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Gene-Expression Systems

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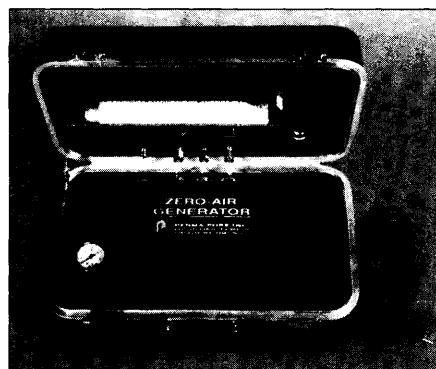
systems: Äkta explorer is designed for the fast development of purification methods for proteins, peptides, and nucleic acids; Äkta purifier is for purifying and characterizing peptides and nucleic acids; and Äkta FPLC is for fully automated flexible purification of proteins at laboratory scale.

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dryer technology to remove water, providing a continuous, maintenance-free dry air supply. An ultraviolet light source serves as a sterilizer and oxidizer to assist the removal of organics and nitrogen oxides.

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The Multi-96 Plasmid and Multi-96 PCR (polymerase chain reaction) Kits are two new NucleoSpin Kits for high-throughput purification of nucleic acids in 96-well plates. These kits allow purification of up to 96 samples simultaneously on a single plate, thereby reducing

CLONTECH

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LITERATURE

P/ACE Setter newsletter, named after the P/ACE Series capillary electrophoresis (CE) systems, is a quarterly publication that features articles on cutting edge CE applications, tips on ideal operating conditions, updated literature highlights, details on upcoming scientific meetings, and information on new product development. For example, a recent issue includes a description of a CE-based immunoassay that detects and quantifies the presence of the abnormal prion protein associated with transmissible spongiform encephalopathies such as "mad cow" disease.

Take a Close Look at the ELAN 6100 Series of ICP-MS Systems is a CD-ROM electronic guide that provides an in-depth view of the workings and benefits of a modern inductively coupled plasma-mass spectrometry (ICP-MS) system. It also explains the basics of ICP-MS technologies and explains how users can increase the efficiency and cost-effectiveness of their laboratories through the addition of such a system. The CD-ROM includes more than 40 ICP-MS application articles from *Atomic Spectroscopy* journal.

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



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POSITIONS OPEN

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The University of Minnesota, Department of Pediatrics, is seeking a Ph.D. for a full-time position at the rank of **ASSISTANT PROFESSOR** (annually renewable). Technical skill and experience are preferred in primary cell isolation and tissue culture, especially hepatocytes, Kupffer cells, and bile duct cells from mice, animal surgery, and immunological bioassays. Experience is also necessary in handling human tissue and blood specimens. The successful candidate must be able to work independently and be able to set up experiments and work out new protocols. Isolating pathologic human hepatocytes will be one project.

Essential requirements include a Ph.D., preferably in immunology. Must have ability to write scientific articles and research grant proposals. Last date for receipt of application is September 8, 2000. Start date: as soon as possible thereafter. Submit application and curriculum vitae to:

Harvey L. Sharp, M.D.
Division of Pediatric Gastroenterology
and Nutrition
Box 185 Mayo
420 Delaware Street S.E.
Minneapolis, MN 55455

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Chair search: Department of Anatomy and Medical Education in the School of Medical Science, College of Medicine and Public Health, The Ohio State University invites nominations and applications for the position of **DEPARTMENT CHAIR**. Candidates should hold the Ph.D., M.D., or M.D./Ph.D. degree; be committed to a balanced, vigorous teaching and research program; have demonstrated excellence in research and scholarly activities; and possess proven leadership qualities. The ideal candidate will lead the Department in establishing collaborations with clinical departments and take advantage of opportunities for interdisciplinary research offered by The Ohio State University Heart and Lung Institute, the Department of Radiology's Center for Advanced Biomedical Imaging, and the College of Engineering's Center for Biomedical Engineering. The ideal candidate will also lead Department efforts in education and the development of instructional technology. Nominations and applications should include curriculum vitae with bibliography and the names of at least three references and sent to: **E. Christopher Ellison, M.D., Anatomy and Medical Education Search Committee Chair, 327 Means Hall, 1654 Upham Drive, Columbus, OH 43210**. Review of candidates will begin September 1, 2000, and continue until the position is filled. *The Ohio State University is an Equal Opportunity/Affirmative Action Employer.*

