/women encouraged to apply.

FACULTY OPPORTUNITIES IN IMMUNOLOGY

The Rockefeller University is conducting an active search for two independent faculty positions in immunology. Opportunities are available either tenured or tenured track at any rank. Research areas of particular interest are T-cell biology, autoimmunity, tumor immunology, vaccine development, signal transduction, and host immunity to infection. The search is part of an initiative to expand The Center for Immunology and Immune Diseases at the Rockefeller University and is supported, in part, by two Irene Diamond Professorships in Immunology awards.

Applicants should have demonstrated outstanding potential for independent research in this area and should send a curriculum vitae (including publication list), a statement of current and future research interests (no longer than 3 pages), and the names and addresses (including telephone, fax and e-mail information) of three referees (who should be asked to send their references without delay) to: Dr. David Ho, The Aaron Diamond AIDS Research Center, 455 First Avenue, New York, NY 10016. The closing date



York, NY 10016. The closing date for applications is January 31. The Rockefeller University is an Affirmative Action/Equal Opportunity Employer.

Further information about the research and educational programs of The Rockefeller University can be found on the Internet at www.rockefeller.edu.

POSTDOCTORAL AND TECHNICIAN POSITIONS AT THE NIH GENETICS OF DEVELOPMENT AND DISEASE

Postdoctoral and technician positions are available in the Genetics of Development and Disease Branch at the National Institute of Diabetes and Digestive and Kidney Diseases, NIH, in Bethesda, MD. Areas of interest include:

Chuxia Deng - Functions of FGF receptors and tumor suppressor genes. Projects include cell cycle checkpoints, tumorigenesis, developmental induction, bone growth and creation of animal models of human diseases. For details see Genes & Dev. 8: 3045 (1994); Cell 82: 675 (1995), 84: 911 (1996); Oncogene 15: 685 (1997): Dev. Biol. 185: 42 (1997) Development 125: 753, 3615 (1998); PNAS 95: 3667, 9378 (1998). Postdoctoral and technician (biologist) positions are available. Applicants for the technician/biologist position must be US citizen and should have experience in tissue culture and molecular cloning. The Biologist position will be filled at the GS-9/11 level with an annual salary range from \$32,457 through \$51,049. This is a Term Appointment not to exceed 4 years. Please call (301) 496-4231 to request a vacancy announcement and mandatory KSA's to be addressed. Refer to announcement #DK-98-840.

Richard Proia – Mechanisms of apoptotic-mediated neurodegeneration, therapeutics for glycosphingolipid storage diseases, creation of mouse models of disease, functions of glycosphingolipids in development and nervous system function, and their roles in cell signaling. Approaches include conventional/conditional mouse knockouts and large-scale gene expression analysis. For details see Nat. Genet. 14: 348 (1996); Science 276: 428 (1997), PNAS 95: 2503 (1998); J. Clin. Invest. 101: 1881 (1998); J Biol. Chem. 273: 19634 (1998). Postdoctoral position available.

The NIH offers a competitive salary and benefits package. Applicants should include a CV with list of publications, a brief description of research experience and the names and addresses of 3 references to Chuxia Deng or Richard Proia at:

Building 10, Room 9N-119 10 CENTER DR MSC 1812 National Institutes of Health Bethesda, MD 20892

Biologist applications should be mailed to:

Thomascene White NIH/NIDDK 31 CENTER DR MSC 2560 BETHESDA, MD 20892

APPLICATIONS MUST BE RECEIVED BY 12/7/98.

nature Structural biology

seeks a TALENTED MOLECULAR BIOLOGIST

to join its full-time staff in New York, as an Assistant Editor. This position provides a superb opportunity to enter the world of scientific publishing while staying at the forefront of modern research. The successful candidate will work closely with other members of the editorial team on all aspects of the editorial process, including manuscript selection, commissioning and editing reviews, writing for the journal and liaising with the scientific community.

The ideal applicant will have a PhD and postdoctoral research experience in molecular biology (preferably with some knowledge or experience of structural biology), good writing skills and standing within the community, and a keen interest in the communication of science.

Please submit a CV, a short 800-1000 word News and Views-style article on an exciting, current and newsworthy area of molecular/structural biology and a short cover letter explaining your interest in the position to:

The Editor Nature Structural Biology 345 Park Avenue South, 10th Floor New York, NY 10010-1707 Fax: 212 679 0735 e-mail: nsb@natureny.com

The closing date for applications is the 11th of December.



Nature America, Inc. 345 Park Ave. South New York, NY 10010

VICE PRESIDENT, DEAN AND DIRECTOR UNIVERSITY OF MINNESOTA

The University of Minnesota invites nominations and applications for the position of the Vice President for Agricultural Policy, Dean of the College of Agricultural, Food, and Environmental Sciences (COAFES), and the Director of Minnesota Agricultural Experiement Station. The college, with its 11 departments, six branch stations, and a landscape arboretum is a key part of a large land-grant research University. Minnesota has a high rank nationally in food and agricultural products. Many of the faculty, departments, and centers are nationally and internationally recognized for the quality and innovation of their disciplinary and interdisciplinary activities. Biotechnology and environmental issues are increasingly important — on the farm, in industry, and at the University. Responsibilities include providing leadership on matters relevant to statewide agricultural policy and advising central officers on strategic and tactical issues related to the State of Minnesota and its role in global agricultural systems.

Qualifications include: A Ph.D. or comparable terminal degree. A record of scholarly research, teaching, and outreach activity, preferably at an academic institution. Extensive knowledge of and experience in critical public policy issues in agriculture or environmental sciences. Ability to develop and maintain effective relations within and outside the University. Effective leadership, administrative, and fiscal management experience.

Appointment: The candidate will have a renewable administrative appointment. Faculty rank and immediate tenure contingent upon research, teaching, and outreach/ service accomplishments. Anticipated start date is July 1, 1999, or ASAP.

Application Process: Review of applications and nominations begins January 15, 1999. A complete file includes a letter of application briefly describing qualifications and vision of land grant mission, vitae or résumé, and the names, addresses, and telephone numbers of at least three references. Please send to: Regents' Professor G. Edward Schuh, Search Committee Chair, College of Agricultural, Food, and Environmental Sciences, University of Minnesota, 277 Coffey Hall, 1420 Eckles Ave., St. Paul, MN 55108. A complete position description is available at http://www.agri.umn.edu/ under the "News and Events" button.

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



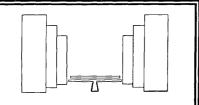
MCO Endowed Chair in Microbiology & Immunology

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

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

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

Affirmative ActionlEqual Opportunity Employer.



THE SALK INSTITUTE

Postdoctoral Training Positions are available at The Salk Institute for Biological Studies. The Institute is one of the world's foremost independent non-profit institutions conducting basic science research dedicated to the improvement of human health. The Institute was founded in 1960 by polio vaccine pioneer Jonas Salk, M.D. The Salk Institute's two major areas of focus are molecular biology and genetics, and the neurosciences.

The Salk Institute 10010 North Torrey Pines Rd, La Jolla, California 92037

Individual postdoctoral training opportunities are posted on The Salk Institute's website at www.salk.edu

The Salk Institute is an Equal Opportunity Employer

Traineeships in Oceanography for Minority Undergraduates

The Woods Hole Oceanographic Institution offers special educational opportunities in oceanography for minority undergraduate U.S. citizens or permanent residents. These awards are designed to provide training and research experience in Woods Hole for students who have completed at least two semesters of undergraduate study in physical or natural science, mathematics, or engineering and have an interest in marine sciences, oceanographic engineering, or marine policy.

Traineeships may be awarded for a ten to twelve week period in the summer or for a semester during the academic year and may be renewed the following year. The Trainee is paid a stipend of \$335 per week, plus a round trip travel allowance to Woods Hole. This program is conducted with support from and in cooperation with the Northeast Fisheries Science Center, National Marine Fisheries Service, NOAA; and the Coastal and Marine Geology Program, Woods Hole Field Center, U.S. Geological Survey; and with support from the Office of Naval Research.

3, 1999. Application deadline for Summer 1999 is February 16, 1999.

WOODS HOLE **OCEANOGRAPHIC** INSTITUTION

Write for application forms to: Education Office, MS #31 Woods Hole Oceanographic Institution 360 Woods Hole Road Woods Hole, MA 02543-1541 or call (508) 289-2219 or email: education@whoi.edu An equal opportunity/affirmative action employer.

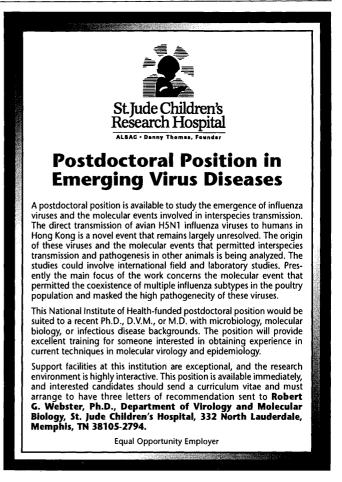
http://www.whoi.edu

COASTAL PLANKTON ECOLOGIST Environmental, Coastal and Ocean Sciences

• The Department of Environmental, Coastal and Ocean Sciences (ECOS) at UMass Boston seeks a tenure-track Assistant Professor in Coastal Plankton Ecology to start on 9/1/99. ECOS is an interdisciplinary graduate (M.Sc., Ph.D.) department with an emphasis on coastal and marine environments (see http://www.es.umb.edu). ECOS is continuing a multi-year expansion with new faculty expected to contribute to research on coastal processes and watersheds. Applicants should have a well-conceived research program, capable of supporting graduate research through external funding. Preference will be given to candidates whose research complements research by other UMB faculty. Teaching responsibilities include supervising graduate students and teaching graduate courses in a faculty member's discipline. An interest in developing undergraduate courses would be viewed positively. QUALIFICATIONS: Ph.D. in a field relevant to coastal plankton ecology (postdoctoral research and teaching experience preferred). Send a cover letter that includes a statements of interests and goals in research and teaching, curriculum vitae, and three letters of reference to: Office of Human Resources, Search 190-255, University of Massachusetts Boston, 100 Morrissey Blvd., Boston, MA 02125-3393. Application review will begin on December 20th and continue until the position is filled. An Affirmative Action, Equal Opportunity, Title IX employer.

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THE 1999 LOUISA GROSS HORWITZ PRIZE

The Louisa Gross Horwitz Prize was established under the will of the late S. Gross Horwitz through a bequest to Columbia University and is named to honor the donor's mother. Louisa Gross Horwitz was the daughter of Dr. Samuel David Gross (1805–1889), a prominent surgeon of Philadelphia and author of the outstanding *Systems* of Surgery, who served as president of the American Medical Association.

Each year since its inception in 1967, the Louisa Gross Horwitz Prize has been awarded by Columbia University for outstanding basic research in the fields of Biology or Biochemistry. The purpose of this award is to honor a scientific investigator, or group of investigators, whose contributions to knowledge in either of these fields is deemed worthy of special recognition.

The prize consists of an honorarium and a citation, which are awarded at a special presentation event. Unless otherwise recommended by the Prize Committee, the prize is awarded annually. The 1998 awardees were Arnold J. Levine, Ph.D., Harry C. Wiess Professor in Life Sciences at Princeton University (currently President, Rockefeller University), and Burt Vogelstein, M.D., Professor of Oncology at Johns Hopkins University.

QUALIFICATIONS FOR THE AWARD

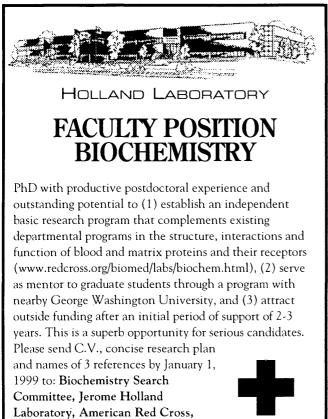
The Prize Committee recognizes no geographical limitations. The prize may be awarded to an individual or a group. When the prize is awarded to a group, the honorarium will be divided among the recipients, but each member will receive a citation. Preference will be given to work done in the recent past.

Nominations for prospective recipients should be given to the Chairman of the Louisa Gross Horwitz Prize Committee, Dr. Carol Prives. Nomination letters should include:

- 1. A summary, preferably less than 500 words, of the research on which this nomination is based.
- A summary, preferably less than 500 words, of the significance of this research in the fields of biology or biochemistry.
- A brief biographical sketch of the nominee, including positions held and awards received by the nominee.
- 4. A listing of up to ten of the nominee's most significant publications relating to the research noted under item 1.
- 5. A copy of the nominee's curriculum vitae.

An original and twelve (12) copies of each nomination should be sent to: Dr. Carol Prives, Chairman of the Louisa Gross Horwitz Prize Committee, Office of the Vice President for Health Sciences and Dean of the Faculty of Medicine, Columbia University, 630 West 168th Street, New York, NY 10032.

Deadline for the receipt of nominations is January 15, 1999.



Rockville, MD 20855-2743.

EOE, M/F/D/V.

American Red Cross

1999-2000 AAAS Public Policy Opportunities in Washington, DC For Scientists and Engineers

The American Association for the Advancement of Science invites applications for public policy fellowships, which bring scientists and engineers to Washington, DC, to work for one year, beginning in September 1999. Fellows serve in the Congress, the Department of State, the Environmental Protection Agency, the Agency for International Development, the Department of Defense, the Department of Agriculture, the Food and Drug Administration, and the RAND Science and Technology Policy Institute.

The programs are designed to provide each Fellow with a unique public policy learning experience and to bring technical backgrounds and external perspectives to decision-making in the U.S. government.

Applicants must be U.S. citizens and must have a Ph.D. or equivalent doctoral degree at the time of application (January 1999) from any physical, biological, or social science or any field of engineering. Person's with a master's degree in engineering and at least three years of post-degree professional experience may apply. Federal employees are not eligible for the fellowships. Stipends vary, with most in the \$45,000 to \$48,000 range. Application deadline is January 15, 1999. For further information call 202/326-6700, or visit our Web Site under Science and Policy Programs at www.aaas.org.



Faculty Position Department of Pharmacology The University of Michigan

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

N I CHO LA Sho N NENT

Duke University's Nicholas School of the Environment is one of the world's premier graduate/professional schools for the interdisciplinary study of the environment.

DORIS DUKE CHAIR IN CONSERVATION BIOLOGY

The Division of Ecology in the Nicholas School of the Environment at Duke University announces the newly created Doris Duke Chair in Conservation Ecology.

We are seeking an internationally known scholar who conducts research on animal conservation ecology in human-modified landscapes. In particular we are seeking candidates with expertise in the spatial patterning and/or temporal dynamics of animal populations or communities.

Specific research interests might include population dynamics, responses to habitat disturbance or fragmentation, spatial analysis or species interactions; we are particularly interested in research that links these processes to the dynamics of real landscapes.

The individual appointed would be expected to offer a core course in applied conservation ecology and an advanced course in his/her area of interest.

Salary is negotiable and start-up funding is available. Women and minorities are encouraged to apply.

The closing date for applications/nominations for this position is December 4, 1998.

For full consideration, applicants must submit a CV, a statement of research and teaching interests and names of three references to: Dr. Larry Crowder, Nicholas School of the Environment, Duke University Marine Lab, 135 Duke Marine Lab Road, Beaufort, NC 28516-9721

Duke University is an equal opportunity employer. Women and minority candidates are encouraged to apply.

www.env.duke.edu

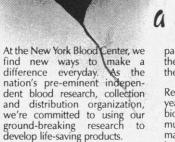


FACULTY POSITION

The Department of Biochemistry and Molecular Biophysics and the Molecular Cardiology Program at Columbia University College of Physicians and Surgeons invite applications for a tenure-track position at the Assistant Professor level. We are seeking applicants with outstanding backgrounds in molecular and cellular biology, with particular interests in development. Faculty appointments will be jointly in the Department of Biochemistry and Molecular Biophysics and the Department of Medicine.

Applicants should send a curriculum vitae, reprints of publications, a statement of research plans, and three letters of recommendation to: Dr. Andrew R. Marks, Director of Molecular Cardiology, P & S 9-401, Columbia University College of Physicians & Surgeons, 630 W. 168th St., New York, NY 10032. E-mail: arm42@columbia.edu

Columbia University is an affirmative action/equal opportunity employer.



Assistant

Lab

Member

Dr. Sara Lustigman Molecular Parasitology Laboratory

In this challenging role you will develop a competitive research program in malaria aimed at iden-

tifying and characterizing path-



parasite into RBCs and studying the post invasion modifications in the infected RBC.

Requires a Ph.D., with at least 5 years of experience in molecular biology and cell biology. A minimum of 4 years experience in malaria research and experience in biological assays also essential. Successful candidate will be independent, creative, and self-motivating with a demonstrated track record in research. Ability to apply for extramural funding is desirable.

We offer a competitive salary and benefits package. Please fax (212)468-2082, or forward your CV to: **Human Resources Dept-MK, New York Blood Center, 150 Amsterdam Avenue, NY, NY 10023.** EOE M/F/D/V

Ways of invasion of the malaria 10023. EOE M/F/D/V **A New York** Blood Center Where concern for the community comes first. WWW.nybloodcenter.org



POSTDOCTORAL FELLOWSHIPS

St. Jude Children's Research Hospital, a premier research center for catastrophic diseases of childhood and biomedical research, offers two named fellowship opportunities; the JOHN H. SUNUNU ENDOWED FELLOWSHIP and the RICHARD A. GEPHARDT ENDOWED FELLOWSHIP IN BASIC SCIENCE RESEARCH. The American Lebanese Syrian Associated Charities/St. Jude Children's Research Hospital Boards of Governors and Directors established these fellowships in honor of Mr. Sununu and Mr. Gephardt's contributions to the political life of the nation.

The fellowships are open to junior investigators with an M.D., Ph.D., D.V.M., or Pharm.D. degree who seek training experience in one of the specialty areas of laboratory biomedical research available which include: biochemistry, developmental neurobiology, experimental oncology, experimental hematology, infectious diseases, genetics, cell and gene therapy, immunology, pharmaceutical sciences, molecular therapeutics, molecular pharmacology, structural biology, tumor cell biology and virology/molecular biology.

Both of the named fellowships are made for up to three years and are based on merit, recommendations and promise of a productive career in biomedical research. Stipends are highly competitive.

Qualified candidates should send a completed application [for application materials, please visit our website (<u>www.stjude.org</u>), see Research and Science: Education and Training, or contact the office below for a brochure], a curriculum vitae, a brief description of research interests and three letters of reference to: Office of Academic Programs - Named Fellowships, St. Jude Children's Research Hospital, 332 N. Lauderdale Street, Memphis, TN 38105-2794 USA

Deadline for receipt of applications is January 1, 1999. Award notification will be February 15, 1999 with a beginning date thereafter.

AN EQUAL EMPLOYMENT/AFFIRMATIVE ACTION EMPLOYER



Rochester Minnesota

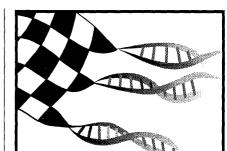
The DIVISION OF CARDIOVASCULAR

MEDICINE at Mayo Clinic invites applications for clinician investigator in the field of vascular biology. The candidate should be a M.D. or a M.D.-Ph.D. with clinical training in cardiology and vascular medicine who is highly trained in vascular gene transfer techniques. Two-year post-residency training in vascular gene transfer and vasomotor studies is required. We seek a clinician investigator who is eager to commit a significant amount of time to research and to practice vascular medicine. The candidate would also have teaching responsibilities in areas pertaining to vascular biology.

Interested applicants should submit a curriculum vitae, a statement of research interests and long-term goals, and three references by December 30, 1998, to:

A. Jamil Tajik, M.D., Chair Division of Cardiovascular Diseases Mayo Clinic 200 First Street S.W. Rochester, MN 55905

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



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...

- **FAST:** Each week you'll receive e-mail notification about jobs on *Science* Professional Network that match your search criteria.
- **FREE:** There's no charge. All you do is register. Go to www.scienceonline.org click on *Science* Careers then click on Job Alerts.
- **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.



Go to www.scienceonline.org and click on *Science* Careers.

CENTER DIRECTOR

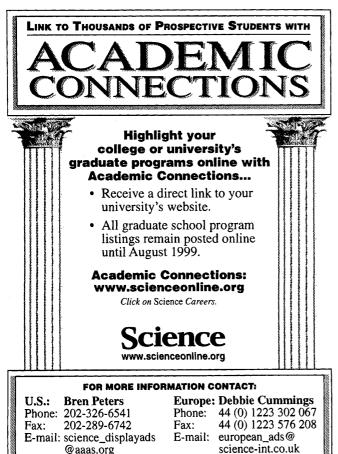
The U.S. Department of Agriculture (USDA) is seeking candidates for the position of Director of Plum Island Animal Disease Center (PIADC) at Greenport, New York. PIADC is the principal USDA laboratory for research and diagnosis of animal diseases which are exotic to the United States. Duties of the Director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

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

USDA/ARS IS AN EQUAL **OPPORTUNITY EMPLOYER.**

Agricultural Research Service

United States Department of Agriculture





U.S. Environmental Protection Agency Office of Research and Development

EPA is seeking a highly qualified scientific leader for the position of Division Director, Human Studies, National Health and Environmental Effects Research Laboratory. The division is housed in the EPA Human Studies Facility on the campus of the University of North Carolina, Chapel Hill, NC. This division provides critical human data and mechanistic information needed to improve the scientific basis for health risk assessment to better support environmental decision making by the Agency. The successful candidate will plan, develop, organize, direct, and implement multimillion dollar research programs.

This division conducts a multidisciplinary research and development program in the broad area of human health effects of environmental pollutants. Areas of specialization include:

- development of methods and conduct of studies to identify and quantify the effects of environmental pollutants on humans.
- development/application of approaches to estimate directly human exposure and dose or through the application of validated biomarkers.
- conduct of mechanistic research (in vivo and in vitro) for the development of pharmacokinetic and biologically based dose response models.

To meet the requirements of this position, applicants must have a Bachelor's (or higher) degree in one of the following: biological, medical, engineering, or physical sciences (advanced degree preferred, but not required). Preferred candidate would possess recognized scientific expertise as evidenced by multiple publications in peer-reviewed literature and invitations to participate in national and international meetings/panels. Candidates must also have competence and substantive specialized (scientific, administrative, or managerial) experience in a type of work or a combination of functions directly related to this position. In addition, applicants must meet the executive and technical qualifications described in the vacancy announcement. Salary will be commensurate with level of appointment in the federal Senior Executive Service. To obtain a copy of the vacancy announcement for this position, call or write to: USEPA/OARM/OHROS/SES Human Resources Staff (3641), 401 M Street S.W., Washington, DC 20460. The telephone number is 202-260-6374. Request announcement number EPA-9-SES-ORD-6136 or you may download a full text announcement via Internet at www.usajobs.opm.gov. Applications must be postmarked by the closing date January 15, 1999.

EPA is an Equal Opportunity Employer.

FUNCTIONAL BRAIN IMAGING AND AFFECTIVE AND COGNITIVE NEUROSCIENCE Deadline: December 15, 1998

With partial support from the W. M. Keck Foundation, the University is creating the W. M. Keck Laboratory for Functional Brain Imaging and Behavior, focused on affective and cognitive neuroscience. The laboratory will include a new 3T MRI scanner, PET scanner, and associated radiochemistry and image processing areas. In conjunction with this laboratory, several interdisciplinary **FACULTY APPOINTMENTS** will be made, with the tenure homes of the successful candidates in one or more of several Departments including Psychology, Psychiatry, Medical Physics, or Computer Sciences. We are seeking candidates at **ANY LEVEL** in the following areas:

Affective/Cognitive Neuroscientist: We seek a Psychologist or Neuroscientist who uses functional brain imaging methods to study cognitive and/or affective functions. Preference will be given to individuals studying emotion or higher-level cognition such as memory, or attention.

Functional neuroanatomy of psychiatric illness: We seek an M.D. and/or Ph.D. who uses functional brain imaging in the study of neural bases of major mental disorders.

MR Physicist: We seek a Physicist with expertise in functional MRI and interest in cognitive neuroscience applications who will take a leadership role in the development of methods for use with the 3T magnet.

Computer Scientist: We seek a Computer Scientist with expertise in large-scale complex image analysis applied to functional brain imaging and with interests in the development of new computing tools for functional brain imaging.

Please send material to: Richard J. Davidson, Chair, Affective/Cognitive Neuroscience Search Committee, Department of Psychology, University of Wisconsin, 1202 West Johnson Street, Madison, WI 53706. E-mail: rjdavids@facstaff.wisc.edu.

TENURE-TRACK FACULTY POSITION IN MARINE FISHERIES

The Department of Marine Biology, Texas A&M University at Galveston (TAMUG), invites applications for a tenure-track ASSISTANT PROFESSORSHIP in marine fisheries. The Department seeks added expertise in fisheries population biology, fisheries techniques, mariculture, pathology/immunology, genetics, physiology, or non-native species biology. Individuals who can strengthen our program in two or more of these areas are especially encouraged to apply. In addition to teaching two undergraduate courses per semester, the successful candidate will be expected to develop a research program in his/her specialty and to Chair the advisory committees of graduate students. Filling the position is contingent upon approval of funds to support it.

To apply, submit a curriculum vitae, evidence of teaching capability, and evidence of research capability on or before 1 February 1999. At least three letters of recommendation must also be received by 15 January 1999. Send all materials to: Dr. D. E. Harper, Jr., Chair, Search Committee, Texas A&M Marine Laboratory, 5007 Avenue U, Galveston, TX 77551.

TAMUG is a branch campus of Texas A&M University. Currently there are about 1,200 undergraduate and 60 graduate students in residence. Graduate appointments are through departments at Texas A&M University. For more information please view the University's website: http://www.tamug.tamu.edu or the Marine Biology website: http://www.tamug.tamu.edu/marb.

MICROBIAL ECOLOGIST. Tenure-track ASSIST-ANT PROFESSOR position, fall 1999. Ph.D. required to teach general microbiology, ecology, advanced courses in soil/aquatic microbiology, bioremediation, and supervise research by undergraduate and graduate students. Strong commitment to teaching and college teaching experience desirable. Application review begins December 20, 1998. Submit statement of teaching interests and research plans, curriculum vitae, transcripts, and addresses and telephone numbers of three references to: Biology Search Committee, Biology Program, HSB 223, University of Illinois at Springfield, P.O. Box 19243, Springfield, IL 62794-9243. See website: http:// www.uis.edu/ or contact: Dr. Roy H. Mosher, Telephone: 217-206-7536; e-mail: mosher@uis.edu for more information. UIS is an Affirmative Action/Equal Opportunity Employer. Women, people with disability, minorities, and veterans are encouraged to apply.

POSITIONS OPEN



BIOPSYCHOLOGY

The Department of Psychology at The University of Chicago is seeking to fill a SENIOR or JUNIOR FACULTY POSITION in the field of biopsychology, especially in the areas of social interactions, of sexual behavior, or of emotions. We are particularly interested in those who study the effect of mental and behavioral processes on biological systems (e.g., the nervous, endocrine, and immune systems as well as regulation of gene expression). We have a new research facility for both animal and human behavioral studies, fully accredited animal care facilities, rooms for equipment to be shared in common. Before January 1, 1999. applicants should submit a curriulum vitae, a conceptual summary of research, and representative publications. In addition, please have three letters of reference sent to: Biopsychology Search Committee, c/o Gwen Stevenson, 5848 South University Avenue, Green Hall, Room 109, Chicago, IL 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

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.