MOUSE TRANSGENIC FACILITY UNIVERSITY OF PENNSYLVANIA CARDIOVASCULAR DIVISION

Positions are available immediately for a **DIRECTOR and RESEARCH SPECIALIST** to staff a new transgenic facility within the Cardiovascular Division at the University of Pennsylvania. Expertise with pronuclear and blastocyst injections is required. Applicants at all levels from technician to junior faculty will be considered. Generous reimbursement and benefit packages are available commensurate with experience. Successful applicants will work closely with five to six NIH-funded faculty members to design and carry out experiments within brand-new research and animal care facilities. Necessary equipment and technical and administrative assistance is available. Send curriculum vitae and names of three references to: **Mark Kahn, 952 BRB II, 421 Curie Boulevard, Philadelphia, PA 19104**. E-mail: markkahn@mail.med.upenn.edu; FAX: 215-573-2094.

POSITIONS OPEN

HEAD, DEPARTMENT OF BIOLOGICAL SCIENCES SCHOOL OF SCIENCE Purdue University

Applications are invited for the position of **DEPARTMENT HEAD** from dynamic individuals with a creative vision for biology. The Department has 58 full-time faculty and educational programs leading to B.S., M.S., and Ph.D. degrees. Active research programs supported by national funding organizations are directed by faculty in the areas of biophysics, biochemistry, and structural biology; cell, molecular, and developmental biology; ecology, evolution and population biology; microbiology and molecular genetics; and neurobiology and physiology. In addition, the Department has a strong commitment to teaching and to biology education represented by faculty in the biology curriculum and instruction area. Department faculty participate in NIH- and NSF-funded inter-departmental training programs with Biochemistry and Molecular Biology, Genetics, Biophysics, Plant Biology, and Neurobiology. Campus resources include an NCI-designated Cancer Center. The administration is fully committed to the continued development of this internationally recognized Department. The successful candidate will have an outstanding record of scholarly achievement with demonstrated leadership qualities, an extramurally funded research program, and a commitment to teaching excellence. Strong interpersonal, communication, decision-making, and administrative skills are required. Candidates must have a Ph.D. or equivalent degree and be eligible for tenure at the rank of **PROFESSOR**. Qualified persons should submit a letter of application; a statement of research, teaching and administrative philosophy; and complete curriculum vitae with addresses and telephone numbers of five references. Applications will be reviewed beginning August 31, 2000, and will continue until the position is filled. Send applications, nominations, and inquiries to: **Dr. Joann J. Otto, Chair, Head Search Committee, Department of Biological Sciences, Purdue University, West Lafayette, IN 47907-1392**. Telephone: 765-494-4410; FAX: 765-496-1495; website: <http://www.bio.purdue.edu>.

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DIVISION CHIEF, ECOSYSTEMS PROCESSES DIVISION NORTHEAST FISHERIES SCIENCE CENTER National Marine Fisheries Service National Oceanic and Atmospheric Administration Department of Commerce Highlands, New Jersey

The National Marine Fisheries Service seeks a Division Chief to direct an interdisciplinary research program focused on the environmental and anthropogenic factors affecting living marine resources in U.S. coastal waters, with particular interest in issues relating to fish habitat requirements. From the James J. Howard Marine Sciences Laboratory on Sandy Hook, New Jersey, the Chief leads a staff of 55 at three laboratories in coordinated laboratory and field studies involving fishery ecology, oceanography, and marine environmental chemistry. The James J. Howard Laboratory has specialized facilities for research in fishery ecology and marine environmental chemistry. The Division also operates a coastal research vessel. The Chief must have a demonstrated ability to build and direct interdisciplinary research programs, to develop programs to attract academic and other collaborators, and to manage a large scientific organization. Ph.D. preferred. *Must be a U.S. citizen.* The salary range is \$86,998 to \$113,095. A copy of the Vacancy Announcement (E/NMF/00136.SDT) is available from the Office of Personnel Management's website: www.usajobs.opm.gov. For information, contact: **David Mountain; Telephone: 508-495-2271; e-mail: david.mountain@noaa.gov**. The closing date for applications is July 28, 2000. *The Department of Commerce is an Equal Employment Opportunity Employer.*

AIDS research

NEEDED: A SPECTRUM OF SKILLS

Groups that undertake AIDS research need life scientists with a wide range of academic qualifications in several disciplines. They can contribute to an all-out effort to end a scourge on humankind. **by Peter Gwynne**

"The potential enormity of the HIV/AIDS pandemic is profound," states a recent document published by the Office of AIDS Research of the National Institutes of Health. "AIDS has already killed more than 16 million people, surpassing tuberculosis and malaria as the leading infectious causes of death worldwide."