FACULTY POSITION IMMUNOLOGY

The Department of Microbiology and Immunology, University of Maryland School of Medicine invites applications for a tenure-track faculty position at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR** for our joint research program in immunology. Applicants must have a Ph.D. and/or M.D. degree and

Applicants must have a Ph.D. and/or M.D. degree and several years of research training experience in molecular or cellular immunology. The successful candidate will be expected to establish independent research programs, to participate in the development of collaborative projects, and to contribute to teaching of medical and graduate students.

Applicants should submit their curriculum vitae, an outline of current and future research interests, selected reprints, and names of three references to the following address:

Martin Flajnik, Ph.D., Chair Immunology Search Committee Department of Microbiology and Immunology University of Maryland School of Medicine 655 West Baltimore Street, BRB 13-007 Baltimore, MD 21201

The University of Maryland at Baltimore is an Equal Employment Opportunity/Affinnative Action/ADA Employer. Minorities and women are encouraged to apply.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION. Department of Geosciences, The Pennsylvania State University, The Department of Geosciences in Penn State University's College of Earth and Mineral Sciences (EMS) invites applications for a tenure-track faculty position in astrobiology, especially the areas of hydrothermal geochemistry or geomicrobiology. Of particular interest are individuals whose research interest include one or more of the following topics: high-temperature geochemistry of fluid-rock interactions, synthesis of organic molecules and the origins of life; life in extreme environments; and the evolution and roles of microbes in geological processes. The successful candidate will have the opportunity to join the Penn State Astrobiology Research Center, part of a newly funded interdisciplinary initiative directed toward research on the coevolution of planets and biospheres. Current research by members of the Center includes understanding the environment of the prebiotic Earth and the origin of life, the role of metals in the origin of life, the early evolution of life and its environment, and the causes and consequences of the diversification and extinction of metazoans. Applicants should demonstrate the potential for developing a funded research program and high-quality teaching. A Ph.D. is required at the time of appointment. We expect to fill this position at the ASSISTANT **PROFESSOR** level, but appointment at an **ASSOCI-ATE PROFESSOR** level is possible in exceptional cases. We will consider candidates beginning January 1, 1999, and will continue until suitable candidats are identified. Applications should include a complete résumé, examples of published work, a statement outlining teaching and research interests, and the names and addresses of at least four (4) individuals who could provide references. Send application materials to: Head, Department of Geo-sciences, Pos#: S-3851, 503 Deike Building, The Pennsylvania State University, University Park, PA 16802. Penn State is committed to Affirmative Action/Equal Opportunity and the diversity of its work force.

DIRECTOR OF SCIENCE OUTREACH

Rutgers University-Newark Campus invites applications for the Director of Science Outreach, Faculty of Arts and Sciences-Newark (FASN) and Co-Director of the Center for Pre-College and Community Outreach. The successful candidate will coordinate and promote all science outreach programs of FASN including K-12 initiatives and community college efforts, develop new out-reach programs with a focus on Newark Public Schools, and generate support for science outreach programs and pre-college programs through foundations and other sponsors. Qualifications include a Ph.D. in the natural sciences, physical sciences, or chemistry; demonstrated grantsmanship; outstanding communication skills; and college teaching and administrative experience. Applications will be reviewed beginning January 4, 1999. Send curriculum vitae, personal statement, and three letters of reference to:

> Janice Robinson Associate Dean for Academic Affairs and Director, Academic Foundations Center Rutgers University Department of Personnel 249 University Avenue Newark, NJ 07102

Affirmative Action/Equal Employment Opportunity. Vietnam veterans must self-declare.

ORGANISMAL BIOLOGIST (PJ# 2230) BIOLOGICAL SCIENCE

Plattsburgh State University of New York invites applications for a fall 1999 tenure-track position. **ASSIST ANT PROFESSOR**. Qualifications: Ph.D. with a broad background in organismal biology is required. Responsibilities: teach a basic course in general biology, be expected to develop upper-level courses in an area of expertise, and develop a research program involving undergraduates on some aspect of the flora or fauna of the Adirondacks or Lake Champlain. An opportunity exists for interaction with the Lake Champlain Research Institute on campus. Salary: \$36,000; dependent upon qualifications and

Salary: \$36,000; dependent upon qualifications and experience; excellent benefits. Review of applications begins January 15, 1999, and continues until position is filled. Please send or FAX cover letter, résumé or curriculum vitae, transcripts, three letters of recommendation, a statement of teaching philosophy and a summary of potential research to: Chair, Search Committee (PJ# 2230-Science), c/o Personnel, Plattsburgh State University of New York, 101 Broad Street, Plattsburgh, NY 12901-2681. FAX: 518-564-4600.

Women and racial minorities encouraged to apply.

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Science

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FACULTY POSITIONS MICROBIAL GENOMICS AND INFORMATICS

As part of a University-wide programmatic expansion in genomics and bioinformatics, the Department of Biology at Texas A&M University invites applications to fill two faculty positions in the following areas:

Microbial genomics. We seek an outstanding individual using genomics-based approaches to address fundamental biological questions in any area of microbiology, with some preference given to individuals studying fungi, pathogenic bacteria, or the *Archaea*, especially extremophiles.

Bioinformatics. The successful candidate should have a sound understanding of the nuances of database construction and the use and development of search and display algorithms. He or she should be applying these approaches to some aspect of functional or comparative genomics, focusing on an important biological problem, e.g., evolution and systematics or identifying gene regulatory networks. There will be significant opportunity to form linkages with other faculty conducting genomics research and with informatics groups forming on campus.

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FACULTY, BACTERIAL PATHOGENESIS

The Department of Molecular Genetics and Microbiology of the University of Florida College of Medicine invites applicants for a tenure-track position at the ASSIST-ANT PROFESSOR level, although outstanding candi-dates at the ASSOCIATE PROFESSOR and PRO-FESSOR ranks will be considered. The successful candidate will be expected to develop an independent research program in molecular pathogenesis, preferably of bacterial disease, to complement ongoing programs in bacterial pathogenesis, molecular virology, viral pathogenesis, and molecular genetics. Applicants should hold a Ph.D. and/ or M.D. degree and have demonstrated productivity using a molecular approach to study bacterial pathogenesis and/or host-pathogen interaction. Teaching responsibilities include medical and graduate students and undergraduate pharmacy students. Salary will be commensurate with rank and experience. Application deadline is February 28, 1999, and start date is on or after July 1, 1999. Send curriculum vitae, description of research plans, and names and addresses of three references to: **Dr. Paul A.** Gulig, Department of Molecular Genetics and Microbiology, Box 100266, University of Florida College of Medicine, Gainesville, FL 32610-0266.

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

OPHTHALMIC RESEARCH FACULTY POSITION AT THE CULLEN EYE INSTITUTE Baylor College of Medicine Houston, Texas

The Cullen Eye Institute invites applications for new faculty positions at the **INSTRUCTOR** or **ASSIST-ANT PROFESSOR** level in teaching and the basic research areas of glaucoma, neuroprotection, and/or apoptosis/necrosis in the eye. Candidates must hold a Ph.D. or M.D.-Ph.D. degree, and should be familiar with cell culture, molecular biology, and electrophysiology techniques.

Applicants should send curriculum vitae, a short research plan, and contact information for three references to:

> Dr. Ronald L. Gross Cullen Eye Institute, NC-205 Baylor College of Medicine One Baylor Plaza Houston, TX 77030

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

POSITIONS OPEN

FACULTY POSITION DEPARTMENT OF NEUROBIOLOGY UCLA SCHOOL OF MEDICINE

The Department of Neurobiology of the UCLA School of Medicine invites applications for a tenure-track or tenured faculty position at the ASSISTANT, ASSOCIATE, or FULL PRO-FESSOR level. The Department has a strong commitment to excellence in research, scholarship, and teaching of graduate and professional students. We seek an outstanding individual who will address fundamental questions regarding the structure and function of the vertebrate nervous system to complement our established and emerging strengths in molecular, cellular, and systems neurobiology. The successful candidate must be capable of maintaining a vigorous, creative, and independent research program. Applicants should have a Ph.D., M.D., or

Applicants should have a Ph.D., M.D., or equivalent, and postdoctoral training experience in neuroscience. The position includes a competitive start-up package including new or recently renovated laboratories, and a salary that will be commensurate with rank and experience. The appointment may start as early as July 1, 1999.

To apply, please send a curriculum vitae and a brief statement of current and future research plans and have at least three letters of recommendation sent to:

Nicholas C. Brecha, Ph.D. Chair, Search Committee Department of Neurobiology UCLA School of Medicine Box 951763

Los Angeles, CA 90095-1763 Application deadline: January 1, 1999.

UCLA is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION INTEGRATIVE NEUROSCIENCE University of California, San Francisco

The Department of Physiology seeks an **ASSISTANT** or **ASSOCIATE PROFESSOR**, tenure-track, in integrative neuroscience. Candidates should have a strong record of basic research in issues related to the operation of the intact brain, using relevant biological or computational techniques and involving human or animal subjects. The successful candidate will have laboratory space within the W. M. Keck Foundation Center for Integrative Neuroscience and will be a member of the Neuroscience Graduate Program and the Sloan Center for Theoretical Neurobiology. He/she will be expected to mount a highly successful research program, to participate in graduate and postdoctoral training, and to teach in graduate and professional courses.

The search will remain open until an appointment is made, but complete applications should be received by January 15, 1999, to ensure full consideration. Please send a curriculum vitae, key publications, a two-page description of past research and future goals, and have three letters of recommendation sent to:

> Professor Stephen G. Lisberger Chair, Neuroscience Search Committee University of California, San Francisco Department of Physiology, Room S-762 513 Parnassus Avenue San Francisco, CA 94143-0444

The Department of Forensic Sciences of the George Washington University invites applications for a TEN-URE-TRACK POSITION in the area of molecular biology. A Ph.D. is required. Experience in forensic science is desired, but not required. The successful applicant will develop a competitive research program, direct graduate student research at the Master's degree level, and contribute to the Department teaching at the graduate level. Applicants should submit a current curriculum vitae and a succinct outline of their research plans. Candidates should arrange for three letters of recommendation to be sent directly to: David A. Rowley, Chair, Department of Forensic Sciences, The George Washington University, Washington, DC 20052. Website: www.gwu. edu/-forensic. Review of applications will begin on January 15, 1999, and continue until the position is filled. The George Washington University is an Equal Opportunity/ Affirmative Adtion Employer.

POSITIONS OPEN

SENIOR FACULTY POSITION MOLECULAR BIOLOGY/PHYSIOLOGY/ BIOCHEMISTRY

The University of Missouri is accepting applications for a Senior Investigator (tenure track) with research achievements and interests in molecular biology, gene regulation, and their application to understanding physiological and biochemical responses to physical exercise, training adaptations, and cardiovascular health. This position is a Mission Enhancement initiative of the University in support of the existing excellence in cardiovascular sciences on campus. The successful candidate should exhibit a well-established, nationally recognized, active research program that has been sustained by substantial extramural funding. A desire to lead research and training initiatives to integrate molecular biology inquiry to observed phys-iological and biochemical responses of exercise and car-diovascular health is essential. The appointment is in Bio-medical Sciences, College of Veterinary Medicine, with joint appointments in the College of Medicine (e.g., Physiology, Biochemsitry) and/or the Dalton Cardiovascular Research Center, as appropriate. Applications should include a curriculum vitae, names of three references, and a letter stating professional goals. Applications should be submitted by December 31, 1998, or until the position is filled. Address correspondence to:

Dr. Ronald L. Terjung Biomedical Sciences E102 Veterinary Medicine Building University of Missouri-Columbia College of Veterinary Medicine Columbia, MO 65211 E-mail: terjungr@missouri.edu

The University of Missouri is an Affirmative Action/Equal Opportunity Employer and complies with the guidelines of the Americans with Disabilities Act of 1990.

TENURE-TRACK FACULTY APPOINTMENT FOR IN VIVO MR SCIENTIST

The Department of Biological Sciences at Carnegie Mellon University and the Pittsburgh NMR Center for Biomedical Research seek an outstanding scientist working in the application for in vivo magnetic resonance imaging and/or spectroscopy to solve important biomedical problems, primarily in cellular or animal models. Appointment will be made at a level consistent with the experience of the applicant. Applicants are expected to initiate an independent research program that complements ongoing activities. Areas of interest include, but are not limited to, functional imaging of the brain or other tissue function, microimaging to study tissue function or developmental biology, and spectroscopic studies of organ function including applications to cancer. Applicants working on development of functional imaging, spectroscopic imaging, or novel contrast agents are also encouraged to apply. The Pittsburgh biomedical community has strong programs in the neurosciences, cancer, organ transplantation, molecular genetics, developmental biology, and structural biology from which the successful applicant can draw for potential collaborations. Interested applicants should send their curriculum vitae, statement of research interests, future plans, and three reference letters directly to: Dr. Chien Ho, MR Faculty Search Committee, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213. E-mail: chienho@andrew.cmu. edu. Review of applications will begin on January 4, 1999, and will continue until a suitable candidate is re-cruited. Canegie Mellon University is an Equal Opportunity/ Affirmative Action Employer.

JUNIOR FACULTY POSITION

The Division of Transplantation at the University of Miami School of Medicine is seeking a MOLECULAR BIOLOGIST for an entry-level research faculty position. Qualified applicants will possess a Ph.D. in molecular biology and have at least two years of postdoctoral experience in the field of eukaryotic gene transfer/expression using viral delivery systems. We are especially interested in applicants with experience in recombinant adenovirus gene transfer. Additional experience in molecular and cellular immunology is highly desirable. Interested individuals should send a curriculum vitae and the names of three references to: Keith Zucker, Ph.D., Department of Surgery (R-440), Division of Transplantation, University of Miami School of Medicine, P.O. Box 012440, Miami, FL 33101. The University of Miami School of Medicine is an Equal Opportunity Employer.

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CONFERENCE

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Stefan Hatos Chair in Psychiatry & Biobehavioral Sciences

The Department of Psychiatry and Biobehavioral Sciences and the Neuropsychiatric Institute at UCLA seeks a senior research neuroscientist in the areas of addiction and mood disorders to fill the Stefan Hatos Chair in Psychiatry. This endowed professorship will provide support for a research program in opiate addiction and depression. Applicants should possess a record of substantial research, the ability to develop a strong integrative research program to advance the treatment of human addiction, and expertise to oversee the educational component associated with the research program. Applicants should also possess an internationally recognized record of research excellence in molecular and cellular mechanisms of drug actions, and a substantial record of extramural peerreviewed research funding. The successful candidate will be expected to play an integrative role between basic and clinical scientists within the Department and must possess experience in directing a multidisciplinary research program. Candidates must qualify for an appointment at the rank of professor at UCLA. Please send curriculum vitae, a statement of research interests, and names and complete addresses of three references to: Cynthia Brooks, Search Coordinator, Hatos Chair Search Committee, Department of Psychiatry & Biobehavioral Sciences, 760 Westwood Plaza, Los Angeles, CA 90024-1759 UCLA is an EOE.

OSI Pharmaceuticals, Inc. is an integrated drug discovery company with a mission to discover and develop novel pharmaceutical products. We have combined sophisticated molecular biology with industry pioneering robotics to become the leader in the field of small molecule drug discovery by automated high-throughput screening.

Senior Research Scientist (job code: A1)

Responsibilities: Target identification and selection, assay development for HTS, functional assay development for leads optimization, supervision of two RA's.

Qualifications: Ph.D., 2-5 years' post-doc experience in skin biology field, broad training in molecular cell biology and biochemistry. Must have excellent written and oral skills.

Senior Research Scientist (job code: A2)

Responsibilities: Designing and performing animal studies for pigmentation control, hair growth and photo aging repair, supervising 1-2 RA's, communicating with internal and external collaborators.

Qualifications: Ph.D. in pharmacology, with 2-5 year's post-doc experience in skin biology field, topical application and evaluation, basic statistical analysis, and excellent written and oral presentation skills.

Senior Research Scientist (job code: D1)

Responsibilities: Managing the biology group for the diabetes project; designing and implementing experiments for evaluating compounds for anti-diabetic activity; and interfacing with scientists at the Vanderbilt Diabetes Center.

Qualifications: Ph.D. and 2 or more years' post-doc experience in diabetes, with a background in molecular biology/pharmacology. Industry experience preferred.

Systems Specialist

Responsibilities: Systems troubleshooting, programming, performance evaluation, repair and maintenance. Interfaces with project teams to design, develop and/or modify screening software to support projects. Devises procedures, prepares flowcharts, codes, tests, debugs, validates and documents procedures. Analyzes systems performance to evaluate liquid transfer accuracy, positions accuracy and precision and takes corrective action to calibrate or repair. Performs and coordinates periodic maintenance to ensure contamination free and consistent system performance.

Qualifications: B.S. degree and/or equivalent in a scientific discipline with 0-2 years' experience required. Knowledge of PC hardware, software, peripheral configuration, troubleshooting, DOS, Windows required. Technical background in the repair, troubleshooting and maintenance of lab equipment preferred. Familiarity with RS232 communications and programming skills strongly preferred.

Programmer

Responsibilities: Design, develop, evaluate and modify computer programs for the solution of scientific and engineering efforts. Analyze existing systems and formulate logic for new systems. Devise logical procedures, prepare flowcharts, perform coding, test and debug programs. Provide input for documentation of new or existing programs.

Qualifications: B.S. in computer science with 1 or more years of programming experience. Experience with Windows GUI, Power builder, and SQL/ODBC is required. Knowledge of HTML, CGI and JAVA is a plus.

OSI Pharmaceuticals offers a superb benefits package, including 3 weeks vacation, stock options, 401(K) and opportunities for career development. Qualified candidates may send resumes (please specify the position of interest) to: Director, Human Resources, OSI Pharmaceuticals, Inc., 106 Charles Lindbergh Blvd., Uniondale, NY 11553; Fax (516) 222-0114; e-mail: employment@osip.com. Equal Opportunity Employer M/F/D/V.

OSI Pharmaceuticals

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HEAD, DEPARTMENT OF ECOLOGY, EVOLUTION, AND BEHAVIOR UNIVERSITY OF MINNESOTA

The University of Minnesota invites applications and nominations for the position of Head (with tenure) of the Department of Ecology, Evolution, and Behavior in the College of Biological Sciences. The Department has 30 faculty, serves as a home for more than 60 graduate students in several graduate programs, and offers an undergraduate major. We seek a recognized scholar of international stature in the fields of ecology, evolution, or behavior. The successful candidate will have a distinguished record of scholarly activity and leadership. The Head will lead the department through a series of faculty searches over the next few years and will be expected to maintain an active research program. Applications will be reviewed beginning January 4, 1999. Applications will continue to be accepted and reviewed until the position has been filled. A letter of application, curriculum vitae, up to ten reprints, and the names of four references should be submitted to: >

> Ms. Jean McAlpine Ecology, Evolution, and Behavior Head Search Committee College of Biological Sciences University of Minnesota 123 Snyder Hall 1475 Gortner Avenue St. Paul, MN 55108

The University of Minnesota is committed to the policy that all persons shall have equal access, to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

FACULTY POSITIONS IN SIGNALING AND REGULATORY MECHANISMS DEPARTMENT OF PHARMACOLOGY Mount Sinai School of Medicine

Applications are invited for tenure-track positions at the **ASSISTANT PROFESSOR** level. We are seeking outstanding individuals who are interested in mechanistic approaches to analyzing biological processes relevant to pharmacology and therapeutics. Current areas of strength in the department include protease biology, G-protein signaling, and synaptic plasticity. While we are interested in recruiting in the areas of protease, and/or protein kinase cascades regulating cell cycle, development, neuronal plasticity, or immune responses, outstanding candidates in all areas will also be considered.

The successful candidates will be expected to develop and maintain a vigorous research program supported by extramural funding and participate in medical and graduate teaching.

Interested individuals should send curriculum vitae, description of research interests, and names and addresses of three references by January 15, 1999, to: Chair, Search Committee, c/o Ms. Renny Satz-Greeco, Administrator, Department of Pharmacology, Box 1215-PH, 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.

FACULTY POSITION MICROBIAL ECOLOGY/EVOLUTION

Montana State University invites applications for a tenure-track position in any aspect of microbial ecology/ evolution. The successful candidate will establish a nationally recognized and funded research program utilizing the techniques of molecular biology, biochemistry, genomics, classical microbiology, or other approaches, and will achieve excellence in teaching undergraduate and graduate students in general microbiology and microbial ecology/evolution. Required: Doctoral degree in an appropriate discipline and postdoctoral research training. Appointment at the ASSISTANT PROFESSOR level is anticipated; exceptional candidates at higher levels will be considered. Information, including additional required qualifications, may be obtained on the website: www. qualifications, hay be obtained on the website. www. montana.edu/msuinfo/jobs/faculty or Telephone: 406-994-2903; FAX: 406-994-4926. Review begins November 23, 1998. Applicants should send a letter of application, curriculum vitae, representative publications, statements of teaching and research interests, and three professional references to: Microbial Ecology/Evolution Search Committee, Department of Microbiology, Montana State University, Bozeman, MT 59717-3520.

 $ADA/Equal\ Opportunity/Affirmative\ Action/Veterans\ preference.$

POSITIONS OPEN



The Department of Psychiatry and Biobehavioral Sciences at the University of California, Los Angeles School of Medicine, seeks full-time neurobehavioral genetics faculty members at all levels. The Neuropsychiatric Institute, in conjunction with the Departments of Human Genetics, Neurology, and Psychiatry, has developed a Neurobehavioral Genetics Research Center. Individuals are sought who will strengthen and expand the research activities in this new program. Successful candidates will join a multidisciplinary team of researchers working to elucidate gene and environmental influences on brain-behavior pathways. Current areas of the Center's research in the Department of Psychiatry include genetic investigations of the major psychiatric disorders including attention deficit hyperactivity disorders, Alzheimer's disease, and schizophrenia. Individuals with particular expertise in genetic epidemiology and/or molecular psychiatry are encour-aged to apply. Candidates must have a Ph.D. and/or M.D., a proven track record of productivity, strong potential for extramural funding in neurobehavioral genetics research, and demonstrated excellence in teaching and mentoring. Interested persons should send a letter of inquiry, brief statement of research plans, curriculum vi-tae, and names and complete addresses of three individuals who can provide letters of recommendation to: Cynthia Brooks, Coordinator, Neurobehavioral Genetics Search Committee, UCLA Department of Psychiatry and Biobehavioral Sciences, 760 Westwood Plaza, Los Angeles, CA 90024-1759. UCLA is an Equal Opportunity Employer.

PLANT PHYSIOLOGIST. Denison University, a selective liberal arts college, invites applications for a ten-ure-track position at the ASSISTANT PROFESSOR level. Teaching responsibilities include core courses in plant biology and ecology and evolution, an advanced course in plant physiology, and perhaps another course in the candidate's area of interest (teaching load is typically two courses per semester with laboratories). Ability to teach genetics is a plus. A strong potential for excellence in undergraduate teaching and an active research program involving undergraduates are essential. Denison offers competitive start-up funds, summer support for student and faculty research, departmental greenhouse, herbari-um, and a 350-acre Biological Reserve with field station near campus. Ph.D. required; postdoctoral experience and demonstrated teaching ability preferred. Candidates should send letter of application, curriculum vitae, statements of teaching philosophy and research interests, transcripts (graduate and undergraduate), and have three letters of reference forwarded to: Chair, Plant Biologist Search Committee, Biology Department, Denison University, Granville, OH 43023 by January 5, 1999. Denison is an Affirmative Action/Equal Opportunity Employer. Women and people of color are encouraged to apply.

Case Western Reserve University invites applications for a **TENURE-TRACK FACULTY POSITION** in the area of organic chemistry, beginning fall 1999. Candidates with a Ph.D. and/or postdoctoral experience in oligosaccharide/carbohydrate chemistry, and with a commitment to excellence in teaching and research, will be considered. Applicants should submit a curriculum vitae, list of publications, statement of present and future research interests, and arrange to have three letters of recommendation sent to: **Chairman, Organic Faculty Search Committee, Department of Chemistry, Case Western Reserve University, Cleveland, OH 44106-7078. Au Affinnative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.**

FACULTY HEMATOLOGY/ONCOLOGY

The University of Illinois at Chicago, Section of Hematology/Oncology is seeking a Clinician to develop a practice at its offsite clinic, teach Residents and other medical professionals, and participate in research activities. This non-tenure-track position will be at the ASSIST-ANT PROFESSOR level. Please send curriculum vitae and references to: Sharon Gaik, Department of Medicine, The University of Illinois at Chicago, 840 South Wood (M/C 787), Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION IN MICROBIAL PHYSIOLOGY/BIOTECHNOLOGY

The Department of Molecular Biology at the University of Wyoming is seeking to fill a tenure-track position. Preference will be given to individuals with training and/ or experience in the general area of microbial physiology and biotechnology. Candidates must hold a Ph.D. in an appropriate field and have at least two years of postdoctoral experience. Evidence of accomplishments in both research and teaching will be essential. The successful candidate will be expected to establish an independently funded research program and participate in both the undergraduate and graduate teaching programs. The De-partment is presently composed of 14 faculty members with diverse research interests in biochemistry, genetics, and microbiology supported by over \$2.5 million per year in grants. Laboratory facilities are modern and well equipped. Salary and start-up packages will be competi-tive. The University enrolls 12,000 students including approximately 3,000 graduate students. Laramie is locat ed in southeastern Wyoming about 120 miles from Denver, Colorado. For additional information about the Department, see website: http://www.uwyo.edu/ag/ molecbio/mobio.html or direct questions to e-mail: uwmbio@plains.uwyo.edu. Candidates should submit a curriculum vitae, description of research plans and teaching philosophy, and three letters of recommendation to: Faculty Search Committee, Department of Molecular Biology, University of Wyoming, Laramie, WY 82071-3944. Screening of applications will begin on January 15, 1999, and continue until a suitable candidate is identified.

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

THREE-YEAR LECTURER ANIMAL PHYSIOLOGY DEPARTMENT OF BIOLOGY University of Michigan

The Department of Biology at the University of Michigan announces the availability of a non-tenure-track Lecturer position. The term of appointment is for a period of three years and is subject to renewal based on satisfactory performance. The Lecturer will serve as coordinator and supervisor of undergraduate laboratories in animal physiology. The successful candidate must have a Ph.D. and experience in teaching undergraduate courses in areas related to animal physiology. In addition to general supervision, duties will include working with faculty to revise laboratory exercises, leading laboratory sections, and training graduate student Instructors who serve in the laboratories. Appointments are on a nine-month basis and include a liberal benefits package. The position is available beginning September 1, 1999, and the deadline for receipt of application is January 22, 1999. Applicants should provide curriculum vitae and three letters of recommendation to:

Chair, Animal Physiology Lecturer Search Committee Department of Biology University of Michigan

Ann Arbor, MI 48109-1048

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

ASSISTANT PROFESSOR UNIVERSITY OF WISCONSIN

The Division of Pharmaceutical Sciences at the University of Wisconsin School of Pharmacy is seeking a tenuretrack Assistant Professor. Duties will include research and graduate training, as well as teaching pharmacology/toxicology courses for undergraduate and professional students. The successful candidate will be expected to establish an extramurally funded research program in an area related to the mechanisms of drug action. Outstanding candidates from a broad range of disciplines in the biological sciences will be considered; however, areas of particular interest include systems that regulate developmental processes, transcriptional regulation, and the use of molecular genetics to identify the functions of receptor molecules. The position requires a Ph.D. in pharmacology, or a related discipline, and at least two years of post-doctoral experience. Send a curriculum vitae, a statement of research interests, and three letters of reference to: Warren Heideman, Chair, Pharmacology Search Committee, School of Pharmacy, University of Wis-consin, Madison, WI 53706. Application must be re-ceived by January 15, 1999. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer, and strongly encourages women and minorities to apply.

Center for Cancer Biology University of Rochester Institute for Biomedical Sciences



Faculty positions

The University of Rochester School of Medicine and Dentistry announces the opening of a Center for Cancer Biology in the new University of Rochester Institute for Biomedical Sciences. The Center will be located in a new research building attached to the Medical Center, and will constitute a significant extension to the existing NCI-designated Cancer Center.

This is an exciting time to apply the recent advances in our understanding of cell signaling to the design of novel therapeutic strategies targeting specific cancer-cell characteristics. The Center will have a strongly interactive environment and will focus on basic research in molecular cell biology that will contribute to the discovery of cancer-relevant drug targets.

We are now recruiting eight to ten tenure-track assistant, associate or full professors with proven abilities in research. Generous start-up packages will be provided. Investigators will have dual appointments in the Center and in a department of the Medical School. Areas of emphasis include, but are not limited to:

cell cycle, apoptosis, signal transduction, gene expression, angiogenesis intercellular communication, cell adhesion and migration, and metastasis.

Investigators working with genetically tractable model organisms are encouraged to apply. Applications including a curriculum vitae, brief summaries of past accomplishments, a statement of future research interests and the names of three referees should be addressed to:

Dr. Hartmut Land

Director, Center for Cancer Biology University of Rochester Institute for Biomedical Sciences 601 Elmwood Avenue, Box 633 Rochester, NY 14642 Tel: (716) 275-9315 Fax: (716) 756-5116 land@urmc.rochester.edu www.urmc.rochester.edu/ribs

MUSCLE PHYSIOLOGIST UCLA

The Department of Physiological Science seeks a highly qualified muscle physiologist for a tenure-track position for which appointment is expected at the level of AS-SISTANT PROFESSOR. Although the area of muscle physiology is not specified, applicants who use integrative approaches to muscle physiology and can interact with existing faculty in research areas that include mechanisms of muscle growth, adaptation, regeneration, and pathophysiology or the structure and function of neuromuscular junctions are especially encouraged to apply. The successful candidate will be expected to participate in undergraduate and graduate teaching and to establish a vigorous, externally funded research program. Minimum qualifications include a Ph.D. degree in a relevant discipline, postdoctoral experience and the demonstrated ability to perform excellent research. Applicants should submit a curriculum vitae with a description of research plans, reprints or preprints of key publications, and have three letters of recommendation sent by February 1, 1999 to: James G. Tidball, Search Committee Chair, Department of Physiological Science, College of Letters and Science, University of California, Los Angeles, CA 90095-1606.

DEAN College of Engineering

The University of Delaware invites applications and nominations for the position of Dean of the College of Engineering. The University is a state-assisted institution with an enrollment totaling about 20,000 students. The College offers programs in chemical, civil, computer, electrical, environmental, and mechanical engineering and materials science. Six centers provide research foci in biomechanical engineering, catalysis, coastal engineering, composite materials, engineering and molecular thermodynamics, and nanomachined semiconductor surfaces. Current research expenditures total about \$20M per annum.

The Dean provides leadership for the college's 89 faculty and approximately 400 graduate and 1000 undergraduate students. Along with the 6 other Deans, the Dean of Engineering reports directly to the Provost and is a crucial component of the central management team, including active participation in University development activities. The Dean is responsible for apportioning faculty lines and operating budgets in the College. S/he is charged with providing the vision and strategic planning necessary to develop and enhance the quality of the College's undergraduate, graduate, and research programs and facilitate collaborations with other colleges, and industrial, governmental, and philanthropic organizations. During the tenure of the next dean, an additional 60,000 square foot engineering building is scheduled for construction and about 20 faculty hires are anticipated.

The candidate must meet the requirements for appointment to the rank of professor in one of the departments in the College. In addition, the successful candidate must have experience in attracting and managing sponsored research and demonstrate an appreciation for the administrative support needed to maintain a vigorous research program. Qualifications include an earned doctoral degree, a distinguished scholarly record, and the ability to lead the College in its academic responsibilities.

Applications should include a letter of interest, curriculum vitae, and names of four references. Although nominations and applications will be accepted until the position is filled, it is desired that the Dean will assume office on July 1, 1999. Nominations and expressions of interest will be held in confidence. Candidates should submit materials to: **Dean Carolyn Thoroughgood, Chair, Dean of Engineering Search Committee, 111 Robinson Hall, University of Delaware, Newark, DE 19716.** More information regarding this search and the College of Engineering is available at http://www.udel.edu/engg.

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.



FACULTY POSITION IN BIOCHEMISTRY/ BIOMEDICINAL CHEMISTRY

The Department of Basic Pharmaceutical Sciences at the University of South Carolina, College of Pharmacy invites applications for a tenure-track position at the level of ASSISTANT/ASSOCIATE PROFESSOR. The position is available beginning August 16, 1999. Candidates should have a Ph.D. degree in biochemistry or biomedicinal chemistry and at least two years of postdoctoral research experience. The appointee will be expected to develop or continue an independently funded research program that utilizes biochemical and/or molecular approaches for the design of therapeutic agents or identification of therapeutic targets. The highest priority will be given to individuals with research interests in the area of oncology. In addition, the appointee is expected to participate in the teaching of professional and graduate stu-dents. Review of applications will begin on February 1, 1999. Candidates should send a curriculum vitae, a statement of research objectives, and the names and addresses of three references to: Dr. Sondra Berger, Chair, Search Committee, University of South Carolina, College of Pharmacy, Columbia, SC 29208. Additional information regarding the Department of Basic Pharmaceutical Sciences and College of Pharmacy is available at website: http://pharmwww.biol.sc.edu/index.html. The Uni-versity of South Carolina is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

FACULTY POSITIONS THE BURNHAM INSTITUTE LA JOLLA, CALIFORNIA

Positions are available at the level of **ASSISTANT** and **ASSOCIATE PROFESSOR**. The Institute is seeking individuals with strong and innovative scientific programs to join the Institute's Program on Cell and Matrix Biology. Individuals with scientific interests in the following areas are encouraged to apply: protease structure and function (metalloproteinases, ADAMs, and serine proteases), mass spectrometry (particularly individuals with an interest in the study of mammalian proteomes), structural biology (with an emphasis on adhesion molecules and proteases), protein engineering (including individuals applying phage display and other randomization approaches toward the study of protein function), and targeting (including protein, drug, and gene delivery). Send application letter, curriculum vitae, representative publications, and the names of three references to: Human **Resources, Attn: JS, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037**. See our website: www.burnham-inst.org.

Equal Opportunity Employer.

FACULTY POSITION IN ENVIRONMENTAL BIOLOGY

The Department of Biological Sciences at the College of New Rochelle invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level, beginning September 1999. The School of Arts and Sciences of the College continues the tradition of educating women, only, and has a strong commitment to undergraduate teaching. The successful candidate will teach courses in environmental biology and be responsible for overseeing the interdisciplinary Environmental Studies Program.

Requirements are a Ph.D. in biology, a broad background in the biological sciences, demonstrated evidence of teaching at the undergraduate level, and a willingness to teach a variety of courses to a population with diverse learning styles.

Interested applicants should send a letter of application, including a statement of teaching and research interests, a curriculum vitae, and three letters of reference by December 1, 1998, to: Dr. Thomas Venanzi, Chair, Division of Natural Sciences and Mathematics, College of New Rochelle, 29 Castle Place, New Rochelle, NY 10805. CNR is an Affirmative Action/Equal Opportunity Employer.

FACULTY HEMATOLOGY/ONCOLOGY

The University of Illinois at Chicago, Section of Hematology/Oncology is seeking a Clinician to develop a practice at its offsite clinic, teach Residents and other medical professionals, and participate in research activities. This non-tenure-track position will be at the ASSIST-ANT PROFESSOR level. Please send curriculum vitae and references to: Sharon Gaik, Department of Medicine, The University of Illinois at Chicago, 840 South Wood (M/C 787), Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

POSITIONS IN BIOCHEMISTRY AND CELL BIOLOGY

The Department of Biological Sciences at Clemson University is seeking to fill two tenure-track faculty positions at the level of **ASSISTANT PROFESSOR**.

Biochemistry. We are seeking a Biochemist with interest in the general area of enzymology. Postdoctoral experience is required. Candidates wilb be expected to develop a competitive, extramurally funded research program and to train M.S. and Ph.D. degree candidates. Teaching of undergraduate and graduate students will be in the general area of molecular biology and biochemistry with expertise in enzymology. Special considerations will be given to candidates whose research can augment our program in plant biotechnology and functional genomics. The Clemson University Genomics Institute is a state-ofthe-art genomics facility and is physically located within the department. To apply, submit a letter of application, a curriculum vitae, research support, at least three names and e-mail addresses of suitable references, and a research plan.

Cell biology. We are seeking a broadly educated Cell Biologist whose research is based on a fundamental interest in the integrative, comparative, or evolutionary biology of organisms. The successful candidate would be expected to interact with faculty research programs in a department that emphasizes these approaches. Primary teaching responsibilities include an undergraduate course in cell biology with a laboratory and upper-level undergraduate/graduate courses in the successful candidate's areas of special interest. We are interested in individuals who will establish an outstanding research program and who have the potential to be inspiring teachers. Applicants should submit a curriculum vitae, representative publications, a statement of current and planned research, a statement of teaching interests and philosophy, and the names of three individuals who can supply letters of recommendation.

Applications should be sent to: Chair, Biochemistry or Cell Biology Search Committee, Department of Biological Sciences, Clemson University, 132 Long Hall, P.O. Box 341903, Clemson, SC 29634-1903. Electronic applications may be sent to e-mail: lesley@ clemson.edu by including Biochemist or Cell Biologist on the subject line. Attachments should be compatible with WinWord 97. Information on research interests of the faculty and departmental resources may be obtained at the Department's website: http://biowww.clemson. edu/biosci/home.html. Consideration of applications begins January 15, 1999, for employment to begin August 15, 1999. Women and minorities are particularly urged to apply. Clemson University is an Equal Employment Opportunity/ Affirmative Action Employer.

The Department of Biostatistics and Medical Informatics at the University of Wisconsin is recruiting two tenuretrack ASSISTANT PROFESSOR positions in new medical informatics program, which will serve as a focal point between computer science, software engineering, and health science researchers. Ph.D. in computer science, medical informatics, or engineering with computer science focus; expertise in computational biology, database systems, artificial intelligence, or related fields. Successful candidate expected to establish independent research program in addition to collaborating on medical or health science research proejcts. Submit letter of application, curriculum vitae, description of research interests, and names of references to: David DeMets, 600 Highland Avenue, Room K6/446, Madison, WI 53792. E-mail: demets@biostat.wisc.edu. Women and minorities encouraged to apply. Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSISTANT/ASSOCIATE PROFESSOR IN MOLECULAR ENDOCRINOLOGY

Applications are invited to participate in NIH-funded studies regarding mechanisms mediating effects of insulin and growth factors on gene expression. Previous postdoctoral experience in molecular biology, analysis of DNA/ protein interactions, and/or transgenic approaches to studies of gene regulation desirable. Please send curriculum vitae and names of three references with telephone numbers to: Terry Unterman, M.D., The University of Illinois at Chicago, Department of Medicine/Endocrinology (M/C 640), 1819 West Polk Street, Chicago, IL 60612-7333. FAX: 312-455-5877; e-mail: unterman@uic.edu. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

TENURE-TRACK FACULTY POSITIONS DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS University of Mississippi Medical Center

Applications are invited for tenure-track positions in the Department of Physiology and Biophysics at the Uni-versity of Mississippi Medical Center. Applicants will be considered at ranks of ASSISTANT, ASSOCIATE, or FULL PROFESSOR, and must have a Ph.D. and/or M.D. degree with appropriate postdoctoral research experience. Special consideration will be given to candidates with strong backgrounds in molecular and/or cellular physiology and research interests that complement existing areas of excellence in cardiovascular, renal, and neuroendocrine physiology, or the pathophysiology of hyper-tension and vascular disease. The successful candidate is expected to develop a nationally recognized research lab-oratory supported by extramural funding and to contribute to the teaching and service missions of the department. The large group of cardiovascular scientists in the department offer excellent opportunities for collaboration at molecular, cellular, or systems levels of integration. For more information, the department website can be accessed at website: http://phys-main.umsmed.edu. Applicants should send a curriculum vitae, a statement of research interests and career goals, and the names of at least three references to:

Dr. John E. Hall Department of Physiology and Biophysics University of Mississippi Medical Center Jackson, MS 39216-4505

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

UNIVERSITY OF VIRGINIA FACULTY POSITIONS IN PHARMACOLOGY

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

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

ASSISTANT PROFESSOR of nutritional biochemistry. Rutgers, the State University of New Jersey, invites applications for a tenure-track Assistant Professor position in the expanding Department of Nutritional Sciences to begin fall 1999. The successful applicant is expected to develop a strong, externally funded research program in nutrition utilizing either molecular and cell biological approaches or stable isotope techniques. Specific area of re-search is open but the successful candidate will be expected to overlap and augment existing strengths in the department. Existing faculty interests can be found on our website: http://aesop.rutgers.edu/~nutrition. Responsibilities also include undergraduate/graduate teaching. Significant start-up funds and competitive salary in a dy-namic growth environment make this a very desirable position. Qualifications include at least two years of postdoctoral experience. Deadline for application is February 1, 1999, or until a suitable candidate is identified. Send curriculum vitae, a statement of research and professional interests, and names of three references to: Dr. Judith Storch, Chair, Search Committee, Department of Nutritional Sciences, Rutgers University, 96 Lip-man Drive, New Brunswick, NJ 08901-8525. An Af-firmative Action/Equal Opportunity Employer.

DEAN

Loyola University Chicago Stritch School of Medicine

Founded in 1909, the Stritch School of Medicine (SSOM) is one of four Jesuit Catholic medical schools in the United States. In support of its creative curriculum and educational commitment, a new facility for the School of Medicine was opened in 1997. The School of Medicine consists of approximately 600 full-time and 700 part-time faculty currently organized into 23 departments and 4 research institutes. The clinical faculty are formally incorporated as Loyola University Physician Foundation, a multi-specialty group practice that is the exclusive provider of health services for the Medical Center.

The SSOM is one of the nine colleges of Loyola University Chicago and a component of Candidates for the position of Dean are Loyola University Health System. The System includes the 545-bed Foster G. McGaw Hospital and the Russo Surgical Pavilion, the Mulcahy Outpatient Center, the SSOM, the

Cardinal Bernardin Cancer Center, the Ronald McDonald Children's Hospital of Loyola and clinical facilities for the School of Nursing on its Loyola University Medical Center campus; 18 satellite facilities, a joint venture with the Rehabilitation Institute of Chicago and a ventilator specialty hospital. Loyola shares a campus and is closely affiliated with the Hines Veterans Administration Hospital, a Dean's Committee hospital. Since moving to the campus in 1969, the SSOM experienced substantial growth in clinical programs, research productivity, and academic excellence particularly in the areas of cardiovascular disease, immunology, organ transplantation, oncology, neuroscience, burn and shock/trauma. The School of Medicine recently has initiated an Institute for Medical Ethics and Health Policy, which includes both an endowed chair and operating support.

expected to demonstrate an understanding and appreciation of Loyola University's historic mission. They should possess an M.D. or a Ph.D. (or an equivalent terminal degree) in

one of the fields of study offered in the School. While the selection process is open to candidates of varied backgrounds, those who have demonstrated leadership and excellence in education, research, medical science and administration will be given particular consideration. The Dean will be expected to work with other University and Health System administrators, the faculty and the Physician Foundation in the continued development of Loyola's academic health system and to represent the SSOM and Loyola University in an effective manner to the external public.

Nominations and requests for applications should be made prior to February 1, 1999. Address all correspondence to Stephen Slogoff, M.D., Search Committee for the Dean, Loyola University Medical Center, 2160 S. First Avenue, Maywood, Illinois 60153.



LOYOLA UNIVERSITY OF CHICAGO IS AN EQUAL OPPORTUNITY, AFFIRMATIVE ACTION EMPLOYER AND EDUCATOR





PROGRAM IN MOLECULAR MEDICINE

Mayo Foundation has recently established a new Molecular Medicine Program whose purpose is to establish a major gene therapy presence at Mayo Clinic. The Program involves laboratory research, education, and clinical practice, and brings together basic scientists and clinicians working toward medically important goals.

A tenure-track position is currently available for an individual with a Ph.D. or M.D. degree with a strong research track record in the development of lentiviral vectors. This faculty position is available with associated laboratory space, equipment start-up funds, and ongoing institutional support.

Interested applicants are asked to submit curriculum vitae, bibliography, statement of research interests, and names of three references to:

Stephen J. Russell, M.D., Ph.D. Director, Molecular Medicine Program Mayo Clinic and Foundation 1821D Guggenheim Building 200 First Street S.W. Rochester, MN 55905

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

MARINE PHYSIOLOGIST/BIOCHEMIST

The Ocean Sciences Centre (OSC) of Memorial University wishes to make a tenure-track appointment at the rank of **ASSISTANT PROFESSOR**. The appointee will have a strong program in experimental zoology that will take advantage of our laboratory facilities, including high-quality flowing seawater and a recently constructed 15,000–square foot Aquaculture Technology Building. Preference will be given to a candidate who can develop a strong research program in the physiology or biochemistry of marine fish or other marine organisms. Duties will include teaching in either or both of the graduate programs (aquaculture and marine biology), and the supervision of graduate students. The OSC is a research unit within the Faculty of Science

The OSC is a research unit within the Faculty of Science that operates a variety of research programs addressing questions relevant to the cold ocean environment, including aquaculture of fish and shellfish, vertebrate and invertebrate physiology, biochemistry and behaviour, oceanography, and seal biology. The OSC is situated 10 kilometers north of the university's main campus in St. John's, and ptovides excellent facilities for laboratory and field studies.

Memorial University is part of a vibrant, local scientific and engineering community that maintains an inventory of available positions for qualified partners. Partners of candidates for these positions are invited to include their résumé for possible matching with other job opportunities.

Interested persons should send a résumé, an outline of proposed research, and the names and addresses of three academic referees to:

Director, Ocean Sciences Centre Memorial University of Newfoundland St. John's, Newfoundland A1C 5S7 Canada E-mail: dwheeler@morgan.ucs.mun.ca Telephone: 709-737-3709 FAX: 709-737-3220 Website: http://www.mun.ca/osc

The closing date is January 15, 1999.

Memorial University is committed to the principle of Equity in Employment. In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. If suitable Canadian citizens or permanent residents cannot be found, other individuals will be considered.

BIOLOGY DEPARTMENT THE CATHOLIC UNIVERSITY OF AMERICA WASHINGTON, D.C.

The Department of Biology with a Ph.D.-granting graduate program has a tenure-track opening at the level of ASSISTANT PROFESSOR. Investigators studying molecular aspects of microbial pathogenesis, microbial genetics, or microbial physiology are particularly encouraged to apply. However, strong candidates asking novel, creative questions in any area of molecular and cellular biology will receive full consideration. The successful candidate will develop a competitive, extramurally funded research program and will teach at both the undergraduate and graduate levels. Please submit a statement describing research interests, a curriculum vitae, and three letters of reference by January 15, 1999, to: Dr. Pradip Rathod, Chairman, Faculty Search Committee, Department of Biology, The Catholic University of America, Washington, DC 20064. For more information on this position, the Department, and the University, please see website: http://www.cua.edu.

MICROBIOLOGIST. Emporia State University invites applications for a tenure-track ASSISTANT PRO-FESSOR position in biological sciences, beginning fall 1999. Ph.D. required. Strong commitment to teaching. Teaching assignments include pathogenic microbiology, immunology, and courses in area of interest. Typical course loads per semester consist of two courses with laboratories. Other expectations include advising, service, and development of a research program, which includes supervision of undergraduate and Master's-level students. Send curriculum vitae, unofficial transcripts, a letter describing teaching and research interests applicable to an undergraduate and Master's-level institution, and names, addresses, e-mail addresses, and telephone numbers of four references to: Chair, Screening Committee, Division of Biological Sciences, Box 4050, Emporia State University, Emporia, KS 66801. Review of applications begins January 4, 1999, and continues until the position is filled. Website: http://biology.emporia.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSORS CORNELL UNIVERSITY WEILL MEDICAL COLLEGE

As part of a major expansion in its basic biomedical sciences research programs. Weill Medical College (formerly known as Cornell University Medical College) seeks to fill six newly created faculty positions. Candidates with research interests in the structure and function of macromolecular assemblies, organelles, and cells are encouraged to apply.

Targeted areas of research include signal transduction mechanisms, membrane structure and function, cytoskeleton and extracellular matrix, and interactions of cells with infectious agents. Exceptional candidates in other appropriate fields will also be considered.

Candidates for Assistant Professor should demonstrate the potential for establishing a vigorous independent research program, and candidates for Associate Professor should have an outstanding record of productivity. The recruited faculty will occupy newly renovated laboratory and office space and generous start-up support will be provided. In addition to medical student teaching, candidates will participate in the Graduate School of Medical Sciences, which includes faculty from the Weill Medical College and the Sloan-Kettering Institute. Applications should include a curriculum vitae, statement of research interests, and three letters of recommendation. Applications should be sent to: Dr. Frederick R, Maxfield, Chairman, Recruitment Committee, Box# 27, Weill Medical College of Cornell University, 1300 York Avenue, New York, NY 10021.

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

ASSISTANT PROFESSOR LANDSCAPE ECOLOGY

The Department of Wildlife and Fisheries Sciences (website: http://wfscnet.tamu.edu) is seeking a tenure-track Assistant Professor in landscape ecology to apply landscape theory to restoration ecology and biodiversity conservation with quantitative skills in GIS and modeling. Candidate should integrate his/her research with existing programs in the Department including population ecology, genetics, ecological modeling, and human/ environment interactions. Submit curriculum vitae, transcripts, teaching philosophy, research interests, and three letters of reference by January 15, 1999, to: Dr. Thomas E. Lacher, Jr., Search Committee Chair, Department of Wildlife and Fisheries Sciences, 210 Nagle Hall, Texas A&M University, College Station, TX 77843-2258. Telephone: 409-847-9334.

The Texas A&M University System is an Equal Opportunity Employer and encourages applications from women and minorities.

ASSISTANT/ASSOCIATE PROFESSOR BIOLOGY, TENURE OR NON-TENURE-TRACK

University of Guam. Begins August 1999. Preference to candidates who can offer upper-division courses in developmental/cell/molecular/immunology, and participate in introductory microbiology or anatomy and physiology. Send application form, curriculum vitae, official graduate transcripts, copy of undergraduate transcripts, statement of teaching philosophy, three letters of reference, reprints to: Chair, Biology Search Committee, Human Resources Office, University of Guam, University of Guam Station, Mangilao, GU 96923 USA. Website: www.uog2.uog2.edu. January 15, 1999, receipt deadline. UOG is an accredited Land Grant Institution, Affirmative Action/Equal Employment Opportunity Employer.

The University of Arkansas currently has three to four **GRADUATE STUDENT ASSISTANTSHIPS** available for candidates interested in nutritional biochemistry/toxicology. General areas of interest include regulation of nutrient utilization/partitioning, nutrient/xenobiotic interactions in the GI tract, amino acid metabolism, and nutrition/environmental interactions. Contact: Dr. David Barnes, University of Arkansas, Fayetteville, AR 72701. Telephone: 501-575-2913; e-mail: dbarnes@ comp.uark.edu.

POSITIONS OPEN

Two faculty positions, plant ecology and surface processes and tectonics, Lehigh University. The Department of Earth and Environmental Sciences (EES) invites applications for two tenure-track positions at the level of ASSISTANT or ASSOCIATE PROFESSOR.

For the first position, we seek a Plant Ecologist with interests in ecosystem-level studies that link modern processes to the record of environmental change. Ability to interact constructively with department foci in surficial processes, geochemistry, and limnology is desired. For the second position, we seek a Geomorphologist with broad interests in the coupling between surface and tectonic processes. We are interested in an individual with expertise in erosional and depositional processes or in landscape evolution, who might apply their expertise over a range of scales to complement not only our interests in tectonics but also foci in surficial processes, record of environmental change, and ecosystems.

For both positions, quantitative strength and experience in modeling, remote sensing, or field studies are desirable. We expect the successful candidates to develop a vigorous externally funded research program, develop an undergraduate course in the general area of plant ecology (Ecologist) or sedimentation and the sedimentary record (Geomorphologist), as well as courses in his/her specialty to complement our curriculum.

These tenure-track positions begin August 1999. To receive full consideration, applicants should submit by December 15, 1998, a letter of application, curriculum vitae, statement of research and teaching interests, up to three reprints, and three letters of reference to: Peter Zeitler, Chair, Department of Earth and Environmental Sciences, 31 Williams Drive, Lehigh University, Bethlehem, PA 18015. For further information about the EES Department, see website: http://www.lehigh.edu/~inces.

Lehigh University is committed to recruiting and retaining women and minorities.

Biology. ASSISTANT PROFESSOR in marine biology (animal emphasis). Full-time, tenure-track begin-ning August 1999. Major responsibility will include teaching marine biology courses and ethology. Other expectations include teaching introductory biology and involvement with the Marine Science Consortium, Wallops Island, Virginia. Required: Ph.D.; sufficient background to teach marine biology and ethology; primary research with a field orientation and quantitative approach; strong commitment to teaching and developing an active marine biology research program, which includes undergraduates; and a successful interview and teaching demonstration. Preferred: Postdoctoral research, teaching experience, and publications/presentations. Full consideration given to applications received by January 6, 1999. Send letter of application, curriculum vitae, copies of undergraduate and graduate transcripts, three current letters of recommendation (including at least one that addresses teaching ability), and a summary of teaching and research goals to: Dr. Julie Ambler, Marine Biologist Search SC1120, Depart-ment of Biology, Millersville University, P.O. Box 1002, Millersville, PA 17551-0302, Questions may be addressed to: Dr. Ambler, e-mail: jambler@ marauder.millersv.edu. An Equal Opportunity/Affirmative Action Institution.