Other figures are equally disturbing. For example, 17,000 individuals, most of them young, are infected daily; 90 percent don't even know that they have been infected. And while the number of new cases of AIDS has plateaued in the United States and other nations of the developed world, the disease continues unchecked in developing nations in sub-Saharan Africa and Asia. A particularly distressing by-product of the lethal effects of this virus is the creation of millions of orphaned children.

Research has already helped to create drugs that can control the HIV virus that causes AIDS, although none as yet can eradicate it. Those drugs have found significant use in the Western world. However, their expense precludes their use in parts of the globe most affected by the scourge.

The design of more accessible drugs is one of several hot areas in AIDS research. Research teams are also venturing beyond antiretrovirals to examine immune-based therapies. The ultimate goal remains a vaccine against the disease. Significant research also is under way to develop drugs that can combat resistant strains of HIV and to prevent or control the wasting disease associated with the condition.

Members of AIDS research teams have a wide variety of skills and levels of training. Life scientists with Bachelor's degrees often work closely with individuals

who have completed postdoctoral fellowships. And the research is open to specialists in fields as diverse as virology and information technology.

AIDS researchers have the ironic goal of becoming so successful that they put themselves out of business by conquering AIDS in the same way that researchers defeated such diseases as polio and smallpox in decades past. Here, representatives from one academic institute and two companies involved in AIDS research outline what it takes to work effectively in the field.

SAN FRANCISCO, California:

The Gladstone Institute of Virology and Immunology conducts a full spectrum of research on AIDS.

These studies range from very basic investigations of how the component parts of the virus work to patient-based experiments exploring the interplay of HIV with the immune system. In addition, says Institute director Warner C. Greene, "We and several other institutions worldwide are working hard on an effective and safe vaccine."

Founded in 1992 and affiliated with the University of California, San Francisco (UCSF), the Institute has about 90 members distributed among five investigators' laboratories and two core laboratories. Each investigator holds a faculty appointment at UCSF. In recent months, Institute scientists have made significant research findings. They include understanding how HIV kills immune cells with antiviral activity while at the same time protecting the virally infected host T cell; how HIV, unlike



Warner C. Greene



Growing Amazement

Cereon Genomics' mission is to apply genomics technology to transform agriculture ... making plants hardier, naturally disease and pest-resistant, able to grow in some of the most inhospitable conditions. All to improve the quality and quantity of the world's food supply.

In the past two years, we've taken major steps towards achieving that mission by:

- Creating a world class facility
- Highly advanced Genomics Research Center
- Acquiring the latest state-of-the-art equipment
- Identifying key projects in genomics, bioinformatics, and robotics
- Bringing together a team of exceptional professionals at all levels

It is with growing amazement that we realize what we have accomplished ... and what is still left to do. That's why we seek more innovators with a focused sense of urgency and a healthy sense of wonder to join us, keep our impressive momentum going, and make the future of genomics technology happen!



STATISTICAL GENETICIST - QTL

Seeking a statistician with a Ph.D. in Statistics or Biostatistics, and a solid grounding in statistical theory, and to apply these methods to problems in genetics. At least 2 years' post-Ph.D. experience and expertise in QTL analysis are required. Familiarity with Bayesian methods, S-PLUS and C/C++, strong oral and written communication skills are a plus. **Job Code: 7400-13S**

AUTOMATION ENGINEER - HIGH THROUGHPUT PROCESSING

Candidates should have a BS or MS with 3-5 years' experience with robotics and automation in a lab setting, preferably Genomics related. Familiarity with Tecans a plus. Demonstrated programming abilities in VB, Excel, Access, FACTS, and/or familiarity with Labvantage LIMS systems. Interpersonal skills and the ability to train people and manage multiple projects required. **Job Code: 7300-03S**