EVOLUTIONARY BIOLOGIST UNIVERSITY OF CALIFORNIA, RIVERSIDE

The Department of Biology seeks an Organismal Evolutionary Biologist at the junior (tenure-track ASSIST-ANT PROFESSOR) level. We seek an Evolutionary Biologist working at the interface between the individual and the environment; relevant areas of interest include evolutionary physiology, functional morphology, and ecological genetics. The successful candidate will join a well-established program in evolutionary biology, establish a vigorous research program, contribute to undergraduate and graduate training, and participate in our interdepartmental graduate research unit in evolution and ecology. Applicants must have a Ph.D. degree with two or more years of postdoctoral training and a strong record of research accomplishment. A curriculum vitae, statement of research interests, copies of relevant publications, and at least three letters of reference should be sent to: Chair, Organismal Evolutionary Biologist Search, Depart-ment of Biology, University of California, Riverside, CA 92521. Review of applications will begin 30 January 1999. The University of California is an Equal Opportunity/ Affirmative Action Employer.



UCLA

The Department of Physiological Science seeks a highly qualified physiologist for a tenure-track position for which appointment is expected at the level of ASSISTANT PROFESSOR, Appointment at the ASSOCIATE PROFESSOR or PROFESSOR level with tenure may be made for a physiologist with an established, independent record of creative and significant research in integrative physiology. The successful applicant is expected to employ integrative approaches to physiology in which molecular, cellular, and/or biochemical approaches are used to answer questions of systemic and organismic function. Although excellence in research will take precedence over the specific area of physiology in the selection process, the areas of renal, endocrine, cardiovascular, immunological, and respiratory physiology will be especially valuable in the current departmental program. The successful candidate will be expected to participate in undergraduate and graduate teaching and to establish a vigorous, externally funded research program. Minimum qualifications include a Ph.D. degree in a relevant discipline, postdoctoral experience, and the demonstrated ability to perform excellent research. Applicants should submit a curriculum vitae with a description of research plans, reprints or preprints of key publications, and have three letters of recommendation sent by February 15, 1999, to:

> Search Committee Chair Department of Physiological Science College of Letters and Science University of California Los Angeles, CA 90095-1606



Center for Neurobiology and Behavior Department of Psychiatry University of Pennsylvania

Postdoctoral Positions in Molecular and Genetic Basis of Neuroplasticity and Complex Behavior

Several new programs involving studies of molecular and genetic basis of neuroplasticity and behavior are being established among an interdisciplinary group of investigators at the Center for Neurobiology and Behavior of the Department of Psychiatry, University of Pennsylvania (http://www.med.upenn. edu/cnb/). As part of this new initiative, the center seeks outstanding candidates for postdoctoral fellows in the following areas: (1) molecular studies of protein-protein (i.e., actin) interactions regulating cytoskeletal restructuring and presynaptic migration of vesicles to the active zone for neurotransmitter release, req. biochemical and molecular biological expertise and experience with models of vesicular release (Dr. R. H. Lenox; rlenox@mail.med.upenn. edu), (2) molecular neuropharmacological studies of the expression of PKC substrates in transfected neuronal cells as a function of mRNA regulation, reg molecular biological expertise and experience with cell culture (Dr R. H. Lenox; rlenox@mail.med.upenn.edu), (3) genetic studies of rest: activity (circadian and sleep behaviors) in mice, req. experience in chronic sleep recording in animals, and/or analysis of circadian behavior (Dr. Maja Bucan; bucan@pobox.upenn.edu), (4) molecular genetic studies of epilepsy heroin dependence (both mouse models and human linkage/association), and bipolar disorder; expertise in cloning candidate disease sequences from a region implicated in linkage studies is desirable (Dr. W. Berrettini; wadeb@mail.med upenn.edu), (5) cellular and molecular neuropathological studies of neuropsy chiatric and neurodengenerative disorders in human tissue and mouse models experience with quantitative neurohistological methods required (Dr. S. E Arnold; arnold@bbl.psycha.upenn.edu), (6) electrophysiological and molecular studies of hippocampal LTP in genetically modified mice, required electrophysiological expertise (Dr. T. Abel / Dr. R. K. McNamara; rkm@mail .med.upenn.edu). Applicants must have a Ph.D. or equivalent. Interested candidates should forward a CV, a short description of research interests, and names with phone numbers of three references to individual investigators. 111 Clinical Research Building, 422 Curie Boulevard, Philadelphia, PA 19104 USA

MOLECULAR MICROBIOLOGY WOUND HEALING LABORATORY NATIONAL INSTITUTE OF NURSING RESEARCH

The Wound Healing Laboratory, National Institute of Nursing Research is recruiting for the position of research Molecular Microbiologist. The scientist is responsible for planning, conducting and directing studies of microbial pathogenesis related to wound healing. The position requires a Ph.D. or a M.D. with extensive postdoctoral experience in patient directed laboratory research; designing and performing experiments to investigate microbial pathogenesis: ability to interact with both laboratory and clinical investigators; and experience with research training. In addition, experience in the following is desirable: studies of the molecular mechanisms of microbial pathogenesis in the wound microenvironment; clinical microbiology; interactions between microbe and host; recombinant DNA technology, including DNA/RNA analysis and RT-PCR; experience in biochemical analysis, radiolabeling, immunofluorescence, immunohistochemistry, and handling of laboratory animals. The candidate should have published scientific papers in peer reviewed journals and is expected to plan, conduct and maintain an active program of collaborative research; to learn, develop and adapt new techniques as needed to explore pertinent research questions; to be able to work in a multidisciplinary interactive research environment; and to be knowledgeable about scientific resources at the NIH and elsewhere.

Further information about the position and qualification requirements may be obtained by contacting **Ms. Cherry Earl at (301) 402-5490 or e-mail Cherry Earl@nih.gov.** A curriculum vitae and bibliography and three letters of reference and two recent publications should be submitted by **January 4, 1999** to Ms. Cherry Earl, Personnel Management Specialist, National Institute of Nursing Research, 31 Center Drive MSC 2178, Bethesda, MD 20892-2178.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

Functional Genomics of Plant Stress Tolerance University of Arizona Oklahoma State University Purdue University

Eight laboratories from three universities (Arizona, Oklahoma State, and Purdue) have formed a consortium to study molecular mechanisms underlying plant tolerance to stress. We will provide a complete portrait of genetic, biochemical, and physiological adaptive mechanisms that limit productivity. We invite applications by highly motivated, creative colleagues to work in our laboratories as **POSTDOCTORAL RESEARCH ASSOCIATES AND GRADU-ATE ASSISTANTS.** Our goals include:

Isolation of mutants defective in stress-related functions and signal transduction pathways in model plants and algae (Arabidopsis, Dunaliella, Mesembryanthemum, Oryza) and genetic models (Synechocystis, Saccharomyces, Aspergillus) to assess and compare evolutionarily conserved stress defense mechanisms.

- Characterization of all genes in these models with adaptive functions under osmotic challenge and water-limitation; assembly of EST collections for stress-regulated genes and microarray-based monitoring of expression profiles; determination of the subcellular localization and distribution of stress-regulated gene products.
- Establishment of an integrated BIOINFORMATICS resource center to collect, assemble, analyze, and annotate DNA sequence and gene expression data, including the public distribution of materials and data.

Applicants should send a letter outlining research interests, résumé, and three letters of reference to: Hans J. Bohnert, University of Arizona, Department of Biochemistry, 1041 East Lowell Street, Tucson, AZ 85721-0088. E-mail: bohnerth@ u.arizona.edu. Website: http://www.biochem.arizona.edu/ bohnert/FunctGenomicAd.html.

The University of Arizona, Oklahoma State University, and Purdue University are Affirmative Action, Equal Opportunity Employers. Applications from women and ethnic minorities are strongly encouraged.

ASSISTANT PROFESSOR EVOLUTIONARY GENETICIST UNIVERSITY OF MICHIGAN

The Department of Biology at the University of Michigan solicits applications for a faculty position in evolu-tionary genetics. We seek individuals who use molecular tools and model organisms to study fundamental evolutionary processes in laboratory and/or wild populations. Research areas of interest include, but are not limited to, evolutionary and quantitative genetic aspects of life histo ry traits such as development, reproduction, aging, and evolution of genome organization. Persons who combine laboratory and field studies are encouraged to apply. A Ph.D. in an appropriate area as well as postdoctoral expe-rience are required. The successful candidate will join an active group interested in a variety of fundamental and interrelated questions in evolution and genetics. In addition to establishing a successful research program, the candidate must participate in the undergraduate and graduate teaching programs of the department. To apply, send a curriculum vitae, copies of reprints, brief summa-ries of present research and future research plans, and arrange to have three letters of reference sent by January 22, 1999, to:

Chair, Evolutionary Genetics Search Committee Department of Biology University of Michigan Natural Sciences Building Ann Arbor, MI 48109-1048

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

HYDROGEOLOGY UNIVERSITY OF MICHIGAN

The Department of Geological Sciences seeks to fill a tenure-track position at the ASSISTANT PROFES-SOR level or, in exceptional cases, at a higher level. We seek a Geoscientist with broad research interests in the physical and chemical aspects of hydrogeology. We are especially interested in applicants who have worked on large-scale regional or basin-scale fluid migration. Experience with field-based data sets, computational approaches, and environmental aspects of hydrogeology would also be attractive. We expect the applicant to develop a vigorous research program and to teach at both the graduate and undergraduate levels, including involvement in our new environmental geology degree program. Regular participation in introductory earth science courses is expected. A Ph.D. is required. Interested persons should send a curriculum vitae, names of five persons from whom the Department may request letters of recommendation, and brief statements of their research and teaching interests to: Prof. Lynn M. Walter, Search Committee Chair, Department of Geological Sciences, University of Michigan, Ann Arbor, MI 48109-1063. E-mail: lmwalter@umich.edu. To receive a careful evaluation this academic year, applications should be received by March 1, 1999. This search will continue until the position is filled. The University of Michigan is an Affirmative Action/Equal Opportunity Employer

MOLECULAR GENETICIST/ MOLECULAR BIOLOGIST ASSISTANT/ASSOCIATE/FULL PROFESSOR

As part of an expansion in Cancer Research, Creighton University School of Medicine invites applications for a tenure-track position. All applicants must have a Ph.D. and/or M.D. degree, postdoctoral research experience, and a strong record of research accomplishments. The position is available now. The appointee is expected to conduct a vigorous, independent, extramurally funded, hereditary cancer genetics research program and to have an interest and aptitude for teaching and training stu-dents and Fellows. An interest and ability to collaborate with Henry T. Lynch, M.D., on some ongoing projects related to discovering germ-line mutations in cancer-prone families is essential. The appointment could be in one or more departments depending on the interest and background of the applicant. 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: The Search Committee Chair, c/o Shirley Spain, Creigh-ton University, 2500 California Plaza, Omaha, NE **68178-0409.** Applications will be screened immediately and will continue to be accepted until the position is filled. Creighton University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ELON COLLEGE BIOLOGY DEPARTMENT

Applications are invited for a permanent, full-time position as **ASSISTANT PROFESSOR** of biology starting in August 1999. Applicants must have a Ph.D. degree in the biological sciences. Evidence of excellence in teaching and continuing scholarship is required. Primary teaching respon-sibilities include cadaver-based human anatomy and human physiology involving computerized data acquisition. Additional teaching may include general biology for non-majors and an occasional upper-level course for biology majors in an area of vertebrate biology. Interdisciplinary teaching and research are encouraged. Applications should be submitted by January 1, 1999. Send letter of application, résumé, statements of teaching philosophy and research goals, copies of transcripts, and three letters of support to: Dr. Rosalind Reichard, Dean of Sciences and Mathematics, 2163 Campus Box, Elon College, NC 27244. Elon College seeks to increase diversity among its faculty/ staff. Minority applicants are strongly encouraged to apply. Elon College is an Equal Employment Opportunity Employer.

ASSISTANT PROFESSORSHIPS

The Joseph P. Kennedy, Jr. Mental Retardation Research Center in the Department of Pediatrics at the University of Chicago is inviting applications for two tenuretrack faculty positions at the Assistant Professor level. We are seeking outstanding candidates who hold a Ph.D. or M.D.-Ph.D. with established research interests in either developmental neurobiology or vertebrate molecular genetics. Successful candidates will be expected to develop an independent extramurally funded research program. The selected faculty will participate through degreegranting Committees in teaching and training both undergraduate and graduate students.

Candidates should send letters of application, curriculum vitae, statement of research accomplishments and interests, and the names and addresses of three references to: Dr. Nancy B. Schwartz, Director, c/o Ms. J. Corey, Department of Pediatrics, MC 5058, 5841 South Maryland Avenue, University of Chicago, Chicago, IL 60637. The University of Chicago is an Affirmative Action/ Equal Opportunity Employer.

TERRESTRIAL ECOSYSTEM ECOLOGIST ASSISTANT PROFESSOR

The Institute of Ecology at the University of Georgia, Athens is filling a tenure-track opening at the Assistant Professor level in the area of terrestrial ecosystem ecology to start fall semester 1999. The position is open to researchers who work on processes at any spatial scale and is not restricted to a focus on any one taxonomic group. The person occupying this position would be expected to maintain an active research program and teach both undergraduate and graduate students. Application materials must include a curriculum vitae, statement of research and teaching interests, reprints of three publications, and the names and addresses of four references. Please include your e-mail address and, if possible, the e-mail addresses and telephone numbers of your references. Please address all application materials to: Dr. Paul Hendrix, Chair, Ecosystem Search Committee, Institute of Ecology, University of Georgia, Athens, GA 30602. Review of applications begins January 15, 1999. Applications received by that date are assured of consideration. The University of Georgia is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

Applications are invited for a tenure-track faculty appointment as **ASSISTANT PROFESSOR** in the Department of Pathology and the Institute for Cancer Genetics, Columbia University. We seek outstanding candidates with the clear capability to establish an independent research program in molecular oncology. Areas of particular interest include the establishment of mouse models of human cancer and control of genomic stability. Candidates with M.D. and/or Ph.D. degrees will be considered. Send curriculum vitae, statement of reference to: Dr. Riccardo Dalla-Favera, Search Committee, Department of Pathology, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affinative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR DEPARTMENT OF PHARMACOLOGY Uniformed Services University of the Health Sciences

Tenure-track Assistant Professor position. We seek an outstanding scientist who uses molecular, cellular, and/ or systems approaches to study intercellular communication, signal transduction, pathways associated with cell damage and death, toxicity of drugs, drug metabolism, or other areas of research related to pharmacology. The successful candidate will have a Ph.D. and/or

The successful candidate will have a Ph.D. and/or M.D. and will be expected to develop an independent, extranurally funded research program and to participate in teaching graduate and medical pharmacology. A competitive start-up package includes equipment and technical support. Faculty salaries are fully supported from University resources. Research facilities and the environment for professional development are excellent.

Review of applications will begin in January 1999 and will continue until the position is filled. Applicants should submit a curriculum vitae and bibliography, the names of three references, and a statement of current and future research interests to: Dr. Thomas E. Cote, Chair, Pharmacology Search Committee, Department of Pharmacology, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Foreign nationals will be considered only if qualified United States citizens are not available. USUHS is an Equal Opportunity/Affirmative Action Employer strongly committed to racial, cultural, and ethnic diversity. Women and minorities are encouraged to apply.

ASSISTANT PROFESSOR CENTER FOR INFECTIOUS DISEASE AND VACCINE RESEARCH University of Massachusetts Medical School

Creative, enthusiastic Molecular Geneticist is being recruited to join a team of NIH-funded Investigators in a recently established interdepartmental Center devoted to understanding the molecular basis of the immunopathogenesis of human viral infections and to their prevention by novel T-cell–based vaccine strategies. We seek a welltrained Molecular Geneticist, with a strong record of postdoctoral training and productivity, who will successfully interact with other faculty members in the Center, as well as pursue her/his own research interest, consistent with the overall theme of the Center. This faculty member would be expected to join the University of Massachusetts Medical School Graduate School Interdepartmental Program in Immunology and develop the potential for training graduate students and Postdoctoral Fellows on NIHfunded training grants. Substantial start-up support and laboratory facilities are available.

Contact e-mail: alan.rothman@ummed.edu. For information, website: www.ummed.edu/dept/CIDVR. Mail responses to:

Alan L. Rothman, M.D., Co-Director Center for Infectious Disease and Vaccine Research University of Massachusetts Medical School 55 Lake Avenue North Worcester, MA 01655

UMMC is an Equal Opportunity Employer.

ASSISTANT PROFESSOR MOLECULAR BIOLOGY

The Department of Medicine at the University of California, San Francisco is seeking a Physician-Scientist for an Assistant Professor position in the Lung Biology Research Center. Successful candidates must have a M. D. or M.D.-Ph.D. degree and demonstrated potential for leading an independent basic research program in an area of science relevant to human disease. The Center is seeking an additional scientist to complement existing strengths in the molecular biology of injury, inflammation, and repair. The successful candidate need not have training or direct interest in pulmonary medicine or lung biology. Send curriculum vitae and three letters of reference to: Dean Sheppard, M.D., Director, Lung Biology Center, University of California, San Francisco, Department of Medicine/SFGH, 1001 Petrero Avenue, Box 0854, San Francisco, CA 94143. UCSF is an Affirmative Action/Equal Opportunity Employer. The university undertakes Affirmative Action to assure Equal Employment Opportunity for undernitized minorities and women, for persons with disability, and for Vietnam-era veterans and special disabled veterans.

SYMPOSIUM

Biomedical Imaging Symposium

Visualizing the Future of Biology and Medicine

June 25-26, 1999

Natcher Conference Center National Institutes of Health Bethesda, Maryland

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

For information, contact: Chipper Whalan, Capital Consulting Corporation telephone: 301.468.6001; fax: 301.468.0338; e-mail: cwhalan@md.capconcorp.com



Faculty Positions

The Dana-Farber Cancer Institute is undergoing expansion of its basic research facilities on the occasion of its 50th anniversary. The Department of Cancer Biology is seeking qualified candidates to fill faculty positions. The Department of Cancer Biology is housed in the new Smith Research Building. Together with the Department of Cell Biology at Harvard Medical School, the Department invites applicants for tenure-track positions at the Assistant or Associate Professor level. We seek exceptional individuals with potential to study fundamental problems in modern cell biology using biochemical, cellular or genetic approaches.

These positions offer significant scientific resources in a stimulating environment as well as attractive start-up support packages. Candidates are expected to participate in the teaching activities of the Department of Cell Biology for both graduate and medical students. On or before January 15, 1999, applicants should submit a curriculum vitae, bibliography, and a brief statement of research interests and arrange for three letters of recommendation to be sent to: Dr. Tom Roberts, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. Fax: 617-632-5019. Please visit our website at: www.dfci.harvard.edu We are an equal opportunity employer.



medicine

seeks an **EDITOR**

Applicants are invited for the position of Editor of *Nature Medicine*. Nature America, the publisher of *Nature Genetics*, *Nature Structural Biology*, *Nature Medicine*, *Nature Biotechnology* and *Nature Neuroscience*, is seeking a successor to Adrian Ivinson, who is leaving *Nature Medicine* to take up the position of Publisher within the group. We are looking for a successor who will continue to develop *Nature Medicine* and build upon its reputation as the leading international biomedical research journal.

The Editor is responsible for the editorial content of the title, working closely with an experienced team based in our New York office. Regular contact and communication with the international biomedical research community is central to the role, to ensure that the journal continues to meet the needs of its diverse readership. Planning and managing editorial resources, as part of the senior management team of the company is an integral part of this job.

The ideal candidate will have a Ph.D. in a relevant field, exceptional scientific judgement, a broad-based knowledge and understanding of the biomedical research community and some experience in journalism.

Applications, which should include a curriculum vitae, a succinct (up to 1,000 words) assessment of the strengths and weaknesses of *Nature Medicine*, and a concise cover letter explaining your interest in this job, should be sent to Adrian J. Ivinson, Nature America Inc., 345 Park Avenue South, New York, NY 10010, Fax 212.696.9009 to arrive **no later than December 21st, 1998**.



Nature America, Inc. 345 Park Ave. South New York, NY 10010

INTEGRATIVE CELL BIOLOGY UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

The Department of Physiology at University of California, San Francisco (UCSF) seeks an **ASSISTANT, AS-SOCIATE**, or **FULL PROFESSOR** working on novel experimental or theoretical approaches to the biology of cells. A successful applicant will be expected to play an important role in a new center that will develop integrated approaches to understanding complex biological systems. She or he will be expected to mount a successful research program, to participate in graduate and postdoctoral training, and to teach in graduate and professional school courses.

The search will remain open until an appointment is made, but complete applications should be received by December 15, 1998, to ensure full consideration.

Please send a curriculum vitae, key publications, a twopage description of past research and future goals, and have three letters of recommendation sent to:

Professor Andrew Murray Chair, Cell Biology Search Committee University of California, San Francisco Department of Physiology, Room S-762 513 Parnassus Avenue San Francisco, CA 94143-0444

UCSF is an Affirmative Action/Equal Opportunity Employer. The university undertakes Affirmative Action to assure Equal Employment Opportunity for underrepresented minorities and women, for persons with disability, and for Vietnam-era veterans and special disabled veterans.

TENURE-TRACK ASSISTANT/ ASSOCIATE PROFESSOR GENETICS Tufts University

The Department of Biology invites applications for a tenure-track position at the Assistant or Associate Professor level to begin September 1, 1999. A Doctoral degree, postdoctoral experience, and a record of research productivity are required. The successful candidate will be expected to establish and maintain an active research program with extramural funding that combines genetic analysis and molecular biology. The research should involve graduate and undergraduate students. Teaching responsibilities include courses in genetics at the undergraduate and graduate levels and contributions to a teamtaught course in the department. Candidates should have both teaching ability and motivation. Applicants should submit a curriculum vitae, three recent publications, separate statements of (1) research interests and plans and (2)teaching experience and plans, and should have three letters of reference sent to: Chair, Genetics Search Committee, Department of Biology, Tufts Universiwww.tufts.edu/as/biology/. Review of applications begins December 22, 1998, and will continue until the position is filled. *Tufts University is an Affinative Action*/ Equal Opportunity Employer. We are committed to increasing the diversity of our faculty. Members of underrepresented groups are strongly encouraged to apply.

RESEARCH POSITIONS AT DARTMOUTH MEDICAL SCHOOL

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

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR GENETICS DEPARTMENT OF BIOCHEMISTRY AND BIOPHYSICS Texas A&M University

The Department of Biochemistry and Biophysics at Texas A&M University seeks applications for two tenuretrack faculty positions. Applicants for these 12-month appointments must have a Ph.D. and appropriate postdoctoral experience, and will be expected to establish an independent research program. One position will focus on candidates whose research addresses fundamental problems in a well-established genetic system, although applicants with research interests in any area of biochemistry/molecular biology will be considered. Candidates will be sought simultaneously (Search Committee Chair is **Dr. John Mullet**). In addition to research activities, participation in the Department's undergraduate and graduate teaching programs will be expected.

The Department of Biochemistry and Biophysics has more than 40 full-time faculty, 80 graduate students, and 500 undergraduate majors. The Department is housed in a new, spacious, and well-equipped research facility. The research interests of the faculty cover nearly all areas of modern biochemistry and molecular biology (please see website: www.tamu.edu).

Completed applications should include a curriculum vitae, a short description of research interests, reprints of significant publications, and three letters of recommendation. All materials should be sent to: Dr. Gary R. Kunkel, Faculty Search Committee Chair (Molecular Genetic Systems), Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX 77843-2128. Review of applications will begin December 1, 1998. Texas A&M University is an Affirmative Action/Equal Opportunity Employer, and committed to direstity.

PROFESSOR AND CHAIR DEPARTMENT OF ANATOMY AND CELL BIOLOGY

The University of Arkansas for Medical Sciences invites applications and nominations for the position of Professor and Chair of the Department of Anatomy and Cell Biology. The Department has 14 full-time faculty members and established graduate programs leading to the M.S. and Ph.D. degrees. The department currently has strong programs in neuroscience cell biology and developmental biology, but candidates in all areas of research will be considered. The administration is committed to supporting a nationally recognized and competitive department. The successful candidate should have a distinguished record of scholarly activity, an internationally recognized program of sponsored research, a commitment to excellence in teaching, and leadership skills. The recruitment package and available resources are competitive. Applications will be reviewed by the Anatomy Search Committee Interested individuals should submit a letter of application, current curriculum vitae, and names of three references by January 15, 1999, to: Dr. Alan D. Elbein, Chairman, Search Committee for Chairperson of Anatomy, Department of Biochemistry and Molecular Biology, University of Arkansas for Medical Sci-ences, 4301 West Markham Street, Mail Slot 516, Little Rock, AR 72205.

UAMS is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.

Purdue University seeks a 10-month, TENURE-TRACK POSITION in the nutritional biochemistry and molecular endocrinology of growth. The initial appointment will be research (majority) and education (classroom teaching). The individual will be responsible for developing an independent, competitively funded re-search program and for interacting productively with research teams in the department and(or) university. Research emphasis should be related to improved production of food from animals. The individual will be expected to teach at the undergraduate and graduate levels. Dead-line: screening of applications will begin February 15, 1999, and continue until a suitable candidate is found. Candidate should submit letter of application, curriculum vitae, statement of research and teaching interests, official transcripts, and have three letters of recommendation sent to: Dr. Jeff Armstrong, Head, Department of Animal Sciences, 1151 Lilly Hall, Purdue University, West Lafayette, IN 47907-1151. Telephone: 765-494-4808; FAX: 765-494-9346; e-mail: jeff_armstrong@ ansc.purdue.edu. Purdue University is an Equal Access/Equal Opportunity University.

POSITIONS OPEN

The Keck Institute of Cellular Visualization at Brandeis University seeks a tenure-track ASSISTANT PROFES-SOR interested in cellular visualization, beginning September 1999. We seek someone whose research involves the visualization of structure/function relationships from the molecular to the cellular level. Areas of research might include structure and/or dynamics of macromolecular assemblies, membranes, chromosomes, cytoskeleton, organelles, second messengers, and signal transduction molecules, using crystallographic, microscopic, or spectroscopic methods, in combination with biochemical or genetic approaches. Applicants are expected to have a Ph.D. (or equivalent), postdoctoral experience, a strong record of research accomplishments, and a commitment to teaching both undergraduate and graduate students. Applicants should submit a detailed curriculum vitae with concise research plan, and should arrange for three letters of recommendation to be sent to: Dr. Neil Simister, Chair, Keck Search Committee, Rosenstiel Center, MS029, Brandeis University, Waltham, MA 02454-9110. Consideration of applications will begin immediately, and continue until the position is filled.

Brandeis is an Equal Opportunity Employer and welcomes applications from women and minority applicants.

The U.S. Forest Service invites applications for a permanent position (GS-14 level, salary range \$65,000 to \$84,000) as TEAM LEADER for the Canopy Research in Temperate Mesic Forests Team at the Wind River Experimental Forest Canopy Research site in southwest Washington state. The successful applicant will serve as Co-Principal Investigator in the same canopy research effort, shared with the University of Washington. Successful applicant will reside at the Corvallis, Oregon Forestry Sciences Laboratory with the Ecosystem Processes Program and Oregon State University scientists associated with the Canopy Research program. The position will develop basic knowledge of canopy processes in temper-ate mesic forests and relate those processes to stand, landscape, and regional ecological phenomena regulating carbon flows. The position requires a Ph.D. and demonstrated leadership in one or more of the fields: landscape ecology, theoretical modeling, remote sensing, stand-level processes ranging from below-ground to the atmo-sphere. She/he will be an employee of USDA Forest Service. For specific information on how to apply for this position, call or e-mail: Sarah Greene, Telephone: 541-750-7360; e-mail: greenes@fsl.orst.edu. Only U.S. citizens may apply.

The Department of Nutrition is seeking candidates for the position of **PROFESSOR** of molecular pathology and cardiovascular disease. Candidates should have an ongoing research program with emphasis on gene regulation and pathophysiology. Preference will be given to individuals with a broad research interest in diseases of public health importance and demonstrated capacity for multidisciplinary research. The successful candidate will be expected to interact with the faculty in the Division of Biological Sciences and contribute to its teaching and training programs.

Please send curriculum vitae, a short research statement of research interests and field activities, and names of three references to:

> Office for Academic Affairs Harvard School of Public Health Kresge Building, Room 1010 677 Huntington Avenue Boston, MA 02115

The School is especially interested in increasing representation of women and members of minority groups in the faculty and particulary encourages applications from such candidates.

CELL/MOLECULAR BIOLOGIST FORDHAM UNIVERSITY

Individuals are invited to apply for a tenure-track position at the **ASSOCIATE PROFESSOR** level. The department has an active research program and provides excellent physical facilities, state-of-the-art equipment, a stimulating research environment, start-up funds, and competitive salaries and benefits. Candidates should possess expertise in the area of cell/molecular biology and have an ongoing grant-supported research effort underway. The appointee will be expected to establish an active research program and participate in teaching at the graduate and undergraduate levels. Please submit a curriculum vitae and the names and addresses of three references by 15 January 1999 to: Dr. Berish Y. Rubin, Chairman, Department of Biological Sciences, Fordham University, Bronx, NY 10458. Fordham University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL INVESTIGATOR

Postdoctoral position available in the Biology Department of the Woods Hole Oceanographic Institution for a biological oceanographer or marine biologist to work on predator-prey interactions among zooplankton occurring on Georges Bank. Primary responsibility will be field and experimental work, including at sea, on feeding by small predators. Experience desired in sampling and experimental work with zooplankton, particularly copepods. Statement of research interests, curriculum vitae, and names and addresses of three references, should be sent to Woods Hole **Oceanographic Institution, Box** SFT65, Woods Hole, MA 02543 by December 20, 1998. For further information visit our website: http://www.whoi.edu

EOE/M/F/D/V

WOODS HOLE OCEANOGRAPHIC INSTITUTION



ECOSYSTEM ECOLOGY Tenure Track, August 1999 SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS

INDIANA UNIVERSITY

The School of Public and Environmental Affairs invites applications for a tenure-track faculty position (rank open) at our Bloomington campus in the area of ecosystem ecology. More senior applicants must have credentials consistent with the proposed rank at a major research university. Applicants should have field-based research expertise and teaching experience in ecosystem ecology. Preference will be given to candidates with expertise in wetland ecosystems and to those who apply techniques of ecosystem modeling, geographic information systems, and/or remote sensing to ecosystem or landscape-scale problems and solutions. The successful candidate will teach environmental science courses in our undergraduate, master's, and doctoral degree programs, interact regularly with the Faculty of Environmental Science and Policy as well as the larger diverse, interdisciplinary faculty in the School, and be committed to interdisciplinary efforts to address environmental issues. Applicants must have Ph.D. in ecology or a related field and a demonstrated commitment to high and demanding teaching standards and to an established research program with external funding or high potential for obtaining such funding.

The School of Public and Environmental Affairs is a multidisciplinary, university-wide division of Indiana University. It is organized as a professional school committed to excellence in teaching, research, and service addressing critical issues of public policy and management, environmental policy and management, and environmental science. With more than 100 tenured or tenure-track faculty on six campuses, it is the largest school in the nation offering programs in public affairs and environmental science. The School's graduate programs consistently rank among the best in the country.

The review of application materials will begin on December 1, 1998, and continue until the position is filled. Applicants should send a letter of interest, curriculum vitae, and the names, telephone numbers, and postal and e-mail addresses of four references to:

Professor Kirsten Grønbjerg Associate Dean for Academic Affairs School of Public and Environmental Affairs, Indiana University Bloomington, IN 47405

See: http://www.indiana.edu/~speaweb. Indiana University is an Equal Opportunity/Affirmative Action Employer, and strongly encourages applications from members of historically underrepresented groups.

Director, Children's Research Institute and Vice Chairman of Research

The Department of Pediatrics of the University of Louisville School of Medicine is conducting a search for a Vice Chairman for Research and Director of our new Children's Research Institute.

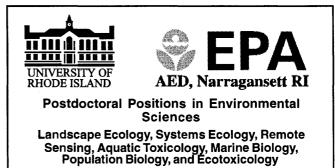
In September of 1999, the Department will open and dedicate a new Children's Research Institute, a facility with approximately 24,000 square feet containing twelve 600–square feet laboratories and contiguous office and support space. We seek a physician scientist with a superior record of accomplishment in pediatric research to develop a strategic plan for the future research institute, and oversee a program of basic and applied research.

The new Vice Chairman/Director must have a well-established funding record as well as strong leadership qualities. This individual should be capable of qualifying for academic appointment at the rank of Associate or full Professor. A comprehensive compensation package will be tailored to the individual's qualifications. In addition, the individual will receive a package of institutional support including laboratory space and research endowment, and will occupy a newly endowed research chair established by the Children's Hospital Foundation. This individual will additionally oversee and manage a research endowment as well as an additional endowed research chair and several research professorships.

The pediatric research initiative will complement a health sciences wide research initiative designed to achieve Carnegie I designation within a period of 10 years. This initiative is underpinned by the construction of a new multidisciplinary research building — 120,00 gross square feet (including the pediatric research institute) scheduled for opening September 1999, and 110,000 gross square feet scheduled for completion in October 2001 as well as a \$33 million dollar state government research endowment for endowed chairs, endowed professorships, and infrastructure support. The University is additionally approaching completion of a \$200 million dollar capital campaign, much of which is committed to research support.

Applications should include a detailed curriculum vitae, a description of research experience and future plans, and the names and addresses of at least three references. Information about our Department and University can be obtained by contacting our website: http://www.louisville.edu, for the Department of Pediatrics specifically add, /medschool/pediatrics/.

Application materials should be sent to: Larry N. Cook, M.D., Professor and Chairman, Dept. of Pediatrics, U of L, 571 S. Floyd St. Ste#300, Louisville, KY 40202-3830.



The U.S. EPA National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division in Narragansett, R.I. (AED) and the University of Rhode Island (URI) will support 2–3 unique postdoctoral opportunities. Candidates will work jointly with scientists at the AED lab and with faculty from URI on research related to the themes outlined below. Positions are for one year, with probable renewal for an additional year.

- Development and Application of Methods to Conduct Integrated Ecological Resource Assessments on Regional Spatial Scales
- Development of Indicators to Assess the Ecological Integrity of Estuarine Systems
- Research Methods for Evaluating the Ecological Significance of Biological Responses to Anthropogenic Stress in Coastal Systems
- Biological Availability of Contaminants in Sediments and Waters of Aquatic Systems

Positions begin June 1, 1999. Submit application letter, curriculum vitae, names and addresses of 4 references, and statement of research intent by January 15, 1999. Consult http://www.edc.uri.edu/epapdoc for detailed position descriptions, salary, research theme descriptions, and application instructions.

Deborah Grossman-Garber, Search Coordinator, University of Rhode Island, Woodward Hall, Kingston, RI 02881.

ECOLOGY AND PLANT BIOLOGY POSITIONS

Millikin University, a selective, comprehensive undergraduate institution in Decatur, Illinois, expects to fill two tenure-track **ASSISTANT PROFESSOR** positions beginning in August 1999. The two positions, one in ecology and the other in plant biology, require the Ph.D. We seek broadly trained individuals who are committed to liberal arts education and excellence in teaching, and who will develop a vigorous research program involving undergraduates. Preference will be given to applicants with strong quantitative skills and/or significant computer applications in teaching and research. Individuals in these positions will teach introductory courses, both major and non-major, as well as upper-level courses for majors. They will also contribute to the University-wide curriculum.

To apply, submit curriculum vitać, undergraduate and graduate transcripts, a statement of teaching philosophy and research interests, and names, addresses, and telephone numbers of three references to: Dr. Terry Matthews, Chair, Department of Biology, Millikin University, Decatur, IL 62522. E-mail: tmatthews@ mail.millikin.edu. The deadline for receiving complete applications is January 15, 1999. An Equal Opportunity Employer, Millikin University encourages applications from women and minorities.

ASSISTANT PROFESSOR BIOLOGY

The University of Portland invites applications for a tenure-track Assistant Professor appointment in biology to begin fall 1999. We seek a Biologist to teach human physiology to majors and non-majors, including interactive and inquiry-based laboratories. Ability to teach human anatomy is highly desirable. Research expertise may be in any area; however, emphasis on projects that can involve undergraduates given a high priority. The University of Portland is a Catholic comprehensive university of 2,100 undergraduate students, with a reputation for quality teaching. Send a letter of application, a curriculum vitae, evidence of teaching effectiveness, description of undergraduate research program, copies of transcripts (undergraduate and graduate), and three letters of recommendation to: Chair, Biology Search Committee, University of Portland, 5000 North Willamette Boulevard, Portland, OR 97203-5798. Website: http:// www.up.edu. Closing date, December 18, 1998. The University of Portland is an Affirmative Action/Equal Opportunity Employer.

DIRECTOR, DEPARTMENT OF PHARMACOKINETICS/MOLECULAR ENDOCRINOLOGY

We are seeking an individual with a proven track record in pharmacokinetics and/or molecular endocrinology. The successful candidate will lead a laboratory staffed by three B.S./M.S. Technicians, and will design, conduct, analyze, and report results from preclinical/clinical reproductive health/contraceptive/toxicology studies. The successful candidate will work closely with three other Ph.D. scientists to achieve project goals. The ideal candidate will have five to 15 years of experience beyond the Ph.D. degree and will possess strong leadership and writing skills. Presentation at scientific meetings and publication in peer-reviewed journals are encouraged and expected. Salary commensurate with experience and skills.

Interested candidates should send curriculum vitae and provide three professional references to: Ms. Erica James, Human Resources Manager, Diagnon/Bioqual, Inc., 9600 Medical Center Drive, Rockville, MD 20850-3336. Equal Opportunity Employer.

The Department of Geography at Michigan State University is seeking to fill two tenure-track positions. Position One ASSISTANT PROFESSOR (SS817). In remote sensing and geographic information science. Applicants should have experience and expertise in the basic science of global environmental change using earth observation satellites and have a Ph.D. in geography or a closely related field at time of appointment. Position Two RANK OPEN (SS 828). People/environment-oriented Economic Geographer/Regional Scientist. Level of appointment is to be commensurate with experience and suitability to the position. Candidates must have a demonstrated interdisciplinary background in the social sciences with a proven track record of external funding and extensive on-the-ground field or survey-oriented experience and estensive on-the-ground field or survey-oriented experience and estensive on-the-ground field or survey-oriented models for global change research. Additional information available by contacting website: http://www.ssc.msu. edu/~geo or by calling: Dr. David Skole, Telephone: 517-432-7774.

POSITIONS OPEN

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY UNIVERSITY OF VERMONT

The Department of Obstetrics and Gynecology at the University of Vermont College of Medicine invites applications for a tenure-track position in obstetrics and gynecology (ASSISTANT/ASSOCIATE/FULL PRO-FESSOR). Candidates should have a Ph.D. degree, have a funded and productive research program, and demonstrated excellence in teaching, scholarship, and service. Candidates are sought in the field of cardiovascular research, particularly with experience in the area of vascular biology; individuals using cellular and/or molecular experimental approaches are encouraged to apply. The successful candidate will be expected to pursue an extramurally funded, independent research program and must be committed to excellence in teaching. Salary will be competitive and commensurate with experience.

Review of applications will begin immediately. Application deadline is January 1, 1999. Applicants should submit a curriculum vitae, statement of research objectives and career goals, and the names of three references to:

George Osol, Ph.D. Chair, Search Committee Department of Obstetrics and Gynecology Given C-211 University of Vermont College of Medicine Burlington, VT 05405

The University of Vermont is an Equal Opportunity/Affirmative Action Employer. Applications from women and people from diverse racial, ethnic, and cultural backgrounds are encouraged.

MEDICAL ONCOLOGIST/ MEDICAL GENETICIST ASSISTANT/ASSOCIATE/FULL PROFESSOR

As part of an expansion in Cancer Research, Creighton University School of Medicine invites applications for a tenure-track position in hereditary cancer research. All applicants must have an M.D. and/or Ph.D. degree, postdoctoral experience, and a strong record of research accomplishment. The position is available now. An interest and ability to collaborate with Henry T. Lynch, M.D., on an extensive resource of cancer-prone families with well-developed extended pedigrees is essential. The appointee is expected to conduct a vigorous, independent, extramurally funded hereditary cancer genetics research program, and to have a clinical practice in medical oncology, and to teach and train students and Fellows. A primary appointment in the Department of Preventive Medicine and a joint appointment in one or more clinical or basic science departments is anticipated. 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 reference sent to: The Search Committee Chair, c/o Paula Hills, Creighton University School of Medicine, 2500 California Plaza, Omaha, NE 68178-0404. Applications will begin to be screened immediately and will continue to be accepted until the position is filled. Creighton University is an Affirmative Action/Equal Opportunity Employer

MOLECULAR BIOLOGIST PROTEIN CHEMIST THE UNIVERSITY OF NEW MEXICO SCHOOL OF MEDICINE

The position of RESEARCH ASSISTANT PRO-FESSOR is available immediately to lead an effort to clone, sequence, express, and characterize proteins that regulate collagen fibril interactions in the mutable connective tissues of echinoderms (see: J. A. Trotter et al., Matrix Biology 15:99–110, 1996). Minimum requirements include Ph.D. or equivalent and at least two years of postdoctoral experience in molecular biology and protein chemistry; evidence of independence and ability to lead a research effort and to publish results in a timely manner; unrestricted legal authorization to work in the United States; ability to spend approximately six periods per year, two weeks each, doing collaborative research at University of Chicago. Position will remain open until filled. For best consideration, applicants should submit a letter of intent, a current curriculum vitae, one reprint, and the names and contact information of three references to: Wilma Morris, Search Coordinator, Department of Cell Biology and Physiology, University of New Mexico Health Sciences Center, Albuquerque, NM 87131-5218 by December 31, 1998. For information, e-mail: jtrotter@ unm.edu. UNM is an Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

PHYSIOLOGIST THE UNIVERSITY OF NEW MEXICO SCHOOL OF MEDICINE

Applications are solicited for a tenure-track faculty position at the ASSISTANT/ASSOCIATE/FULL PRO-FESSOR rank. Applicants must have a Doctoral degree and have completed postdoctoral training. Preference will be given to candidates with demonstrated productivity as evidenced by extramural grant support and by a strong publication record. The successful applicant is expected to sustain an active research program in physiology employing contemporary techniques that interact with existing programs in vascular smooth muscle regulation and endothelial cell physiology. Special consideration will be given to candidates with interests in ion channels, signal transduction, and gene expression in vascular tissue relevant to control of vessel tone, although all areas of physiology will be considered. This individual is also expected to perform medical and graduate teaching. For best consideration, applicants should submit a curriculum vitae, a short description of their research program, and the names of three references by December 31, 1998, to: Benjimen R. Walker, Department of Cell Biology and Physiology, University of New Mexico School of Medicine, Albuquerque, NM 87131. UNM is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR. AQUATIC ECOLO-GIST. Tenure-track position beginning fall 1999. An individual with research strengths in freshwater vertebrates who is able to teach a course in vertebrate zoology is highly desirable. The appointee will be expected to develop a strong research program, seek extramural funding. Our department awards M.S. and Ph.D. degrees with research strengths in aquatic ecology and reproductive biology. The successful applicant must have a Ph.D. or equivalent degree, postdoctoral research experience, a strong record of publication, and a record of extramural funding commensurate with experience. Start-up funds are available. Application deadline is 15 January 1999. To apply, please submit a curriculum vitae, statement of research interests, and arrange to have three confidential letters of recommendation sent by that date to:

Aquatic Ecology Search Committee Mail Box 29 Department of Biological Sciences Kent State University Kent, OH 44242-0001 Website: http://www.kent.edu:80/Biology/

Kent State University is an Equal Opportunity/Affirmative Action Employer.

Tenure-track faculty position, developmental biology. Division of Basic Biomedical Sciences, University of South Dakota School of Medicine. A state-supported tenure-track position is available in the area of developmental biology at the ASSISTANT or ASSOCIATE PRO-FESSOR level. Rank and salary commensurate with experience. Applicants must have a Ph.D. and/or M.D. degree, postdoctoral experience, and the ability to develop an independent research program. Research interests including molecular aspects of differentiation, pattern formation, morphogenesis, and related areas of development are desirable. The successful candidate will participate in teaching of medical, graduate, and undergraduate students. Individuals with the ability to participate in the teaching of gross anatomy are encouraged to apply. Competitive salary and start-up funds. Send curriculum vitae, statement of research plans, and names of three references to: Carleen McNeely, Developmental Biology Search Committee, Division of Basic Biomedical Sciences, University of South Dakota School of Medicine, 414 East Clark, Vermillion, SD 57069. Consideration of applications will begin January 15, 1999. USD is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially invited to apply.

NEUROBIOLOGIST RESEARCH ASSOCIATE position is immediately available for a Ph.D.-level scientist to work on the effects of neurogenic CGRP on muscle AChE molecular forms. Candidates should have experience in biochemical and molecular biological methodologies, and U.S. citizenship. Please send curriculum vitae, relevant reprints, and names of three references to: Dr. Hugo L. Fernandez, Research and Development (151), VA Medical Center, P.O. Box 5005, Bay Pines, FL 33744.

The Bay Pines VA Medical Center is an Equal Opportunity Employer.



If you're looking to move up to the next level, Science Professional Network can help you go all the way to the top. Science Professional Network offers you a database of career opportunities from top companies and organizations as well as a full array of career information, including...

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- Academic Connections



Chemistry Department Chair

DEPAUL

The Department of Chemistry at DePaul University invites applications for the position of Department Chair, beginning with the 1999-2000 academic year. Required qualifications include: 1) a Ph.D. in Chemistry; 2) academic credentials and a record of scholarship sufficient to qualify for a tenured appointment; 3) a demonstrated commitment to excellence in teaching; 4) demonstrated administrative record or potential as indicated by leadership, management, and interpersonal skills. This search comes at a time of planned growth in science programs and science facilities at DePaul. The successful candidate will be a person who is interested in the challenges and rewards attached to such a situation. S/he will be asked to provide leadership in teaching, curricular innovation for majors as well as general education students, and the enhancement of undergraduate and graduate research programs and will participate in efforts to raise the visibility of chemistry and the sciences in general in the larger community.

The department offers ACS accredited B.S. Chemistry and Biochemistry programs and M.S. Chemistry, Biochemistry, and Polymer-Coatings programs as well as a set of courses developed specifically for general education of non-science majors. Scholarly interest in either synthetic organic chemistry of natural products/ biochemical compounds, or inorganic/material science chemistry would enhance the present faculty expertise.

Send letter of application listing qualifications, a complete curriculum vitae, an outline of teaching and research interests/plans, and a list of suitable references to: Search Committee, Department of Chemistry, DePaul University, 1036 W. Belden, Chicago, IL 60614. Fax: (773) 325-7421. E-mail: jskrypek@wppost.depaul.edu Screening will begin immediately and will continue until a candidate is selected.

DePaul University is committed to diversity and equality in education and employment.



The Center for Marine Conservation (CMC), a nonprofit marine conservation organization is committed to protecting ocean environments and conserving the global abundance and diversity of marine life. Through science-based advocacy, research, and public education, CMC promotes

citizen participation to reverse the degradation of our oceans. CMC, located in Washington, D.C., has regional offices in Virginia Beach, St. Petersburg, and San Francisco. CMC has available the following: *Postdoctoral – Threatened and Endangered Species*: Develops the scientific underpinnings and provides the technical support for CMC's work on threatened and endangered marine species internationally. This position will require compilation, review, analysis, and synthesis of published literature, scientific writing, and editing, and conference organizing. **Qualifications:** Must hold a Ph.D. in marine biology or a closely related field and should have a strong background in marine conservation biology or marine ecology, with a particular emphasis on population biology. Demonstrated research experience and publication record on threatened and endangered marine species is desired. Ability to communicate complex scientific concepts in plain English, through both oral and written communications, is essential. Understanding U.S. and international policy processes in relation to threatened species is also highly desirable. This is a two year position.

Research Scientist, Conservation Biology: Oversees the development and implementation of CMC's policies and programs regarding conservation biology of marine resources and their habitats. Serves as CMC's lead scientist regarding conservation biology, particularly relating to sea turtles. Engages in scientific research and publication to further conservation biology objectives. Represents CMC before Congress, federal and state agencies, and the international scientific community. Provides leadership within the conservation community and before the media on conservation biology issues, particularly sea turtle issues. **Qualifications:** Minimum of a graduate degree in marine science or closely related field (Ph.D. preferred), with at least five years in conservation advocacy. Expertise in marine population biology highly desirable. Proven record of achievement in field, and demonstrated record in publishing work.

Director of Citizen Outreach and Monitoring Program: has primary responsibility for the management and overall functioning of CMC's Citizen Outreach and Monitoring Program (COMP). This person is responsible for leading, and assuring the quality of performance of COMP projects, including the international coastal clean-up. The director will undertake fundraising and public/media representation of CMC in conjunction with other departments, and work closely with regional directors to develop and promote citizen outreach and monitoring projects in their locale. **Qualifications:** Advanced degree in marine science or policy with relevance to water quality and marine pollution, or related specialization. Must include seven to ten years of experience in conservation, fundraising, or program management of a nonprofit organization, including three years in a senior supervisory position involving conservation work. Strong scientific, training, communication, organizational, and management skills essential. Proven experience with all aspects of federal grant management highly desirable. Demonstrated commitment to conservation principles. **All positions remain open until filled. TO APPLY SEND COVER LETTER/RÉSUMÉ TO: CMC**,

All positions remain open until filled. TO APPLY SEND COVER LETTER/RESUME TO: CMC ATTN: D. TOLIVER, 1725 DESALES ST. N.W. #600, WASHINGTON, D.C. 20036. *EOE*.

Faculty positions in molecular neurobiology. The Ohio State University is in the midst of a major initiative in the molecular life sciences that will include at least 30 new faculty positions. The University has made a major commitment to develop an outstanding interdisciplinary program in the molecular neurosciences. Applications are invited for two tenure-track faculty positions at the AS-SISTANT or ASSOCIATE PROFESSOR level. The new faculty members will be expected to develop independent research programs using molecular approaches to areas such as sensory systems, neuroimmunology, injury, degeneration, and regeneration in the nervous system. The successful candidates will hold positions in ei-ther the College of Medicine and Public Health or Dentistry, with a joint appointment in the Neurobiotechnol-ogy Center. A transgenic mouse facility and other excellent support and instrumentation facilities are available. Applicants should submit a curriculum vitae, statement of research plans, and arrange to have three letters of reference sent to: Dr. Michael S. Beattie, Chair, Mo-lecular Neurobiology Search Committee, 4072 Graves Hall, \$33 West Tenth Avenue, Columbus, OH 43210-1239, Review will begin on December 31, 1998. Visit our website: http://www.med.ohio-state. edu/neuro/neurohome.html. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to apply.

RESEARCH ASSISTANT PROFESSOR. Nontenure, to participate in research program on the taxonomic delineation and definition of pathogenic mechanisms of salmonellae, Escherichia coli, and Campylobacter via traditional and molecular techniques to complement current activities. Knowledge of phage typing, serotyping, and both integon and IS2000 mapping techniques are essential. Participation in development of other research projects and preparation of additional research grants responsive to the needs of the agricultural community and to food safety is required. Two' and one half years of funding guaranteed. Successful candidate must be willing to participate in original and innovative "think-tank" activities. Submit curriculum vitae, a statement of research career goals, the names and addresses of three referees to: Dr. Charles E. Benson, New Bolton Center, School of Veterinary Medicine, University of Pennsylvania, 382 West Street Road, Kennett Square, PA 19348. Telephone calls and e-mail communications will not be accepted. Position to be filled by 1 January 1999. The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.

The Department of Biological Sciences at Salisbury State University is accepting applications for a tenure-track position, CELL BIOLOGIST with expertise and research interests related to marine organisms, at the rank of ASSISTANT PROFESSOR starting in fall 1999. Ph.D., evidence of teaching and research excellence, and fluency in English are required. In addition to teaching introductory and upper-level undergraduate courses for biology majors, the successful applicant will be expected to engage in scholarly professional activities, sponsor undergraduates in research, and contribute to an interinstitutional dual-degree program in environmental/marine science. Salary is competitive and commensurate with experience. Forward curriculum vitae, all official transcripts, and three letters of reference by December 31, 1998, to: Dr. Mark Frana, Chair, Cell Biologist Committee, Department of Biological Sciences, Salisbury State University, Salisbury, MD 21801. Salisbury State University is an Equal Opportunity/Affirmative Action Employer. Qual-ified women, minorities, and the disabled are encouraged to apply.

ASSISTANT SPECIALIST. Full-time position available in Department of Molecular and Cell Biology, Division of Genetics. Qualifications required include at least a B.A./M.A. or equivalent, and at least four years of experience working with Xenopus and mouse embryos, expression cloning, explant assays, and general experience in analyzing basic problems in early vertebrate development. Knowledge and technical skills in molecular biology, analysis of protein-protein interactions, and analysis of embryonic signal transduction pathways are required. Approximate starting date, January 1, 1999. Salary range: \$33,864 to 38,784 with full benefits. Qualified candidates should send a letter of application, curriculum vitae, and names of three references to: Richard Harland, Department of Molecular and Cell Biology, 401 Barker Hall, University of California, Berkeley, CA 94720-3204. Deadline of receipt of applications is December 20, 1998. The University of California is an Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

BIOINFORMATICS RESEARCH ASSO-CIATE. Gene expression and protein function. We need a highly motivated individual with a strong molecular biology/biochemistry background to join our group. Requires B.S./M.S. in a biological science and direct experience with DNA and protein sequence analysis. Standard desktop and Internet computing experience required; UNIX experience is preferred. Please submit résumé to: Michael Campbell, Molecular Applications Group, 607 Hansen Way, Building One, Palo Alto, CA 94303-1110. E-mail: campbell@mag.com; FAX: 650-846-3595.

ASSISTANT PROFESSOR. The Biochemistry and Cellular and Molecular Biology Department at the University of Tennessee at Knoxville seeks a **GENETICIST** or **NEUROBIOLOGIST**. We prefer an individual studying problems in neurogenetics. Opportunities for professional interaction include Geneticists and Neuroscientists in the department as well as at the University Hospital, the College of Veterinary Medicine, and the Life Sciences Division at Oak Ridge National Laboratory. Desired qualifications include several years of postdoctoral training, evidence of significant scientific productivity and of the potential to develop and maintain a vigorous, independent, and extramurally funded research program. Teaching responsibilities will include efforts at both the undergraduate and graduate level. For more information on the department visit the website: http://utkbiogw.bio.utk.edu/bcmbdept.nsf. Interested candi-dates should submit a résumé including research goals as well as teaching experience and goals and three letters of recommendation to: Ms. Donna Bryan, Secretary to the Search Committee, Biochemistry and Cellular and Molecular Biology Department, WLS M407, Univer-sity of Tennessee, Knoxville, TN 37996-0840. Review of applications will begin on January 15, 1999, and continue until the position is filled. UTK is an Equal Employment Opportunity/Affirmative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer.