PROGRAM LEADER, TRANSCRIPTION/ GENE EXPRESSION PROFILING - TxP

Lead a transcription profiling core production team capable of delivering large quantities of high quality data. This leader will communicate across the enterprise to ensure appropriate knowledge and understanding of Cereon capabilities, will manage prioritization of projects and workflow, and will assist research and discovery groups in the design of transcription profiling experiments. The TxP group will be responsible for array element production, array printing, probe production, hybridization, data collection and primary data analysis, and will develop stringent QA/QC processes to enable the creation of robust reference databases of gene expression patterns. This leader will also be a primary scientific contact for and contributor to transcription profiling R&D and new technology development and implementation. This position requires 8+ years' experience in management of a high throughput genomics lab, process engineering background desirable, and a Ph.D., Engineering degree, or equivalent experience. **Job Code: 7200-17S**

COMPUTATIONAL BIOLOGIST - BIOINFORMATICS

Applicants should have a Master's degree or Ph.D. in Biology or related field, and a proven ability in analyzing large volumes of biological data using computational approaches. Programming (Perl, C, Java) and database (relational, SQL queries) experience is essential. The successful candidate will have a desire to explore biology using a multifaceted bioinformatic approach, along with close interactions with bench scientists. Good organization and communication skills, creativity, initiative and desire to work in a multidisciplinary team environment are a plus. **Job Code: 7100-29S**

SOFTWARE DEVELOPER - BIOINFORMATICS

We are building a leading edge platform using state-of-the-art technologies including distributed components, generic workflows, Oracle, Java, Web content delivery, and CORBA. The components range from user interfaces to high-end databases to algorithms for improving automated analysis of a wide variety of genomics data. Must have Master's degree or equivalent in Computer Science; minimum of 1 year Java experience; minimum of 3 years' software development experience; experience in developing distributed systems (EJB, CORBA, etc.) and UNIX; experience in databases (Oracle, Sybase, SQLserver) Perl, NT, C/C++; experience in biology/bioinformatics a plus. **Job Code: 7100-30S**

Please send your resume, indicating Job Code, to:
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most retroviruses, can replicate in nondividing cell hosts like macrophages; how HIV infection can lead not only to accelerated T cell destruction but also to diminished T cell production by the thymus; how and to what degree the immune system of HIV-infected patients can be repaired following highly active antiviral therapy; and documentation of the transmission of a multidrug-resistant variant of HIV.

The Institute recruits scientists at four different levels. "Investigators who supervise individual laboratories are almost always M.D.s, Ph.D.s or M.D./Ph.D.s who have at least completed postdoctoral training and have assembled records of significant scientific achievement," says Greene. "We identify this small, select group of individuals through highly competitive national/international Gladstone/UCSF searches." Most of the bench scientists working in the Institute are completing postdoctoral fellowships. In some of the laboratories, they are joined by graduate students working on their Ph.D.s as part of a UCSF graduate program. Meanwhile almost all the research associates who work with postdoctoral fellows possess Bachelor's degrees in life science subjects. Many have Master's qualifications as well.

Extensive experience isn't always necessary to obtain one of the research associate positions. "I often like to hire individuals who are thinking about going to graduate school or medical school and give them an opportunity to find out what science in an academic lab is like," says Greene. "We will also occasionally offer summer internships to highly motivated graduate students."

When evaluating potential recruits, Greene says that he looks for enthusiasm and commitment. "While the hours are often long," he notes, "it is hard to describe the personal satisfaction that comes with discovering something fundamentally new. This sense of discovery and the fact that it might one day improve the human condition is what makes science so exciting and rewarding."



Steve Worland

LA JOLLA, California: Agouron Pharmaceuticals, Inc., a Warner-Lambert company, uses an engineering approach to design synthetic drugs based on the molecular structures of target proteins that play key roles in human disease. Its Viracept protease inhibitor, which prevents reproduction of the HIV virus, is already on the market. Agouron researchers are now working on other HIV/AIDS inhibitors. They include AG 1549, a non-nucleoside reverse transcriptase inhibitor discovered by Shionogi and Co., Ltd. This has halted replication of resistant HIV strains in *in vitro* tests.

"We continually have openings in research," says Steve Worland, Agouron's vice president and head of antiviral research. However, only life scientists with backgrounds in antiviral research join the company for the specific purpose of working on AIDS. "We hire scientists in almost all other disciplines for general drug discovery," Worland explains. "They may come into and go out of AIDS research."

The company's AIDS research group involves scientists in several disciplines with a broad range of training. "We have a spectrum of scientists with Bachelor's, Master's, and Ph.D. degrees, as well

as scientists with industrial experience," says Worland. "They have backgrounds in traditional and computational chemistry, molecular biology, the physical sciences, crystallography, and virology."

What makes a good candidate for AIDS research? "It takes a desire and ability to work in a team," says Worland. "Drugs are always discovered by large teams — never any more by an individual. You have to enjoy working in a team effort with a common goal. So you need to be highly communicative, articulate, and open to other people's ideas. You also need a sense of satisfaction that comes from meeting objectives."

Worland has this advice for would-be AIDS researchers: "Get the most solid basic training you can. Get experience in a lab — preferably an AIDS lab if you want to get involved in virology — to decide if you have the passion for that work and for completing an experiment successfully. And find someone to mentor you who has enough time to work with you and who can help you in the industry."

NORWELL, Massachusetts: "Our work is entirely concerned with the metabolic complications of AIDS," says Joseph Gertner, medical director for growth and metabolism at Serono, Inc., a part of the Geneva, Switzerland-based Serono Group. "We've been using growth hormone as a treatment for AIDS wasting syndrome, which involves the loss of body mass and tissue." The syndrome affects between 15 percent and 25 percent of individuals with AIDS in the United States and is a leading cause of death among those patients.

Serono's researchers are also investigating the use of growth hormone to combat lipodystrophy, a condition associated with highly active retroviral treatments. Lipodystrophy reduces subcutaneous fat but greatly increases the quantity of deep fat that can impact internal organs. It may also lead to severe side effects, such as diabetes, high levels of lipids, and, potentially, heart disease. "Growth hormone is known to reduce body fat very sharply," says Gertner. "In our preliminary studies we've seen a very significant reduction in the deep fat."

To carry out those studies, Gertner continues, "We need physicians with experience in AIDS research and treatment. We also want people with nutritional backgrounds and research nurses from academic institutions. They are all participants in our research teams. So are statisticians and specialists in information technology."

At present, the company wants to recruit about five scientists worldwide for its research and clinical trial work on AIDS therapy. "One of the things I look for at a high level is good writing ability. That means putting thoughts together coherently to produce proposals and reports," Gertner says. "I also look for the ability to finish a job."

Gertner has two pieces of advice for life scientists considering work in AIDS research. "It would really help to know something about the people who have this disease," he suggests. "Go to an AIDS clinic or support group once or twice and get to know about the problems faced by people with AIDS. And, as is the case for any young scientist in a new career path, you should get a good mentor." III

For further valuable career features, go to sciencecareers.org, then click on **Advice and Perspectives.**

Defining Gene Function for Drug Discovery

Lexicon Genetics is building a Pharmaceutical Biology division that is pioneering functional genomics analysis of knockout mice for drug discovery. Through significant improvements in non-invasive measurements of mouse development and physiology, the science of mouse genetics is poised to enter a new era of sophistication and descriptive power for drug discovery. Lexicon Genetics has brought mammalian functional genomics to an unprecedented scale and depth.

We are presently seeking three Director-level candidates to set up and manage three core biology groups, which will be charged with the identification and implementation of Pharmaceutical Target projects arising from our functional genomics analysis.

Opportunities exist in the core biology areas of Immunology/Hematology, Oncology and Neurology. Successful candidates will have at least five years post-doctoral experience in one of these areas with a proven track record of scientific success and managerial skills, preferably in a drug discovery context. These positions represent outstanding opportunities for exceptional scientists to participate in shaping the future of health care and drug discovery.