The Surgical Neurology Branch of the National Institute of Neurological Disorders and Stroke, NIH, Bethesda, Maryland, is recruiting a **HISTOPATHOLOGY TECHNICIAN** to perform tissue culture, paraffin, frozen, and gross sectioning, EM fixation, in situ hybridization, and immunohistochemical staining. Applicants require two full years of progressively higher-level graduate education directly related to the duties of a Histopathology Technician or a minimum of 52 weeks of experience that is equivalent in scope and level of responsibility to work as a Histopathology Technician at the next lower level with the Federal Service. Applicants will be further evaluated on their knowledge, skills, and ability to perform the duties of the position. Salary is at the GS-09 level (\$32,457 to \$42,198).

Please mail or FAX résumé to: Christina Contreras, Building 31, Room 8A23, 31 Center Drive, MSC 2540, Bethesda, MD 20892-2540. FAX: 301-402-2818. NIH is an Equal Opportunity Employer.

RESEARCH ASSOCIATE position available immediately in chemistry/protein chemistry. Our group studies erythrocyte cell biology, physiology, and biophysics, applying basic knowledge of RBCs to improved red cell storage methods and identification of red cell-based diagnostic/therapeutic applications. Seek candidates with broad experience in inorganic and organic chemistry, membrane biochemistry, proficiency in protein chemistry and modification. Salary range: S35,000 to \$40,000 commensurate with experience. Send curriculum vitae and three references to: Mark W. Bitensky, M.D., Visual and Circulatory Biophysics Laboratory, Biomedical Engineering Department, Boston University, 36 Cummington Street, Boston, MA 02215. FAX: 617-353-7216. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

Texas A&M University at Galveston (TAMUG) seeks applications for a three-year Postdoctoral Fellowship from highly qualified candidates interested in any aspect of marine biology, marine science, or environmental research. For details, see website: http://www.tamug. tamu.edu/postdoc; Telephone: 409-740-4810.

POSITIONS OPEN

TWO FACULTY POSITIONS IN ORGANISMAL BIOLOGY

Tenure-track positions. One at ASSISTANT PRO-FESSOR level, one at ASSISTANT/ASSOCIATE level. Joint applications from professional couples will be considered. Teaching for one position is in human anat-omy. The second position will support genetics. We also expect advanced courses in the applicants' area of expertise. Research areas for the first position might include functional or comparative anatomy, evolution, behavior, or ecology. Research interests for the second position might include genetic approaches to systematics, conser-vation biology, or any of the areas mentioned above; may focus on plants or animals; and should utilize molecular or other modern techniques. The Ph.D. and significant research accomplishments are required; postdoctoral experience is preferred. We expect continuing excellence in both teaching and funded research with M.S./M.A. and Ph.D. students. Candidates should submit a curriculum vitae, concise statements of teaching and research interests, up to three publications, and the names and addresses of at least four references (include e-mail addresses and FAX numbers) to: Dr. G. S. Bakken, Search Committee, Department of Life Sciences, Indiana State University, Terre Haute, IN 47809. Duties begin August 20, 1999. Screening begins January 15, 1999, continuing until the positions are filled. For more information, email: lsgsb@scifac.indstate.edu with "positions" as the and visit website: http://biology.indstate. subject, edu/dls/. ISU is an Affirmative Action/Equal Opportunity Employer and encourages women, minority candidates and couples to apply,

TENURE-TRACK POSITION IN CELL/MOLECULAR BIOLOGY UNIVERSITY OF TOLEDO

The Department of Biology at the University of Toledo has an opening for a tenure-track **ASSISTANT/ASSO**-**CIATE PROFESSOR** in the area of cell/molecular biology whose research interests focus in the area of eukaryotic signal transduction and/or receptor biology. The Department offers B.S., M.S., and Ph.D. degrees. Facilities include a new \$33 million complex with research laboratories for the cell/molecular biology faculty. Successful candidates will be expected to develop an externally funded research program that complements existing departmental strengths in cell/molecular biology, and to participate in undergraduate and graduate instruction. A Ph.D. and relevant postdoctoral experience are expected. Salary and set-up funds are competitive. Applications filed by January 1, 1999, will receive priority. Interested candidates should send a letter of applica-

Interested candidates should send a letter of application, curriculum vitae, statement of teaching and research interests, and the names of at least three references to:

Chair, Cell/Molecular Biology Search Committee Department of Biology University of Toledo Toledo, OH 43606-3390

The University of Toledo is an Affirmative Action/Équal Opportunity Employer. Minorities/Females/Disabled/Veterans.

ASSISTANT PROFESSOR POSITION

The Department of Biological Sciences, Rochester Institute of Technology seeks a PLANT SCIENTIST to fill a full-time, tenure-track position. Ph.D. required. Demonstrated teaching and postdoctoral experience de-sirable. Broadly trained with knowledge and skills in plant cell/molecular biology, plant physiology, plant cell and tissue culture. Teach botany and plant biotechnology. Participate in foundation course instruction, student advising, and other service activities. Encouraged to develop other courses in area of interest. Will supervise department greenhouse. Research in specialty area encouraged. We are a growing department with 13 faculty and 400 students in two undergraduate degree programs (biology and biotechnology). The department seeks candidates who will assist us in achieving the Institute's Diversity Initiative. Position available September 1, 1999. Applications accepted and reviewed until position is filled. Submit curriculum vitae and arrange to have three reference letters sent to: Chair, Search Committee, Department of Biological Sciences, Rochester Institute of Technology, 85 Lomb Memorial Drive, Rochester, NY 14623-5603. RIT is an Equal Opportunity/Affirmative Action Employer, and especially encourages applications from persons able to contribute in a meaningful way to the Institute's commitment to diversity and pluralism.

The International Center for Tropical Agriculture (CIAT) wishes to appoint a Senior Scientist to lead our project in Environmental Sustainability and Agricultural Land Use Dynamics. The project conducts research on sustainable land use and environmental management in Latin America. Responsibilities include supervision and leadership of a multidisiplinary group of scientists, including the CIAT GIS facility. The scientist will work closely with other CIAT projects to support the development of options for improved land use management, and capacity building in national programs (NARS) through institutional partnerships and training, including supervision of Ph.D. and M.Sc. candidates.

REQUIREMENTS:

• The successful candidate will be an established scientist able to lead a multidisiplinary team, with demonstrated capacity for high-quality research.

• The position requires a Ph.D. and experience related to agriculture, environmental studies, or land use. Good English speaking and writing skills are required. Spanish is desirable but not required.

The appointment will be as Project Manager, based in Cali, Colombia. Initial two-year contract, with potential for continuation for appointee who can successfully lead, shape, and direct this innovative research project. Insurance, company car, relocation expenses, and other benefits are part of the contract.

CIAT, based in Cali, Colombia, is a nonprofit organization with more than 80 internationally recruited scientists. It offers internationally competitive salary packages, is an Equal Opportunity Employer, and believes that the diversity of its staff contributes to excellence. CIAT is interested in increasing this diversity of its staff and particularly encourages applications from both women and developing country professionals.

Please send letter of application including c.v., and names, fax/e-mail, and addresses of three references to:

International Staff Office CIAT, A.A. 67-13 Cali, Colombia Telephone: (57-2) 445-0000 Fax: (57-2) 445-0073 e-mail: CIAT-jobs@cgiar.org Internet: http://www.ciat.cgiar.org Screening of applications has been extended to 30 December 1998 and will continue until a suitable candidate is found.



NATIONAL UNIVERSITY of SINGAPORE DEPARTMENT OF PHARMACY FACULTY SEARCH

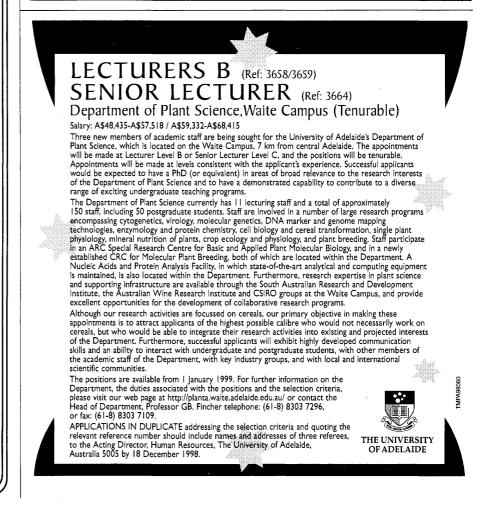
The Department of Pharmacy at the National University of Singapore (NUS) invites applications for tenure-track, senior positions in Pharmaceutical Science and Clinical Pharmacy. Candidates should have a Ph.D. or Pharm.D. and an excellent track record of research and scholarship. Senior levels of appointment—Associate Professor and Professor—will be considered. NUS is in the same league as the 88 top "Research 1 universities" in USA (Carnegie Classification), and faculty can expect at least the same salary levels and research support as these top universities. We seek outstanding individuals with a strong commitment to teaching and research. Please arrange to send a curriculum vitae, a brief research plan, and three letters of recommendation to:

OR

Prof. Soo Ying Lee Dean of Science National University of Singapore 10 Kent Ridge Crescent Singapore 119260 SINGAPORE Fax: (65) 777-4279 E-mail: scidean@nus.edu.sg Assoc. Prof. Go Mei Lin Acting Head Department of Pharmacy National University of Singapore 10 Kent Ridge Crescent Singapore 119260 SINGAPORE Fax: (65) 779-1554 E-mail: phahead@nus.edu.sg

Application deadline: 31 March 1999 Only shortlisted candidates will be notified.

For more details and application form, visit us on the Internet: http://www.science.nus.edu.sg/~webpmc



FISHERIES SCIENTISTS THREE POSITIONS

We seek a **RESEARCH SCIENTIST** in estuarine fish ecology to study fish ecology, bioenergetics, and food webs in Chesapeake Bay. Experience in spatial or bioenergetic modeling is preferred. A Research Scientist in fisheries acoustics will conduct field programs on the Great Lakes and Cheasapeake Bay and analyze underwater acoustic data for fish ecological applications. A strong programming (e.g., IDL) background on PC and UNIX platforms is preferred. Successful candidates will write peer-reviewed publications and grant proposals and present results to the scientific community and should have a good publication record and experience with freshwater and/or estuarine fish communities. A Ph.D. in fisheries science or other related field is required. We also seek a Fisheries Technician to organize field programs, perform data analysis and scientific graphics, and write reports. A Master's degree in fisheries science or related field is desired.

All positions are based at the National Oceanic and Atmospheric Administration (NOAA) Great Lakes Environmental Research Laboratory in Ann Arbor, Michigan, through an appointment with the Cooperative Institute for Limnology and Ecosystems Research (CILER) at the University of Michigan. The initial appointment is for one year with possibility of extension.

Please send your curriculum vitae, cover letter, and names of three references to:

Dr. Guy Meadows Cooperative Institute for Limnology and Ecosystems Research University of Michigan 2200 Bonisteel Boulevard Ann Arbor, MI 48109-2099

For further information please e-mail: clv@engin. umich.edu.

FIVE-YEAR FELLOWSHIP IN COMPUTATIONAL AND THEORETICAL BIOLOGY

The Ernest Orlando Lawrence Berkeley National Laboratory's Physical Biosciences Division is seeking a person with outstanding promise and creative ability interested in the theoretical and/or computational modeling of biological systems at the supramolecular level. The appointment will be as Divisional Fellow, for a term of five years with the expectation of promotion to Senior Scientist upon successful review. The successful candidate will have several years of research experience in theoretical and/or computational biology beyond the Ph.D., and is expected to establish an independent research program aimed at the understanding of the design principles that govern the function of biological systems and the development of computational and/or theoretical tools to model them.

Applicants are requested to submit a curriculum vitae, list of publications, statement of research interests, and the names of at least four references no later than November 30, 1998, to: Prof. Daniel S. Rokhsar, Chair Search Committee, Job# PBS10184/JSCI, Physical Biosciences Division, Building 19 (Le Conte Hall), Lawrence Berkeley National Laboratory, 1 Cyclotron Road, Berkeley, CA 94720. Berkeley Laboratory is an Affirmative Action/Equal Opportunity Employer committed to the development of a diverse work force.

BIOLOGIST/MICROBIOLOGIST

The Biology Department of Augsburg College seeks a Microbiologist for a tenure-track position at the **ASSIST**-**ANT PROFESSOR** level, beginning September 1, 1999. Seeks candidate with broad training in microbiology and biochemistry. Teaching responsibilities include microbiology lecture/laboratory, and other courses appropriate to candidate's interests and department needs.

Augsburg is private, co-educational liberal arts affiliated with the ELCA. Website: www.augsburg.edu. Requirements: Ph.D., commitment to teaching under-

In order to ensure consideration documents must be

received by January 1, 1999. Submit letter describing qualifications, curriculum vitae, undergraduate/graduate transcripts, three confidential letters of recommendation, and statements of teaching philosophy and research interests to:

Human Resources Department Augsburg College 2211 Riverside Avenue, Box# 79 Minneapolis, MN 55454 Attn: Bio Search Equal Employment Opportunity. POSITIONS OPEN



TENURED/TENURE-TRACK POSITION IN VIRAL ONCOGENESIS

The HIV and AIDS Malignancy Branch (HAMB), NCI, is searching for a tenure-track or tenured INVESTIGA-TOR in the field of viral oncogenesis. It is anticipated that the Investigator will establish an independent research program targeted to the study of the pathogenesis, treatment, and/or prevention of viral-induced tumors. The research program should be able to interface with a strong existing clinical research program in adults and children with AIDS and AIDS-related tumors. Current areas of research for HAMB focus on HIV protease, Kaposi's sarcoma-associ-ated herpesvirus (KSHV/HHV-8), and the development of novel therapeutic interventions for HIV infection. Candidates for the position should have an M.D., a Ph.D., or an M.D.-Ph.D. and strong research credentials. Applicants for this position should submit a curriculum vitae including bibliography, a statement of research interests, a two-page outline of the proposed research program, and the names of three references to: Chairman, Search Committee, HIV and AIDS Malignancy Branch, NCI, Attention: Andrea Milor, Building 10, Room 12N226, 10 Center Drive, MSC 1906, Bethesda, MD 20892-1906. The deadline for applications is December 31, 1998.

The National Cancer Institute is an Équal Opportunity Employer.

RESEARCH DIRECTOR—DIAGNOSTICS BIOTECHNOLOGY

American Diagnostica Inc., a profitable biotechnology company founded in 1982, has an immediate opening for a Director of Diagnostics Research and Development, owing to expansion. We develop, manufacture, and market products for hemostasis diagnosis and cancer prognosis, and have an established presence in some 20 world markets. The successful candidate will have a Ph.D. in biochemistry or immunology, a documented record of scientific excellence and achievement in assay development, as well as supervisory experience. He or she will lead a small group of scientists at all levels and have input into drug discovery programs. We are located in a desirable suburban community readily accessible to Manhattan. Please submit your full curriculum vitae along with salary requirements to:

> Ms. Enoya American Diagnostica Inc. P.O. Box 1155 Greenwich, CT 06836-1155

RESEARCH SCIENTIST CELL BIOLOGY

Immediate opening exists for enthusiastic scientist with problem-solving skills to participate in studies of bile acid effects on cellular signaling. The position requires a Ph.D. in some aspect of cellular or molecular biology and two to four years of additional training (postdoctoral or industrial). Familiarity with cell culture and biochemical and molecular methods is important. In conjunction with Senior Researchers, the candidate will be expected to design, execute, and analyze experiments, and to direct Research Technicians. Good communication and computer skills, and the ability to function in a multiple-task environment are essential. Interested candidates should send a curriculum vitae and three letters of recommendation to: Jean-Pierre Raufman, M.D., University of Arkansas for Medical Sciences, 4301 West Markham Street (Slot 567), Little Rock, AR 72205-7199. E-mail: raufmanjeanpierre@exchange.uams.edu.

CANCER PREVENTION AND TREATMENT RESEARCH

Positions at several levels for individuals with demonstrated abilities in clinical or laboratory research. Various topics related to IGF physiology in the context of cancer prevention and treatment. See: Science 279:563-6, 1998; The Lancet 351:1393-6, 1998; Clin. Cancer Res. 3:2465-9, 1997; J. Biol. Chem. 271:1016-21, 1996; Cancer Res. 56:1509-11, 1996.

Send curricula vitae to: Dr. Michael Pollak, McGill University, Lady Davis Institute for Medical Research, Room 121, 3755 Cotte Ste. Catherine Road, Montreal, Quebec H3T 1E2 Canada.

POSITIONS OPEN ASSOCIATE CHIEF OF STAFF

FOR RESEARCH AND DEVELOPMENT

The Albuquerque VA Medical Center (VAMC) invites applications for the position of Associate Chief of Staff for Research and Development (ACOS/R&D). The Albuquerque VAMC is an integrated healthcare delivery system with a tertiary hospital and extensive outpatient programs including eight outreach clinics. The Albuquerque VAMC is the site of the only VA Cooperative Studies Program Clinical Research Pharmacy Coordinating Center. A strong and dynamic research and clinical affiliation with the University of New Mexico School of Medicine enhances an active research program. The successful candidate is expected to play a critical role in policy development and management of the Albuquerque VAMC Research and Development Program. Board-certified M.D., D.O., or Ph.D. candidates with current or a record of competitive extramural funding and a strong record of research productivity are encouraged to apply. Candidates must be eligible for an appointment at the level of Associate or Full Professor at the University of New Mexico School of Medicine. A focus in Health Services Research is desirable. Evidence of administrative and management experience is required. Excellent interpersonal, supervisory, and mentoring skills are a prerequisite. Albuquerque is a city of approximately 500,000 that boasts a modern climate and many outdoor and leisure activities. This is designated as a drug-testing position (PL 100-71).

For best consideration, applications, including names, addresses, telephone numbers, and e-mail addresses for three references, should be received by Februray 28, 1999. Please send this information to:

> VA Medical Center (151) Attn: Search Committee 1501 San Pedro S.E. Albuquerque, NM 87108

The VAMC, UNM School of Medicine, and the University of New Mexico are Equal Opportunity Employers and Educators.

MOLECULAR GENETICS

The Division of Life Sciences at The University of Texas at San Antonio invites applications for a tenure-track ASSISTANT PROFESSOR faculty position in molecular genetics pending budget approval. Requirements include a Doctoral degree in the appropriate discipline and postdoctoral experience. The Division of Life Sciences consists of 22 faculty members, and offers a Bachelor's degree in biology, Masters' degrees in biology and biotechnology, and a Doctoral degree in biology with an emphasis in neurobiology. Candidates who have research interests in neurobiology and mammalian systems are preferred. The Division is developing a mouse transgenic facility. Set-up funds and laboratory space in the newly constructed Biosciences Building are available. Send letter of application, curriculum vitae, statement describing research interests, selected publications, and the names, postal addresses, e-mail addresses, and telephone numbers of three references. Applications and all required materials must be received with a FAX or postmark date no later than December 15, 1998, to: Dr. Joe L. Martinez, Jr., Director, Division of Life Sciences, The University of Texas at San Antonio, 6900 North Loop 1604 West, San Antonio, TX 78249-0662. FAX: 210-458-5658. The University of Texas at San Antonio is an Affirmative Action/Equal Employment Opportunity Employer. Women and minorities are encouraged to apply. Applicants who are not U.S. citizens must state current visa and residency status.

RESEARCH MEDICAL TECHNOLOGIST

The Critical Care Medicine Department, National Institutes of Health, is seeking a Research Medical Technologist to perform a wide variety of complex laboratory procedures involving animal research, cellular biology, biochemistry, molecular biology, and clinical investigation with patients and normal volunteers. Applicants must have the following:

B.S. or M.S. degree in medical technology, chemistry, biology, or microbiology. One year of specialized experience is required. Experience with FACS, monoclonal antibody production, or molecular biology is desirable. The position is a Federal General Schedule position,

The position is a Federal General Schedule position, Grade 9/11. Inquiries may be directed to: Bridget Orloski, Telephone: 301-496-9320. To request the vacancy announcement and application package, contact: The Personnel Office, Clinical Center, Telephone: 301-496-6924. NIH is an Equal Opportunity Employer. U.S. citizenship is required.



Wellcome Trust Centre for the Epidemiology of Infectious Disease

New One Year MSc

Epidemiology, Evolution and Control of Infectious Disease

Applications are invited for this new full time, taught MSc commencing in September 1999. The course places emphasis on multi-disciplinary skills and gives a thorough grounding in infectious disease epidemiology allied to current advances in theory and practice. The academic content includes: i) Core Research Skills for Epidemiology in areas such as information technology, mathematics, statistics, molecular biology and immunology; ii) a Professional Development Programme involving a range of transferable personal skills for a career in scientific research; iii) a series of taught courses on Research in Epidemiology including the subject areas: disease and world development, infectious disease biology, mathematical epidemiology, transmission dynamics, bioinformatics, risk assessment, molecular epidemiology and evolutionary biology, the design of intervention programmes, public health policy formulation and health economics and iv) two research projects.

Examination is by means of two research project dissertations, several extended essays and practical notebooks, two public seminars and a viva voce examination.

Further information is available from Richard Suswillo, Training Administrator, WTCEID, Department of Zoology. Email: richard.suswillo@zoology.oxford.ac.uk

Application forms are available from the address below.

Before the closing date of 31 March 1999, applicants should arrange for three academic references to be sent directly to Shelagh Brooks, Department of Zoology, University of Oxford, South Parks Road, Oxford OX1 3PS, UK (tel +44 1865 271277; Fax +44 1865 271136) and should send her a *curriculum vitae* and covering letter stating why the applicant wishes to entrol in this MSc. Website: http://www.ceid.ox.ac.uk

The University is an Equal Opportunities Employer.

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Your international recruiting partner.







Academic Posts in Biological Sciences

We intend to make a significant number of new academic appointments - from Fellow to Professor - over the next two years. This forms part of a 5 year development programme, which has already involved recruitment of 40 new staff and senior research fellows, the construction of a 7000m² Manchester Biosciences Incubator Building, and the forthcoming construction of the Wellcome Trust Millenial Clinical Sciences Building.

We seek to recruit outstanding individuals researching any area of the Biosciences but for this round will be particularly interested to receive applications or enquiries in the areas of:

Developmental Biology, Neuroscience, Tissue Injury and Repair, Genetics (incl. Population Genetics), Animal Physiology, Vascular Biology, Cancer Biology, Molecular Pathogenicity, Protein Trafficking, Matrix Biology, Molecular Pharmacology, Gene Expression, Cytoskeleton & Mitosis, Plant Biochemistry/Molecular Genetics and/or from individuals using the following techniques/ approaches in their research programmes, Transgenesis, Micro Array Analysis, Structure Determination, Proteomics, Bioinformatics, Functional Genomics.

Extensive information on the School of Biological Sciences and details of how to make a formal application can be found on http://www.biomed.man.ac.uk

Informal enquiries from prospective applicants should be made by e-mail to biosearch@man.ac.uk indicating field(s) of interest.

A full information pack (quote ref 830/98) is available from: The Dean's Office, School of Biological Sciences, G.30A, Stopford Building, The University of Manchester, Manchester M13 9PT, UK. Tel: 0161 275 5632; Fax: 0161 275 5586; E-mail: phough@man.ac.uk

This is an ongoing recruitment campaign and there are no prohibitive closing dates, however, for this round, we would be pleased to hear from prospective candidates no later than 1 February 1999.

As an Equal Opportunities Employer, the University welcomes applications from suitably qualified people from all sections of the community regardless of race, religion, gender or disability.

EMBRYOLOGIST for health care facility in southwest Ohio. Responsible for culture medium preparation and quality control testing; examination of follicular aspirates with oocyte identification; oocyte quality and maturity grading; sperm preparation; semen collection and analysis, sperm wash, and hyperactivation; insemination of oocytes; determination of fertilization and zygote quality evaluation; embryo culture and embryo grading; oocvte/embrvo/sperm cyropreservation; embrvo transfer (uterine); microtool fabrication; and micromanipulation of human oocytes and/or embryos. Develop treatment for male infertility caused by sperm incapacity to induce oocyte activation, diagnose preimplantation embryo genetic disorder by karyotype PCR or immunofluorescent localization, and develop vetrification for blastocyst. Job requires Bachelor's degree in biology or animal science and one and one half years of experience in job described or as a Biologist. The one and one half years of experience must be in an embryology laboratory, with one year of that experience in enucleation and micromanipulation of oocyte, karyotype PCR and immunofluorescent localization, and microtool fabrication. Six months of the experience must be in a clinical environment and include vetrification of human embryos, all aspects of ART procedures, laboratory management, and sperm hyperactivation. Must have evidence of proven research in sperm-oocyte interaction or oocyte activation shown by at least two published articles. 40 hours per week; 8 a.m. to 5 p.m. Salary \$50,899.94 per year. Send two résumés and cover letters (no calls) to: ES Sp Prgms, REF#4170JD, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

COMPARATIVE VERTEBRATE MORPHOLO-GIST. Department of Biological Sciences, East Tennessee State University. Tenure-track ASSISTANT PRO-FESSOR fall 1999. Ph.D. required. Duties include teaching comparative vertebrate anatomy, development of an advanced-level course, teaching in general biology program, and supervision of Master's candidates and undergraduate research. Research is expected in comparative morphology with an evolution approach. Application including curriculum vitae, statements of teaching and research goals, reprints of recent publications, graduate transcripts, and letters from three references should be sent by January 31, 1999, to: Dr. Leonard Robertson, Chairman, Search Committee, East Tennessee State University, Box 70703, Johnson City, TN 37614. E-mail: robertjl@etsu.edu; FAX: 423-439-5958; website: www.etsu.edu/biology. Affirmative Action/ Equal Opportunity Employer.

DIRECTOR/TUNA-DOLPHIN RESEARCH ONE PERMANENT POSITION National Oceanic and Atmospheric Administration San Diego (La Jolla)

The Southwest Fisherics Science Center, a National Oceanic and Atmospheric Administration (NOAA) research facility, invites applications for a Research Director for tuna-dolphin investigations related to recent passage of the International Dolphin Conservation Program Act. This senior-level position will assume responsibility for research program design and interpretation related to determining whether fishery-related stress is having a significant adverse impact on dolphin stocks in the castern tropical Pacific Ocean. U.S. ditizenship required. Salary \$66,551 to \$101,773. Announcement number W/NMF/ 990006.BS closes December 18, 1998; for details see website: http://www.usajobs.opm.gov/a9noaa.htm; Telephone: 206-526-6294. An Equal Opportunity and Affinnative Action Employer.