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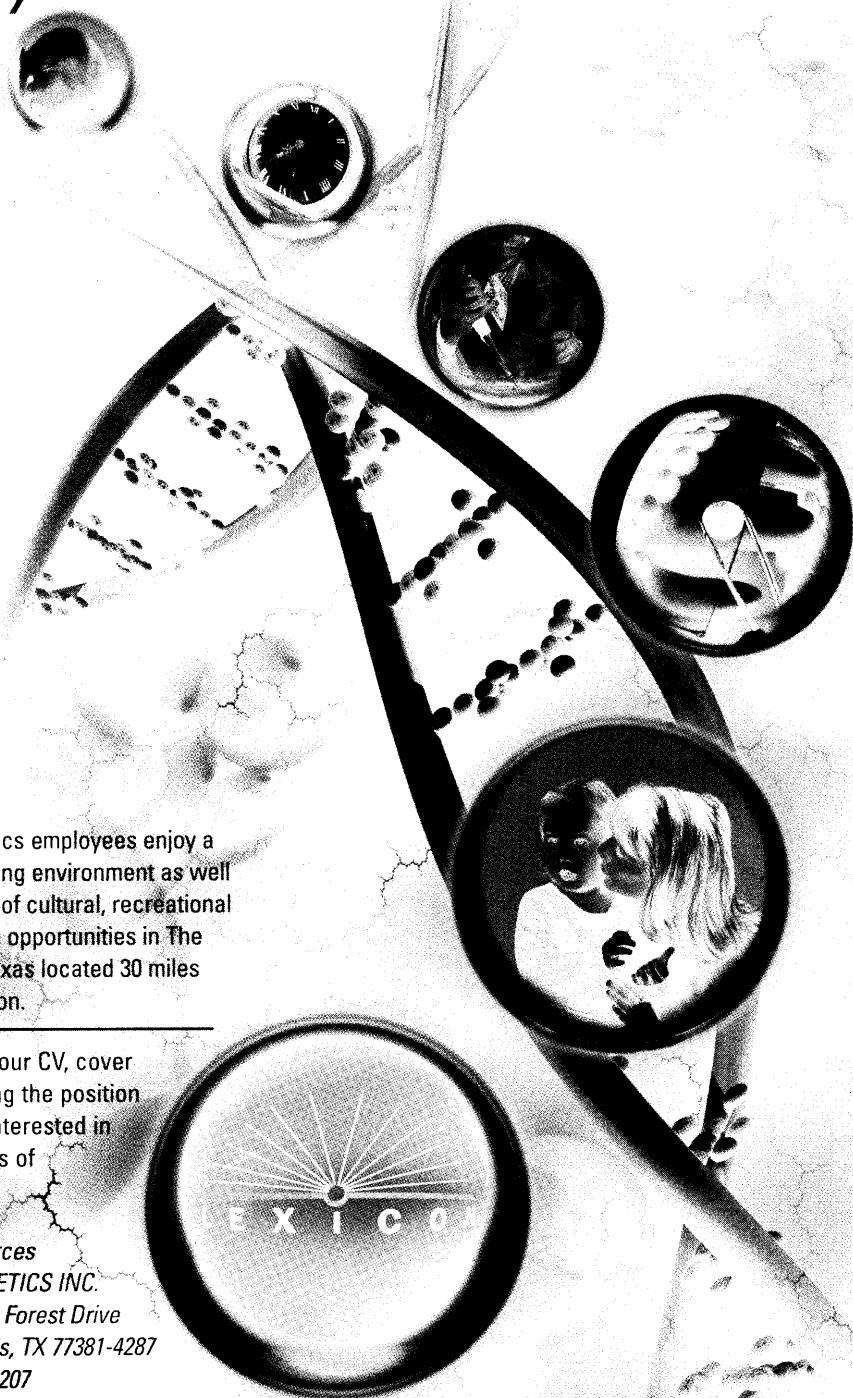
Scientist candidates must have at least two years of post-doctoral experience in a molecular biology lab and Research Associates must have a bachelor's degree in a science field and one year of experience in a research lab.

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EOE





**US Environmental Protection Agency
Office of Research and Development
National Health and Environmental Effects Research Laboratory**

EPA is seeking four highly qualified scientific managers to provide executive leadership for research divisions located in Narragansett, RI, Corvallis, OR, Chapel Hill, NC, and Research Triangle Park, NC. These divisions are within the Office of Research and Development's National Health and Environmental Effects Research Laboratory. The research conducted in these divisions contributes to developing the scientific foundation to support EPA's mission with emphasis on reducing uncertainty in risk assessment. Successful candidates for these positions will plan, develop, organize, direct, and implement the multimillion dollar research programs described below:

**Director, Atlantic Ecology Division, Narragansett, RI
Announcement #EPA-00-SES-ORD-6182**

This Division's research focuses on marine, coastal, and estuarine ecology. Investigators develop and evaluate theory, methods, and data on coastal waters and watersheds of the Atlantic.

Areas of specialization include:

- modeling the effects of multiple stressors on coastal ecosystems;
- developing methods for assessing ecological effects associated with contaminated marine sediments;
- conducting geographic based ecological assessments for the Atlantic coast.

The Division has a \$9.5 million budget and a staff of 82 EPA employees and 36 contractors, who primarily provide computer and facility support.

**Director, Western Ecology Division, Corvallis OR
Announcement #EPA-00-SES-ORD-6183**

This Division is responsible for the management of a research program on terrestrial and watershed ecology, and on multimedia ecological effects assessment for pollutants and other environmentally harmful factors.

This research includes:

- effects from substances transported by air;
- assessment and cleanup methods for contaminated aquatic and terrestrial environments;
- terrestrial effects from toxic chemicals, pesticides, and novel biological organisms.

The Division has a \$9 million budget and a staff of 84 EPA employees (15 of whom are located in Newport, OR), and a large non-EPA onsite workforce, including 154 contractors who provide scientific and technical support and expertise as well as computer and facility support.

**Director, Human Studies Division, Chapel Hill, NC
Announcement #EPA-00-SES-ORD-6184**

This Division is housed on the campus of the University of North Carolina, Chapel Hill, NC. Through the conduct of epidemiologic and controlled human exposure studies, 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.

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.

The Division has a \$12.1 million budget and a staff of 63 EPA employees and 13 non-federal postdoctoral fellows.

**Director, Experimental Toxicology Division, Research Triangle Park, NC
Announcement #EPA-00-SES-ORD-6185**

This Division conducts a multidisciplinary research and development program in the broad area of experimental toxicology to predict potential 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 the pulmonary, immune, hepatic, renal and cardiovascular systems;
- conduct of mechanistic research for the development of pharmacokinetic and biologically based dose response models;
- development of computational models of toxicological, dosimetric and pharmacokinetic processes.

The Division has a \$7.3 million budget and a staff of 78 EPA employees and 30 non-federal postdoctoral fellows.

Qualifications: To meet the requirements of these positions, 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 candidates 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 the position. In addition, applicants must meet the executive and technical qualifications described in the individual vacancy announcements. Salary range is \$113,400-\$124,185, commensurate with level of appointment in the federal Senior Executive Service. Selectees will be eligible for excellent health and life insurance, annual (vacation) and sick leave, and will be covered under the Federal Employees Retirement System (FERS).

How to Apply: To express an interest in any of these positions, **please send your current resume via email to zieman.peggy@epa.gov by July 21, 2000.** Your resume will be used to evaluate the success of our national recruitment efforts. If you have technical questions regarding these positions, please call Karen Dean at (919) 541-5037.

In addition, to officially apply for and be considered for a position, you must submit a full application, which must be postmarked by the closing date of August 11, 2000. Instructions for applying are available within the full text of each announcement, available via internet at www.usajobs.opm.gov (Current Job Openings/Senior Executive icon OR Agency Job Search icon (keyword: environmental)), or by calling the SES Vacancy Hotline (202) 260-6374, or by writing to:

**U.S. EPA/OARM/OHROS/SES, Human Resources Team
1200 Pennsylvania Avenue, N.W. Mailcode -3650
Washington, DC 20460-0001**

Request the specific announcement number as referenced above. A separate application for each position is required.

U.S. Citizenship Required

Applications must be postmarked by the closing date of August 11, 2000.

It is the policy of the Government of the United States to provide equal opportunity in Federal employment for all persons and to prohibit discrimination in employment because of race, color, religion, sex, national origin, handicap, age or sexual orientation through a continuing affirmative program in each executive department and agency.

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RESEARCH OPPORTUNITIES

Postdoctoral Fellowship in the laboratory of Dr. Mike McCune to study HIV pathogenesis, with particular emphasis on effects on the hematolymphoid system. Candidates should have a background in hematology or immunology, preferably with experience in flow cytometry, cell culture, and assays of hematopoietic function. Job #V00-08S

Postdoctoral Fellowship in the laboratory of Dr. Eric Verdin to study the biology of histone deacetylases and the mechanism of HIV transcriptional regulation. Candidate should possess a strong background in molecular biology and/or protein biochemistry. Job #V00-07S

Staff Research Scientist in the laboratory of Dr. Robert Mahley to study population genetics of hyperlipidemia in Turkey. The position will primarily be based in Turkey, with the remainder in San Francisco. Experience in molecular biology and computational analysis required. At least three years of postdoctoral work preferred. Job #C00-24S