DIRECTOR of Environmental Sciences Program. Arkansas State University. Responsibilities include leadership for an emerging multidisciplinary graduate program; student recruitment; pursuit of funding; and other administrative duties (see website: www.cms.astate.edu/ ~environ/). Candidates for the Associate/Full Professor position must possess a Ph.D. in environmental science or a related discipline; demonstrate significant research expertise and external funding in environmental science (specific area of interest is flexible); and have administrative experience. Interested candidates should submit a letter of application, full curriculum vitae, contact information for three references, and other supporting documentation to: Lynita M. Cooksey, Ph.D., Chair, Environmental Science Director Search, P.O. Box 1030, Arkansas State University, AR 72467. Review of applications will begin January 6, 1998, and continue until a suitable applicant is found. Women and minorities are encouraged to apply. An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

SENIOR FACULTY POSITION NEUROBIOLOGY

The Division of Life Sciences at The University of Texas at San Antonio invites applications for the Roland K. and Jane W. Blumberg **PROFESSORSHIP** in bioscience, an Endowed Chair, and a tenured position at the Full Professor level pending budget approval. The Division is seeking a Senior Neurobiologist with a successful research program emphasizing computational neurobiology that will complement existing faculty interests in biophysics, synaptic plasticity, learning and memory, and neuron networks and systems. The successful candidate is required to have a Ph.D. in neurobiology or a related area, have private or federal grant funding support, and have achieved Associate or Full Professor status or its equivalent. The candidate will be expected to collaborate with faculty in the Division of Life Sciences, as well as with faculty members in the Divisions of Computer Science and Engineering, and take a major role in developing the newly established NIH RCMI-funded Cajal Neuroscience Research Center. Set-up funds and laboratory space in the newly constructed Biosciences Building are available. The Division of Life Sciences consists of 22 faculty members, and offers a Bachelor's degree in biology, Masters' degrees in biology and biotechnology, and a Doctoral degree in biology with an emphasis in neurobiology. Interested individuals are required to submit a letter of application, a curriculum vitae, three publications, a research statement, and the names, postal addresses, e-mail addresses, and telephone numbers of three references. Applications and all required materials must be received with a FAX or postmark date no later than December 15, 1998, to: Dr. Joe L. Martinez, Jr., Director, Division of Life Sciences, The University of Texas at San Antonio, 6900 North Loop 1604 West, San Antonio, TX 78249. FAX: 210-458-5658.

UTSA is an Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply. Applicants who are not U.S. citizens must state current visa and residency status.

POSTDOCTORAL POSITION DANA-FARBER CANCER INSTITUTE

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

Postdoctoral position. The structural immunology group at the Dana-Farber Cancer Institute has an immediate opening for a highly motivated Postdoctoral Fellow in protein crystallography or small molecule crystallography. Those candidates with some experience in molecular biology and/or protein chemistry are preferred. The Fellow is expected to work on structural basis of cellular immune response. He/she will enjoy a rich collaborative environment in immunology within the Institute and also a broad structural biology community at the Harvard Medical School.

Interested candidates please forward your curriculum vitae to: Dr. Jia-huai Wang, Dana-Farber Cancer Institute, 44 Binney Street, Room SM-1036, Boston, MA 02115. FAX: 671-632-4393. We are an Equal Opportunity Employer.

POSTDOCTORAL POSITION DEPARTMENT OF MICROBIOLOGY Boston University School of Medicine

A Postdoctoral position is available immediately to study the molecular mechanisms of hepatitis B virus replication and pathogenesis, with a focus on virus-host in teractions. A Ph.D. and/or M.D. degree (or equivalent) with a background and research experience in molecular biology or virology is required. Expertise in protein purification and characterization is highly desirable. Interested applicants should send their curriculum vitae and names of three references to: Jianming Hu, M.D., Ph.D., Department of Microbiology, Boston University School of Medicine, 715 Albany Street, Boston, MA 02118-2394. E-mail: jmhu@bu.edu; FAX: 617-638-4286. Equal Opportunity Employer.

POSTDOCTORAL POSITION for studying molecular mechanisms of chaperoning by α A- and α B-crystallins. The position requires expertise in molecular biology and protein biochemistry. Send curriculum vitae and names, addresses, and e-mails of three references to: Dr. E. C. Abraham, Professor, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100. E-mail: eabraham@mail.mcg.edu. Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer.

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POSITIONS OPEN

RESEARCH OPPORTUNITIES IN DEVELOPMENTAL THERAPEUTICS Frederick Cancer Research and Development Center National Cancer Institute

POSTDOCTORAL POSITIONS are available in the Pharmacology and Experimental Therapeutics Section of the Laboratory of Drug Discovery Research and Development, Developmental Therapeutics Program. Protein chimeras are designed, expressed, and biologically characterized *in vitro* and in mice with the aim of specifically targeting tumor cell growth. Current projects also involve identification of new tumor-related antigens using combinatorial methods. Applicants should have a strong background in molecular biology, particularly antibody engineering, phage display, and recombinant protein expression. Candidates must have three years or less of postdoctoral experience. Send curriculum vitae and correspondence to: Dr. Susanna Rybak, Laboratory of Drug Discovery Research and Development, NCI– Frederick Cancer Research and Development Center, Building 567, Room 162, Frederick, MD 21702. Email: rybak@ncifcrf.gov.

POSTDOCTORAL RESEARCH POSITION

Postdoctoral positions are available to study (1) the structure and function of the antigen I/II family of streptococcal adhesins and their role in biofilm establishment in the oral cavity, and (2) the regulation of RTX toxin expression in Actinobacillus actinomycetencomitans. Candidates with experience in protein biochemistry and/or molecular genetics and an interest in bacterial pathogenesis are preferred. Send curriculum vitae, statement of research experience, and names of three references to: Dr. Donald R. Demuth, University of Pennsylvania, Dental Medicine, Department of Biochemistry, 4010 Locust Street, Room 540 Levy, Philadelphia, PA 19104-6002. E-mail: demuth@biochem.dental.upenn.edu. UPENN is an Affinmative Action/Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available for studying plant disease resistance signal transduction in the Plant Pathology Department at Pennsylvania State University. Projects will utilize a conditional lethal system (see: *Plant Journal* 14:247) in *Arabidopsis* for genetic, molecular, and physiological analysis of the hypersensitive programmed cell death response. Please send curriculum vitae, statement of research experience/interests, and names of three references to: Timothy McNellis, Department of Plant and Microbial Biology, 111 Koshland Hall, University of California, Berkeley, CA 94720. E-mail: mcnellis@nature.berkeley.edu; FAX: 510-642-9017.

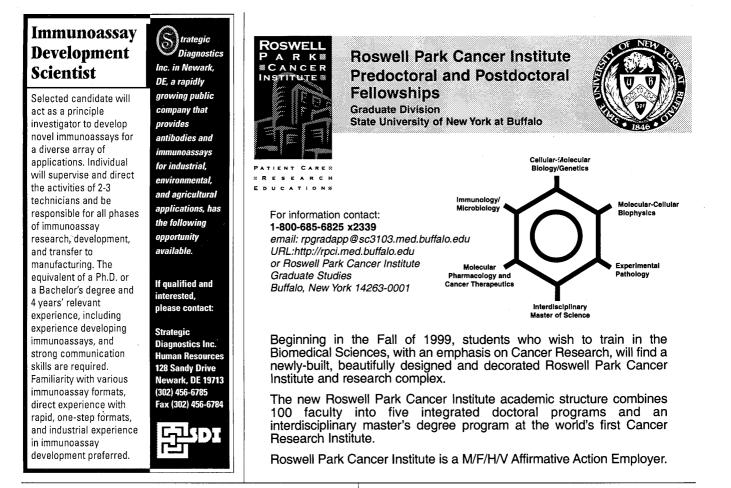
VANDERBILT UNIVERSITY

A POSTDOCTORAL RESEARCH POSITION is available immediately to investigate the mechanisms and regulation of blood coagulation and fibrinolysis with protein chemistry, enzyme kinetics, and fluorescence spectroscopy techniques. Interested individuals who are recent Ph.D. degree graduates in biochemistry, biophysics, chemistry, or biology should send a copy of their curriculum vitae and arrange for two letters of recommendation to be sent to: Dr. Paul E. Bock, Vanderbilt University School of Medicine, Department of Pathology, C-3321A Medical Center North, Nashville, TN 37232-2561.

POSTDOCTORAL POSITION YALE UNIVERSITY

Yale University School of Medicine Postdoctoral position available to investigate T cells and inflammation in the pathogenesis of human occupational asthma. Applicants should have Ph.D., M.S., or equivalent experience, and a strong background in human immunology. Excellent verbal and written communication skills are required. Send curriculum vitae and the names of three references to: Dr. Adam Wisnewski, Yale School of Medicine, Pulmonary, LCI105, 333 Cedar Street, New Haven, CT 06520. E-mail: adam.wisnewski@yale.edu.

POSTDOCTORAL POSITIONS are available immediately at Case Western Reserve University to study the regulation of apoptosis-related genes in the development of cancer. Experience in cell cycle analysis and molecular biology is required. Submit curriculum vitae with names of three references to: Subrata Haldar, Ph.D., Room 657, Rammelkamp Building, 2500 MetroHealth Drive, Cleveland, OH 44109. Telephone: 216-778-1167; e-mail: shaldar@research.mhmc.org.



Washington WASHINGTON UNIVERSITY IN ST LOUS School of Medicine

Tenure Track Assistant Professor Developmental Biologist

The Department of Molecular Biology and Pharmacology at Washington University School of Medicine is recruiting individuals at the level of Assistant Professor on the tenure track. We are seeking an outstanding scientist working in the area of developmental biology. Special emphasis will be given to research involving systems where genetic tools can be used to address fundamental questions dealing with development. Faculty in the Department of Molecular Biology and Pharmacology utilize a broad range of organisms including yeast, *C. elegans, Drosophila*, and mice to investigate cell fate specification, pattern formation, and the regulation of cell proliferation, differentiation, migration, and death. (Visit our website at http:// pharmsun.wustl.edu.)

Interested applicants should forward a curriculum vitae and a short summary of research plans to:

Search Committee (c/o Jeffrey I. Gordon, Head) Department of Molecular Biology and Pharmacology Washington University School of Medicine 660 South Euclid Avenue, Box 8103 St. Louis, MO 63110

Applicants should also arrange to have three letters of recommendation sent to the same address.

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

Faculty Position Section of Orthopaedic Surgery and Rehabilitation Medicine

The University of Chicago

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

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

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

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

POSTDOCTORAL POSITION EUNICE KENNEDY SHRIVER CENTER FOR MENTAL RETARDATION

A Postdoctoral position is available immediately to study regulation of the neuron-specific human tau gene, known to cause fronto-temporal dementia. The research will focus on the regulation and function of tau alternative splicing. Candidates should have experience in molecular and cellular biology; knowledge of protein purification techniques is desirable. Please send curriculum vitae and the names and telephone numbers of three references to: Dr. Athena Andreadis, Biomedical Sciences, Eunice Kennedy Shriver Center, 200 Trapelo Road, Waltham, MA 02452. FAX: 781-894-9968; e-mail: aandreadis@shriver.org.

andreadis@shriver.org. The Shriver Center, located in suburban Boston, is affiliated with Massachusetts General Hospital (MGH) and Harvard Medical School. The selected candidates will have joint appointments at MGH and Harvard. The Department of Biomedical Sciences provides extensive core facilities and many opportunities for scientific interactions. Visit our website: www.shriver.org.

POSTDOCTORAL POSITIONS IMMEDIATELY AVAILABLE

Two Postdoctoral positions open in the renal division of the University of Louisville for two projects: PTH regulation of renal phosphate transporter and cytokine regulation of bone cells. Molecular biology experience required. Please send résumés to: Eleanor Lederer, M.D., University of Louisville, Kidney Disease Program, 615 South Preston, Louisville, KY 40202-1718. FAX: 502-852-7643; e-mail: elederer@email.kdp-baptist.louisville.edu.

POSTDOCTORAL POSITION available to study inflammatory mechanisms in atherosclerosis. Ph.D. or M.D. required.

Please send curriculum vitae and names of references to: Dr. Linda K. Curtiss Departments of Vascular Biology and Immunology, IMM-17

and Immunology, IMM-17 The Scripps Research Institute 10550 North Torrey Pines Road La Jolla, CA 92037 E-mail: lcurtiss@scripps.edu

POSTDOCTORAL POSITION available immediately to help in the positional cloning of a gene causing polycystic kidney disease and other genes affecting development in the mouse. Applicants should have a Ph.D. and experience in mammalian and/or molecular genetics. Send curriculum vitae and names of three references to: Dr. Lorraine Flaherty, Director, Molecular Genetics Program, Wadsworth Center/State University at Albany, P.O. Box 22002, Albany, NY 12201-2002. E-mail: flaherty@wadsworth.org. Affirmative Action/ Equal Opportunity Employer.

POSTDOCTORAL POSITION to study regulation of a G protein-coupled receptor gene (*Endocrinology* **139**: 3449-3455; 1998). Project involves recombinant DNA, DNA/protein interactions, and signal pathways. Require background in molecular biology and protein biochemistry. Please send curriculum vitae and the names of three references to: Dr. Melvyn Soloff, Department of Obstetrics and Gynecology, University of Texas Medical Branch, Galveston, TX 77555-1062. E-mail: msoloff@ utmb.edu.

POSTDOCTORAL POSITIONS

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



JOHN W. HEIN POSTDOCTORAL RESEARCH FELLOWSHIP AT FORSYTH DENTAL CENTER

Nation's leading institution devoted to oral/craniofacial science is a private, Harvard-affiliated research institute. Areas include bioadhesion, biomineralization, cell biology, clinical trials, craniofacial development, cytokine biology, jeriodontology. Fellowship offers generous compensation, benefits, infrastructure support, to develop a research program with a Forsyth staff member. Support initially one year; may be extended. Potential to become productive member of Forsyth research staff preferred. Information at website: http://www.forsyth. org. Send curriculum vitae, three reference names to: Dr. Martin Taubman, Chairman, John W. Hein Research Committee, Forsyth Dental Center, 140 Fenway, Boston, MA 02115. Telephone: 617-262-5200 ext. 314; e-mail: mtaubman@forsyth.org. Affimative Action/ Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS. The Geophysical Laboratory of the Carnegie Institution of Washington invites applications for Postdoctoral Fellowships. The Geophysical Laboratory is a private research and educational institution emphasizing interdisciplinary research in fundamental chemistry and physics related to geology, planetology, astrochemistry, and astrobiology. The Geophysical Laboratory supports world-class staff and research facilities in high-pressure physics and chemistry, organic and biogeochemistry, mineral physics, and petrology. Please refer to our website: http://granite.ciw.edu for a listing of personnel, their current research interests, major facilities, and for application information. Completed applications for Fellowships beginning on or after July 1, 1999, should be submitted by January 15, 1999, to: Wesley T. Huntress, Jr., Director, Geophysical Laboratory, 5251 Broad Branch Road N.W., Washington, DC 20015. The Geophysical Laboratory is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available to study molecular mechanisms that regulate interactions be tween tyrosine kinase and sphingolipid signaling pathways. Cellular models include examination of (1) interactions between neurotrophin signaling pathways in regulating survival and death signals in primary neurons and PC12 cells and (2) regulation of insulin signaling and adipogenesis by interactions between ceramide and insulin signaling pathways. A recent Ph.D. degree and strong background in molecular biology and biochemistry is required as well as a strong motivation to succeed. Review of applications will begin December 1, 1998. Send curriculum vitae and names of three references to: Dr. Rick T. Dobrowsky, Department of Pharmacology and Toxicology, University of Kansas, 5064 Malott Hall, Lawrence, KS 66045. Email: dobrowsky@hbc.ukans.edu; website: www. pharm.ukans.edu/pharm/pharmtox/index.html. Equal Opportunity/Affirmative Action.

POSTDOCTORAL POSITION available immediately to study the mechanism of mRNA stability. Candidate must have demonstrated expertise in cell and molecular biology such as cell culture, transfection, molecular cloning, mRNA decay assay, linker scanning mutagenesis, base substitution, and Northwestern analysis. Send curriculum vitae and three reference letters to: Dr. M. Kumari, University of Texas Health Science Center at San Antonio, Department of Pharmacology, 7703 Floyd Curl Drive, San Antonio, TX 78284-7764. FAX: 210-567-4226; e-mail: kumari@uthscsa.edu.

UTHSCSA is an Equal Enployment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study the molecular and cellular role of adenosine receptors in cardiac pathophysiology, specifically in the context of ischemia/reperfusion injury and preconditioning. Studies will explore the signaling mechanisms of adenosine receptors in cardiac cells and will involve the generation/use of genetically modified mice. Experience in molecular biology or molecular pharmacology is desirable. Send curriculum vitae and names of three references to: Dr. John A. Auchampach, Ph.D., Cardiology, 511 South Floyd Street, MDR Room 128, University of Louisville, Louisville, KY 40202.

POSITIONS OPEN

POSTDOCTORAL POSITION

National Institute of Environmental Health Sciences (NIEHS), NIH has a Postdoctoral position available immediately to investigate structure-activity requirements for substrate specificity of the CYP2C enzymes using cDNA expression systems in bacteria. Technical experience in molecular genetics and protein biochemistry is needed in several of the following areas: site-directed mutagenesis and construction of chimeras, use of cDNA expression systems such as bacteria, cloning techniques, DNA sequencing and protein biochemistry, molecular, biology of CYP enzymes. Experience and training in molecular modeling techniques beneficial. Requires a Ph.D. in biochemistry, molecular genetics, molecular pharmacology, or related field. Applicant must have less than five years of postdoctoral experience. The initial appointment is renewable up to five years with a starting salary of at least \$26,500 depending on experience. Applicants should submit a curriculum vitae and three references to: Joyce Goldstein (A3-02), NIEHS, P.O. Box 12233, Research Triangle Park, NC 27709. Telephone: 919-541-4495; FAX: 919-541-3647; e-mail: goldstel@ niehs.nih.gov.

POSTDOCTORAL POSITION

In a laboratory that focuses on developing excellent independent Investigators and studies the potential therapeutic effects of ribozymes in a transgenic model of osteogenesis imperfecta. The position concerns the generation of stable intracellular expression of ribozyme(s) in an osteoblastic cell line followed by the development of a transgenic mouse simultaneously expressing a mutant minigene and a complementary ribozyme. Strong working experience and publication record in molecular biology preferred. The new Department of Genetics and Developmental Biology and the Center for Molecular Medicine offer tremendous opportunities for collaboration and networking. Interested applicants should send a description of research experience, curriculum vitae, and names/addresses of three references to: Dr. Petros Tsipouras, Department of Pediatrics, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030. FAX: 860-679-13555; e-mail: tsipouras@nsol.uchc.edu.

A POSTDOCTORAL POSITION is available immediately in the Laboratory of Molecular and Developmental Biology, National Eye Institute, National Institutes of Health. The position is to study the functions of alpha-crystallin/small heat shock proteins in ocular and nonocular tissues using transgenic and gene knockout mice. A variety of biochemical, molecular biological, and histological approaches will be employed. To be considered, applicants must be U.S. citizens or permaneut residents, must have a Ph.D. in molecular biology, biochemistry, or a related field, and have fewer than five years of postdoctoral experience. Starting salary ranges from \$27,500 to \$38,000 per year depending on experience. Please send a curriculum vitae, bibliography, and names of three references to: Dr. Eric Wawrousek, National Eye Institute, 6 Center Drive, MSC 2730, Bethesda, MD 20892-2730. Telephone: 301-496-8841; FAX: 301-402-3603; e-mail: ericw@helix.nih.gov.

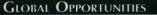
NIH is an Equal Opportunity Employer

MOLECULAR PARASITOLOGY

POSTDOCTORAL POSITION available for 1999 at New York University School of Medicine, in one of the following areas of research: molecular control of differentiation of *Entoamoeba*; interaction between *Plasmodia*, their hosts or vectors; metabolism of *Pneumocystis*. NIH Fellowship, *limited to U.S. citizens or residents*. Send curriculum vitae and three letters of recommendation by FAX rapidly to: Dr. Ruth S. Nussenzweig, Department of Medicine and Molecular Parasitology, New York University, 341 East 25th Street, New York, NY 10010. FAX: 212-263-8116.

POSTDOCTORAL POSITION available for studies on structure-function relationships in the cytochrome P450 superfamily of enzymes. Focus on designing P450s with novel functions and developing predictive methodology for P450 reactions using chimeras, site-directed mutants, isotope effects, crystallography, analytical chemistry, and computational modeling. Contact: Jeffrey P. Jones, Ph.D., Room, 477 Fulmer Synthesis, Department of Chemistry, Washington State University, Pulman, WA 99194-4630. E-mail: jpj@wsu.edu.

Washington State University is a Equal Opportunity Employer.



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: endocrinology, 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

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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.

GLOBAL OPPORTUNITIES

Faculty Positions in Department of Life Science

The Department of Life Science at National Yang-Ming University has two faculty positions available immediately, with one position each, specifically, in the fields of Bioinformatics and Developmental Biology. The faculty in each field are expected to teach undergraduate courses in Bioinformatics and Developmental Biology, respectively. The ability to teach courses in fluent Mandarin is essential. Preference will be given to those who have postdoctoral and/or teaching experience. Please forward curriculum vitae, recent publications, research plan, and three letters of recommendation to the following address before January 15, 1999.

Ming-Ta Hsu, Ph.D., Chair Department of Life Science National Yang-Ming University 112 Shipai, Taipei, Taiwan TEL: 886-2-820-1854 FAX: 896-2-820-1886 E-mail: mth@ym.edu.tw

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EUROPEAN CAREER OPPORTUNITIES IN FRANCE

Chef de Projet

Dans le cadre de la réalisation d'un équipement muséographique novateur consacré aux sciences, aux techniques et à la société, nous recherchons un

Mission : Vous mehez la conduite du projet sur trois ans, animez et alimentez la réflexion sur le contenu du futur équipement, faites valider les propositions par le maître d'ouvrage, veillez à l'avancement régulier de l'opération, organisez les différentes études concourant au projet (étude de site, etc.), assurez la liaïson entre les différentes collectivités locales et l'ensemble des intervenants impliqués dans le projet.

Profil : Vous bénéficiez d'un haut niveau de formation, scientifique et/ou culturel et d'une expérience internationale réussie de conduite de projet et de gestion d'un équipement réalisé relativement important. Bon manager, vous possédez également des capacités en matière de gestion administrative de travaux, d'assistance ou de participation à une équipe de maîtrise d'ouvrage. Vous dialoguez avec les experts des milieux

scientifiques et culturels.

Merci d'adresser votre dossier de candidature (lettre de motivation manuscrite de 3 pages maximum, CV, photo, dossier de référence et prétentions) au Conseil général du Rhône, Direction Générale, 29-31 cours de la Liberté, 69483 Lyon cedex 03 avant le 29 décembre 1998. Dossier disponible auprès de Chrystèle PEYRACHON tél : 04 72 61 78 36 ou Email : cpeyrachon@cg69.fr Consultation de notre site http ://www.cg69.fr



ALERT: THERE IS IMPORTANT RESEARCH HAPPENING OUTSIDE THE EAST AND WEST COASTS

The Department of Microbiology and Immunology at the University of Kentucky College of Medicine invites applications for **POSTDOCTORAL POSITIONS** in microbial pathogenesis and immunology and molecular biology. Positions are available in the following areas: *Legionella* pathogenesis (**Yousef Abu Kwaik**); iron/heme transport in Yersinia virulence (**Robert Perry**); regulation, selection, and immunosuppressive function of plague V antigen (**Susan Straley**); immunologic mechanisms of selection of B cells during development of the humoral immune response (**Charles Snow**); liver gene regulation (**Brett Spear**). Positions are available immediately and are funded through an institutional NCI training grant and grants to individual faculty. This is an opportunity to join a vibrant department with a strong training program and outstanding research support. Please send curriculum vitae, a sumisary of research experience, and the names of three references to the appropriate faculty member at the following address:

Department of Microbiology and Immunology University of Kentucky College of Medicine, MS409 Lexington, KY 40536-0298

E-mail: akaplan@pop.uky.edu

The University of Kentucky is an Equal Opportunity Employer

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Position available to study signal transduction mechanisms that underly the function of neurodegeneration genes in Alzheimer's disease. Projects focus on molecular mechanisms of neuronal apoptosis and the biological function of the presenilin genes. For reference see: *Nature* **395**:698, 1998; *JBC* **272**:14505, 1997; *Neuron* **16**:921, 1996; *Nature* **378**:776, 1995. Experience in molecular and cell biology is required. Send curriculum vitae, a brief description of research experience, and names of three references to: **Dr. Bruce Yankner, Children's Hospital**, **Enders 260**, 300 Longwood Avenue, Boston, MA **02115. FAX: 617-738-1542.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study CD8-ligand interaction. Potential ligands include CD1, TCR, and gp180. Approaches include site-directed mutagenesis, creation of high-avidity multimers, and functional studies either in animals or cell lines with implications for tolerance induction. Send curriculum vitae and names of three references to: Dr. Paula Kavathas, Ph.D., Department of Laboratory Medicine and Section of Immunobiology, Yale University, 333 Cedar Street, P.O. Box 208035, New Haven, CT 06520-8035.

POSTDOCTORAL POSITION available immediately to study molecular regulation and cellular function of SMAD signal transducers in tissue injury and repair. A Ph.D. degree with experience in intracellular signaling, and a strong background in molecular and cellular biology is required. Curriculum vitae should be sent to: Dr. Erwin P. Bottinger, Departments of Medicine and Molecular Genetics, Jack & Pearl Resnick Campus, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461. E-mail: bottinger@ accom.yu.edu. AECOM is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the regulation of calcium mobilization by protein kinases. The research involves the use of fluorescent calcium indicator dyes and the patch clamp technique (*PNAS* **95**:1613–1617, 1998). Applicants should preferably have experience in these areas. Send curriculum vitae and contact information for three referese to: **Dr.** Alan Fein, Department of Physiology, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-3505 USA. FAX: 860-679-1269; e-mail: afein@neuron.uchc.edu.

POSTDOCTORAL POSITION. A Postdoctoral position is available immediately to carry out purification and cloning of enzymes involved in the biosynthesis of nucleoside antibiotics in *Streptomyces*. Previous experience in enzyme purification is required; prior experience in molecular biology is preferred. Send résumé and the names of three references to: Dr. Ronald J. Party, Rice University, Department of Chemistry MS-60, 6100 Main Street, Houston, TX 77005. E-mail: party@ rice.edu.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

Several Postdoctoral positions in two areas of study are available for highly motivated/creative individuals. First, Postdoctoral Fellows are needed to study the role of human EGF receptor family members in breast cancer cell growth regulation and metastasis, with particular emphasis on growth factors and anti-receptor antibodies. The areas of current and planned research include linking signaling pathway(s) with phenotypic change(s), regulation of cell death/survival pathways, regulation/action of metalloproteinases and angiogenic factor(s), and the characterization of newly identified growth factor-inducible genes. Second, positions are available for research in the area of mammary gland biology and the development of transgenic models. Prior experience in signaling, gene regulation, metastasis, and animal models is desirable. Opportunities for career development with highly competitive salaries. For immediate consideration, send a curriculum vitae and contact information for three references to:

Rakesh Kumar, Ph.D. Professor of Medicine and Biology Cell Growth Regulation Laboratory University of Texas M. D. Anderson Cancer Center, Box 36 1515 Holcombe Boulevard Houston, TX 77030-4095

The University of Texas M. D. Anderson Cancer Center is an Equal Opportunity Employer and a smoke-free environment. Women and minority candidates are encouraged to apply.

SELENIUM BIOCHEMISTRY THRESSA STADTMAN, PH.D. ENTRY ID: PD-827

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

POSTDOCTORAL RESEARCHER ION CHANNEL REGULATION

Position available to study the control of NMDA receptor activity and intracellular calcium homeostasis in anoxia-tolerant neurons. Experience with patch-clamping and molecular biology required. Send applications to: Phil Bickler, M.D., Ph.D., University of California, San Francisco Anesthesia/Neuroscience Research Laboratory, 513 Parnassus, San Francisco, CA 94143-0542. Telephone: 415-476-1411; e-mail: phil_bickler@quickmail.ucsf.edu.

POSTDOCTORAL POSITION for Biochemist/ Chemist at Wellmann Laboratories of Photomedicine to work on targeted photodynamic therapy. Experience in protein modification or immunochemistry required. Should know standard techniques, e.g., electrophoresis, chromatography, blotting, Familiarity with photochemistry and/or cell culture desirable. Send curriculum vitae to: T. Hasan, Ph.D., Wellman Laboratories of Photomedicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114. FAX: 617-726-3192. MGH is an Equal Opportunity Employer; twomen, minorities, disabled, and veterans are encouraged to apply.

POSTDOCTORAL POSITION to study chemokines and chemokine receptors in the central nervous and cardiovascular systems (see: *Proc. Natl. Acad. Sci.* 95:10,896). A background in molecular biology and immunohistochemistry is desirable. Send curriculum vitae and the names of three references to: Jeffrey K. Harrison, Ph.D., Department of Pharmacology and Therapeutics, Box 100267, University of Florida, Gainesville, FL 32610-0267. E-mail: harrison@pharm.med. ufl.edu; FAX: 352-392-9696. The University of Florida is an Affinmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available for a project involving transgenic and knockout mouse models in vascular biology and atherogenesis. Candidate must have experience in advanced molecular biological techniques. *Must be U.S. citizen or permanent resident.* Send curriculum vitae and three references to: **Dr. Ira Tabas, Division of Molecular Medicine, Columbia University, 630 West 168th Street, New York, NY 10032. E-mail: iatl@columbia.edu.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITIONS NATURAL PEPTIDE ANTIBIOTICS

Two Postdoctoral positions are available to study antimicrobial peptides found in the cells and secretions of humans and animals. For one position, centering on peptide purification and structure-function analysis, prior experience with RP-HPLC is useful. For the other, which involves regulation of antimicrobial peptide synthesis and processing, a background in molecular biology is required. Antimicrobial peptides play an important role in innate host resistance and may provide new antibiotics for medical and veterinary use (*Trends Biotechnol.* 16:82–8, 1998). The peptides currently under study in our laboratory include human hCAP-18/LL-37 (*Antimicrob. Agents Chemother.* 42:2206–14, 1998), portegrins (*Infect. Immun.* 66:2486–93, 1998), secretory phospholipase A2 (*Infect. Immun.* 66:2791–7, 1998) and others. Please send letter of application, curriculum vitae, summary of research interests, and the names and telephone numbers of at least three references before December 15, 1998, to:

> Robert I. Lehrer, M.D. Department of Medicine UCLA Center for the Health Sciences Los Angeles, CA 90095-1690 Telephone: 310-825-5340 FAX: 310-206-8766 E-mail: rlehrer@ucla.edu

UCLA is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH 'ASSOCIATES sought to join multidisciplinary molecular and cellular neuroscience group in studies of native or recombinant nicotinic acetylcholine receptors. Investigations encompass molecular genetic, protein chemical, electrophysiological, inmunological, histological, and pharmacological approaches in a unique and dynamic institution. Send curriculum vitae, names and addresses of three references, and brief statement of research experience, interests, and career objectives to: R. J. Lukas, Ph.D., Division of Neurobiology, Barrow Neurological Institute, St. Joseph's Hospital and Medical Center, 350 West Thomas Road, Phoenix, AZ 85013. E-mail: rlukas@mha. chw.edu. St. Joseph's Hospital and Medical Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study development of vertebrate cardiovascular regulation. Innovative, NSF-funded laboratory employs a variety of embryo models to study the interplay of genes and environment during early development. Send description of research interests, curriculum vitae, and names and addresses of four references to: Dr. Warren Burggren, Department of Biological Sciences, University of North Texas, P.O. Box 305220, Denton, TX 76203-5220. FAX: 940-565-4517; e-mail: burggren@unt.edu; website: http://www.biol.unt. edu/~burggren/.

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCHER to study hematopoiesis: regulation of cytokine production, heparan sulfate proteoglycan structure and function, human hematopoietic stem cell culture, cycling, and apoptosis. U.S. citizens with a recent Ph.D. in biochemistry, cell biology, or related discipline. Annual salary \$27,500 to \$33,500, with benefits. Send curriculum vitae and references to: P. Gupta, M.D., Assistant Professor, Hematology/Oncology Section 111E, VA Medical Center, Minneapolis, MN 55417. FAX: 612-725-2149; e-mail: gupta013@gold.tc.umn.edu. VAMC is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available at the Holland Laboratory/American Red Cross to study polypeptide growth factor-inducible gene expression in fibroblasts and vascular cells. A Ph.D. degree with strong background in molecular and cellular biology is required. Send curriculum vitae, a brief description of research experience, and names of three references to: Dr. Jeffrey A. Winkles, Department of Vascular Biology, Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. Equal Opportunity Employer. Minorities/Females/Veterans/Disabled.

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



AND ASSOCIATE RESEARCH SCIENTIST

The Oklahoma Medical Research Foundation invites applications for two openings in the Protein Studies Program. OMRF is a private research institution located adjacent to the University of Oklahoma Health Sciences Center, Oklahoma City, OK. The Foundation has a stimulating research environment with emphasis in basic research in protein structural biology, cardiovascular biology, cell and molecular biology, immunobiology, cancer biology, aging, and mammalian genetics.

Faculty Position — The applicant is required to have a Ph.D. or equivalent, postdoctoral research experience, and a proven record of research productivity. The successful candidate will receive an excellent start-up package, including laboratory space and start-up funds designed to further career development. This position is at the level of Assistant/Associate Member. The successful candidate is expected to lead an independent research group in the area of protein structure, function, and genetics related to important biomedical areas, especially in AIDS, enzyme mechanism, and drug design, and regulation of physiological processes.

Associate Research Scientist — The applicant is required to have a Ph.D. in Biochemistry or related field with a strong commitment to research. The successful candidate will work in an exciting project on cancer gene therapy.

Applicants for either position should submit a curriculum vitae, a summary of research accomplishments and future plans, and the names of three or more references to: Dr. Jordan Tang, Head, Protein Studies Program, Oklahoma Medical Research Foundation, 825 N.E. 13th Street, Oklahoma City, OK 73104. Internet address: jordan-tang@omrf.ouhsc.edu. Applications received by January 15, 1999, will receive full consideration.

EEO/Affirmative Action Employer.

Assistant Professor College of Medicine at Urbana-Champaign

The Department of Pharmacology, University of Illinois College of Medicine at Urbana-Champaign and the School of Molecular and Cellular Biology invite applications for a full-time tenure-track Asssistant Professor position in the area of neuropharmacology. This position will become available August 1999. Appointment at this level requires a doctoral degree, postdoctoral experience, and evidence of outstanding research potential. The successful candidate will be expected to develop a vigorous independently funded research program. Neurobiology is one of the areas of focus of the School of Molecular and Cellular Biology, which contains more than 50 faculty who work at biological levels from the molecular to integrative, and there is a dynamic campus-wide Neuroscience Program. Medical school pharmacology will be the primary teaching responsibility of the appointee, and opportunities for undergraduate/graduate teaching exist. The University of Illinois at Urbana-Champaign offers a highly interactive, interdisciplinary research environment, exemplified by the Beckman Institute, and state-ofthe-art research support facilities.

Urbana-Champaign offers the residential advantages of a mediumsized city, excellent cultural opportunities, and easy access to Chicago and St. Louis. Information concerning the University can be found at http://www.uiuc.edu. Applicants should submit a curriculum vitae with a complete list of publications and a summary of research interests and future plans, as well as at least 3 letters of reference to:

> Pharmacology Search University of Illinois at Urbana-Champaign College of Medicine at Urbana-Champaign 506 S. Matthews St. Urbana, IL 61801

For fullest consideration, all materials should be received by January 21, 1999.

The University of Illinois is an AA/EOE.

GLOBAL OPPORTUNITIES

ADVERTISEMENT FOR DIRECTOR (DESIGNATE) ADVANCED CENTRE FOR TREATMENT RESEARCH AND EDUCATION IN CANCER (ACTREC)

The Tata Memorial Centre, Mumbai, an autonomous grant-in-aid Institute of the Department of Atomic Energy, Government of India, invites applications for the prestigious position of Director (Designate), ACTREC.

An exclusive new National Research facility at the "Advanced Centre for Treatment, Research & Education in Cancer (AVTREC)" in Owe Village, Navi Mumbai is being established by the Department of Atomic Energy and the Tata Memorial Centre for fundamental research and clinical research and is expected to be commissioned by late 1999.

Currently, the Cancer Research Institute (CRI) carries out extensive basic research on the complete spectrum of cancer with special attention in areas such as oncogenes, tumor suppressor genes, immunological responses, metastases, and carcinogenic effects of tobacco in human subjects. Molecular Epidemiology using techniques of molecular genetics to identify genes involved in susceptibility to cancers, and programs of gene therapy in Head and Neck tumors as also stem cell biology have been recently identified.

All the facilities and infrastructure presently at the Cancer Research Institute (CRI) in Parel will be transferred to ACTREC initially in the first phase at Navi Mumbai. The Director (Designate) will be expected to work full time with the present Director, Cancer Research Institute and the Director, Tata Memorial Centre to commission the entire campus at ACTREC and to coordinate all activities towards planning of new laboratories and clinics and future research programs.

The Cancer Research Laboratories (CRL) and Clinical Research Clinics (CRC) will be expected to jointly develop ACTREC into a Centre of excellence dedicated to research in Cancer. Fundamental research will initially be focused at the molecular level with research for development of new protocols, test advanced therapies such as stem cell transplantation and gene therapy at the cutting edge of technology. Clinical research will be developed in a mission mode and coordinated with a strong emphasis for clinical trials and related therapy at Tata Memorial Hospital.

The ACTREC will also develop a strong educational component as a deemed University to interact with other Centres to disseminate educational programs and train personnel for human resource development in the country.

Essential Qualifications & Experience:

Indian nationals with high academic qualifications, proven outstanding leadership qualities, and managerial experience for administrative responsibilities are invited to send in their curriculum vitae. The candidate should posses a Ph.D. degree and/or a recognized postgraduate medical degree with Ph.D. qualifications. A minimum of 15 years of experience in fundamental and/or clinical research is mandatory with an excellent record of publications in peer review journals. The candidate is expected to provide leadership to the Centre in a full-time non-practicing capacity to advance frontiers of basic and clinical cancer research into the next millennium.

Age Requisite:

Applicants should preferably be within 40-50 years of age, relaxable in cases of exceptional merit.

Pay Scale:

Attractive remuneration as per the recent pay commission recommendations for Scientific Officer 'G' Grade (Rs. 18400-500-22400) with residential accommodation, health care, and other benefits would be applicable as per the rules of the Centre.

Applications should be forwarded by mid-December 1998 to:

The Director Tata Memorial Centre Dr. Ernest Borges Marg Parel, Mumbai-400 012, INDIA Telephone: 91-22-4139318 / 4146750 Fax: 91-22-4168440 / 4146937 E-mail: tmhdir@tmc.ernst.in

DANA-FARBER CANCER INSTITUTE HARVARD MEDICAL SCHOOL

Positions are available in the laboratory of **Dr. Thomas** Look that focus on the molecular basis of leukemia. Projects include the identification of genes involved in conserved cell death specification pathways that are altered by the E2A-HLF chimeric proto-oncogene (*Nature* **382**:541–544, 1996; *MCB* **18**:6035–6043, 1998). Opportunities are also available to participate in a new project to apply genetic analysis in the zebrafish system to clarify developmental pathways in leukemogenesis.

POSTDOCTORAL POSITIONS Experience in molecular biology is required.

RESEARCH LAB SUPERVISOR

Seeking an experienced professional to manage and enhance scientific productivity of a research program focused on the molecular basis of leukemia. Responsibilities include training and supervising efforts of the support personnel, coordinating extramural collaborative scientific interactions, maintaining scientific interactions, maintory and purchasing. Advanced degree and excellent administrative and interpersonal skills are required. Minimum of five years of experience in molecular biology research and laboratory management are required.

Please send a curriculum vitae, a brief description of research experience, and the names of three references to:

Dr. Thomas Look, c/o Jill Rapp, Human Resources es Department, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115. FAX: 617-632-4421. We are an Equal Opportunity Employer.

POSTDOCTORAL POSITION available in the Molecular and Cellular Endocrinology Branch of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) at NIH. Our laboratory studies transcriptional regulation by thyroid hormone and steroid hormone receptors and molecular mechanisms of thyroid cancer. Strong background in molecular biology required. Experience with viral vectors, *in viro* transcription, or protein purification helpful. Applicants must have a Ph.D. and/or M.D. as well as zero to five years of postdoctoral experience. *Candidates must be U.S. citizens or permanent residents*. Please send curriculum vitae and three references to: Paul M. Yen, M.D., Molecular and Cellular Endocrinology Branch, NIDDK/NIH, Building 10, Room 8D12, 9000 Rockville Pike, Bethesda, MD 20892. Telephone: 301-594-6797; FAX: 301-402-4136; e-mail: pauly@bdg10.niddk.nih.gov.

POSTDOCTORAL POSITIONS available immediately to study the regulation of signal transduction by (1) atrial natriuretic peptide receptor or (2) glucocorticoid receptor by phosphorylation. Candidates should have a Ph.D. with a strong background in biochemistry, molecular biology, or cell biology. For more information, see website: www.usouthal.edu/pharmacology/phchinkers.html. Please send curriculum vitae with bibliography and the names, addresses, and telephone numbers of three references, to: Michael Chinkers, Ph.D., Department of Pharmacology, University of South Alabama, College of Medicine, MSB3130, Mobile, AL 36688-0002. E-mail: michaelc@jaguar1.usouthal. edu. Equal Opportunity Euployer.

NIH-funded **POSTDOCTORAL POSITIONS** are available to study cytokine signal transduction (*JBC* 272: 1032–7, 21334–40, 1997) and a new cytokine-inducible transcription factor with oncogenic potential (*PNAS* 95: 13555–60, 1998). Candidates with background in molecular biology and/or biochemistry should send their curriculum vitae plus names and addresses of three references to: Dr. Yu-Chung Yang, Indiana University School of Medicine, 1044 West Walnut Street, R4-272, Indianapolis, IN 46202. Telephone: 317-274-7512; FAX: 317-274-0396; e-mail: ycyang@iupui.edu.

POSTDOCTORAL POSITIONS MIT

Immediate openings to study chemical, biochemical, and molecular aspects of oxidative DNA damage. Prefer recent Ph.D. with background in DNA chemistry or biochemistry; experience with cell culture, immunoassay, molecular biology desirable. Send, FAX, or e-mail curriculum vitae, names of three references to: Prof. Peter Dedon, Division of Bioengineering and Environmental Health, 56-787, MIT, Cambridge, MA 02139. FAX: 617-258-0225; e-mail: pcdedon@mit.edu.



YALE UNIVERSITY SCHOOL OF MEDICINE

POSTDOCTORAL POSITIONS available immediately to study mechanisms of inflammation in asthma (A. Ray) and oxidant-induced lung injury (P. Ray) (J. Biol. Chem. 272:21597, 1997; J. Clin. Invest. 100:2501, 1997; J. Immunol. 161:3817, 1998; J. Exp. Med. 188:1739, 1998). Research projects include (1) molecular mechanisms of gene expression and signal transduction pathways in T cells and (2) characterization of genes involved in hyperoxic lung injury and repair. Studies will employ both in vitro biochemical and molecular methods and inducible transgenic/gene deficient mice in conjunction with animal models of disease. Experience in molecular biology is essential. Some familiarity with transgenic animal studies and protein biochemistry is desirable. Please send a brief cover letter, curriculum vitae, and the names and telephone numbers of two to three references to: Dr. Prabir Ray or Dr. Anuradha Ray, Associate Professor, Department of Medicine, 333 Cedar Street, LCI 105, New Haven, CT 06520. Equal Opportunity Employer.

POSTDOCTORAL SCIENTIST position available immediately in the area of vertebrate genomics. Successful applicant will have an opportunity to participate in either (or both) of two ongoing research projects: (1) detection and mapping of genes that influence quantitative variation in serum levels of thyroid hormones in humans; (2) construction of genomic resources (framework linkage map and physical map) for the laboratory opossum (Monodelphis domestica). Applicants must have Ph.D. in genetics, cell biology, or closely related discipline, and laboratory expertise in modern molecular biology techniques. Additional information available from: Dr. Paul B. Samollow, e-mail: pbs@darwin.sfbr.org. Send curriculum vitae and names of three references to: Director of Human Resources (849), Southwest Foundation for Biomedical Research, P.O. Box 760549, San Antonio, TX 78245-0549. Website: http://www.sfbr. org. Equal Opportunity Employer.

FT-EPR AND MUSCLE BIOPHYSICS

A POSTDOCTORAL POSITION is available immediately for a person interested in developing two-dimensional time-resolved EPR methods and high-field EPR as applied to muscle biochemistry. The project is a collaboration between **Prof. Jack Freed** of Cornell University (Ithaca, New York) and **Prof. Piotr Fajer** of the National High Magnetic Field Laboratory (Tallahassee, Florida). The initial appointment will be for two years. Candidates should have a strong background in EPR spectroscopy with an interest in protein biochemistry and biophysics. Please send a résumé and names of three references to: **P. Fajer, National High Magnetic Field Laboratory, 1800 East Paul Dirac Drive, Tallahassee, FL 32310 USA. E-mail: fajer@magnet.fsu.edu by December 1, 1998.**

POSTDOCTORAL FELLOW

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

POSTDOCTORAL POSITION available to study hindbrain segmentation and serotonergic neuron development using biochemical and molecular genetic approaches. Excellent transgenic and knockout facilities at Mt. Sinai help to expedite these studies. In addition, we are using streamlined assays to identify novel mouse mutations (generated by ENU mutagenesis) that affect neural development. Please send curriculum vitae and the names of three references including e-mail addresses to: Dr. Sabine Cordes, Samuel Lunenfeld Research Institute, Room 865, Mt. Sinai Hospital, 600 Universit-Avenue, Toronto, Ontario M5G 1X5 Canada.

POSITIONS OPEN

POSTDOCTORAL POSITIONS LUNG CELL PHYSIOLOGY AND MOLECULAR BIOLOGY University of Minnesota School of Medicine

Three positions are available immediately at the University of Minnesota, in our NIH Specialized Center of Research. The first position is to study ion transport in lung epithelia using advanced electrophysiologic and molecular techniques, examining the effects of hormones and oxidants. This individual will work jointly in the Departments of Medicine and Physiology, under the immediate direction of Scott O'Grady, Ph.D. and David Ingbar, M.D. The second position is to develop transgenic mice with modified expression of transport proteins and will involve working jointly in the Department of Medicine with Christine Wendt, M.D., and the Institute of Human Genetics. The third position will study the role of extracellular matrix in the regulation of fibroblast viability, using state-of-the-art molecular techniques in vitro and in transgenic mice, under the direction of Craig Henke, M.D., in the Department of Medicine. Applicants must be Ph.D. or M.D. citizens or permanent residents of the United States who are eligible for NIH Postdoctoral Training Grant Support. Please send curriculum vitae and three references to: Peter Bitterman, M.D., Pulmonary, Allergy, and Critical Care Medicine, University of Minnesota, Box 276 F-UMC, 420 Delaware Street S.E., Minneapolis, MN 55455. E-mail: bitte001@tc.umn.edu.

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UNIVERSITY OF NEW MEXICO SCHOOL OF MEDICINE

POSTDOCTORAL POSITIONS available with an interdisciplinary collaborative research group investigating 7TMR activation, processing dynamics, and peptide biology in the laboratories of Dr. Larry Sklar (see: Nat. Biotechnol. 16:633), Dr. Eric Prossnitz (see: JBC 272: 15213, 29326), and Dr. Larry Kvols. Applicants must have completed Ph.D., M.D., or equivalent. Expertise in receptor biochemistry, molecular biology, flow cytometry, kinetics, or radiation/cancer biology is desirvble. Send curriculum vitae and a statement of research interests to: Ms. Mary Archuleta, Cancer Center, 2325 Camino de Salud, University of New Mexico Health Science Center, Albuquerque, NM 87131. UNM is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION is available for study of the mechanism of retroviral DNA integration. A qualified candidate, preferably with a background in chemistry, will have a choice of interesting and feasible projects that focus on structure-function studies with purified viral integrase protein, or on analysis of the roles of specific host cell proteins in the integration reaction. Please send curriculum vitae and have at least two letters of recommendation mailed to: Dr. A. M. Skalka, c/o Human Resources Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. A summary of our research program and information about Fox Chase can be found at the Fox Chase website: http:// www.fccc.edu. Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP available immediately in the Department of Biomedical Sciences working in the area of structure-activity relationships of peptides. Experience in mass spectrometry (preferably electrospray) is required. The post is for two years with the possibility of renewal. Send inquiries to: Dr. J. Michael Conlon, Biomedical Sciences Department, Creighton University, 2500 California Plaza, Omaha. NE 68178. E-mail: jmconlon@creighton.edu.

ANNOUNCEMENT

Providing communication and information to build a more diverse generation of scientists in the 21st century. Register online and join over 1,500 minority scientists and students in the database ready to make a difference.

Located at the Center for Study of Gene Structure and Function, Hunter College, City University of New York, website: http://sonhouse.hunter.cuny.edu/ genecenter. Offering quality graduate biomedical research opportunities and summer undergraduate research internships in New York City.

Just/Garcia/Hill Science website: http://hyper. hunter.cuny.edu/jghweb; Telephone: 212-650-3957; FAX: 212-772-4109.

MEETING

5TH INTERNATIONAL TOXOPLASMA CONFERENCE May 1–6, 1999

Marshall, California USA FAX: 773-834-3577 Website: toxoplasma.uchicago.edu

COURSES & TRAINING

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

CAREER IN OPTOMETRY, OPTOMETRIC RESEARCH, OR TEACHING

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

APPLIED MOLECULAR BIOLOGY

The University of Maryland Baltimore County is accepting applications for its unique 12-month M.S. Program in Applied Molecular Biology. The program includes hands-on intensive laboratory courses each semester, research internship either on/off campus, and four companion lecture courses. This comprehensive program prepares students for research positions in industry or academia. Some Fellowship assistance is available. Information/applications: University of Maryland Baltimore County, Department of Biology, Baltimore, MD 21250. Telephone: 410-455-3669; website: http://www.umbc.edu/biosci.

INTERESTED IN CLINICAL OR POSTDOCTORAL RESEARCH TRAINING?

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http://www.training.nih.gov The NIH is an Equal Opportunity Employer

GLOBAL OPPORTUNITIES

RESEARCH FACULTY POSITIONS INSTITUTE OF ATOMIC AND MOLECULAR SCIENCES Academia Sinica, Taipei, Taiwan, ROC

The Institute of Atomic and Molecular Sciences, Academia Sinica is seeking candidates for several tenure-track research faculty positions at the ASSISTANT RE-SEARCH FELLOW, ASSOCIATE RESEARCH FELLOW, and RESEARCH FELLOW levels. Qualified candidates (with a Ph.D. degree) in one of the following areas are encouraged to apply: atomic physics, condensed matter and biophysical sciences, surface sciences, and ultrafast and high-field optics. Applicants should submit a letter of application, a curriculum vitae including a list of publications, and a research plan, to: Professor Sheng-Hsien Lin, Director, Institute of Atomic and Molecular Sciences, Academia Sinica, P.O. Box 23-166, Taipei 106 Taiwan, ROC. Applicants should also arrange to have three letters of references sent to the above address. Review of applicants will begin on February 1, 1999. Additional information about IAMS is available on its website: http://www.iams.

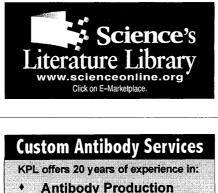
FACULTY POSITIONS OPENING IN TAIWAN

Up to three **TENURE-TRACK** faculty positions are opening in the area of environmental biological sciences, beginning August 1, 1999. The successful candidate should be able to teach the introductory sequences for undergraduates, plant molecular biology, and/or other topics of candidate's expertise for graduate courses. Statement of teaching and research interest, curriculum vitae, three letters of reference, and recent publications should be sent directly to: **Prof. Edward Lee, Faculty Search Committee, Institute of Life Science, National Central University, Chung-Li 32054 Taiwan.** Review of applications will begin by November 15, 1998, and will continue until the positions are filled.

THE UNIVERSITY OF MELBOURNE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

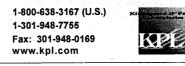
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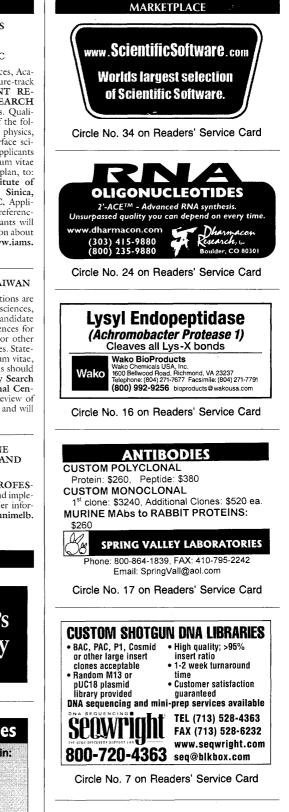


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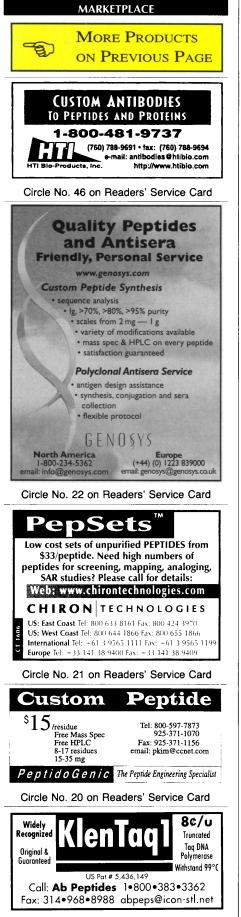
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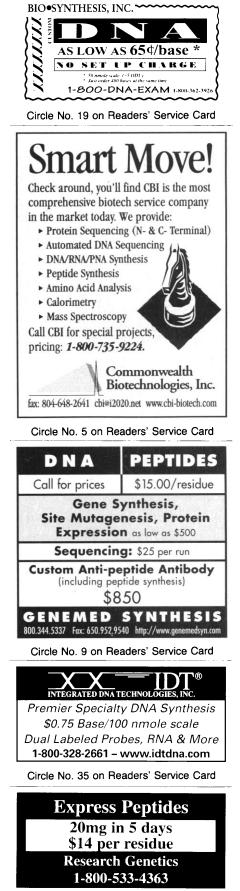
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