Postdoctoral Fellowships in the laboratory of Dr. Stephen Young to investigate the molecular genetics of lipid metabolism and atherogenesis. Experience with molecular genetics and/or lipid metabolism and/or genetically modified mice is required. Job #C00-29S

Postdoctoral Fellowship in the laboratory of Dr. Robert Farese Jr. to study triglyceride synthesis enzymes and their role in triglyceride metabolism and obesity. Experience in molecular biology and lipid metabolism is required. Job #C00-10S

Postdoctoral Fellowship in the laboratory of Dr. David Dichek to study the molecular pathogenesis of atherosclerosis and to develop gene-based strategies to prevent and treat vascular disease. Experimental approaches include viral vector-mediated gene transfer in blood vessels of adult animals and generation of transgenic mice with germ-line targeting to the artery wall. Interest and abilities in animal surgery and molecular biology or virology is required. Job #C99-066S

Postdoctoral Fellowship in the laboratory of Dr. Tony Wyss-Coray to study neurodegeneration and neuroprotection related to Alzheimer's disease and stroke. Project will involve the use of mice with regulatable transgenes to study molecular mechanisms of disease and TGF- β 1 signaling in vivo. Experience with molecular biology and neuroscience is required. Job #N00-09

Postdoctoral Fellowship in the laboratory of Dr. Yadong Huang to study the effects of apolipoprotein E isoforms on lipid metabolism in the plasma, liver, and brain of transgenic or gene-targeted mouse models. A strong background in molecular biology and lipid metabolism is required. Job #C99-070S

Postdoctoral Fellowship in the laboratory of Dr. Israel Charo to study chemokines and their receptors. Current projects include the use of transgenic and knockout mice to study the roles of chemokines/receptors in human disease and the regulation of the immune response. Job #C98-026S

All positions require a Ph.D., M.D., or both. Please mail cover letter indicating job number along with a CV and references to:

The J. David Gladstone Institutes
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P.O. Box 419100
San Francisco, CA 94141
email: hr@gladstone.ucsf.edu

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more active lives. Our business strategies create good opportunities for professionals who insist upon cutting edge projects and excitement in their work.

BS/MS CARDIOVASCULAR RESEARCH

Multiple associate positions exist in the cardiovascular research group for work directed towards congestive heart failure. Skills in molecular and cell biology with previous cardiomyocyte experience are preferable. Additional associate positions exist for candidates with experience in electrophysiology including calcium and contractility measurements in primary neonatal and adult cardiomyocytes. Candidates with small and large animal surgical skills and previous experience with in vivo monitoring of cardiac function are also encouraged to apply. All candidates with molecular, cellular and/or in vivo experience will be expected to contribute creatively to basic and applied research directed towards drug discovery for Congestive Heart Failure. Candidates should exhibit excellent communication, interpersonal skills and also be willing to work in a team environment.

We are also seeking an associate biochemist (MS/BS) to participate in the discovery of novel anticoagulants and to perform basic research toward the understanding of relevant biochemical mechanisms in the blood coagulation system and in thrombosis. The research would include in vitro studies of blood coagulation pathways and the pharmacological modulation of various factors important to thrombosis and hemostasis. We prefer an individual with strong basic biochemistry and analytical skills, with the ability for independent and creative scientific work. Expertise in particular aspects of blood coagulation would be advantageous.

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- ***Polymorphism Genotyping • Population Genetics***
- ***Product and Packaging Engineering • IE/Manufacturing Process Engineering***
- ***Marketing • Mechanical Engineering • Microarray Technology***
- ***Microfluidics Design and Development Engineer/Scientist • Microfluidics***
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Associate Scientist

Employment opportunities in West Point, PA

As a leading research-driven pharmaceutical products and services company recently ranked by Fortune among "America's Most Admired Companies," Merck & Co., Inc. discovers, develops, manufactures and markets a broad range of innovative products. We currently have an exceptional career opportunity available for Associate Scientists in our Department of Virus and Cell Biology at our modern **West Point, PA** facility 25 NW of Philadelphia.

The Department of Virus and Cell Biology has two positions available for Associate Scientists within the HIV vaccine research program. The ideal candidates must have a Master of Science degree, preferably in cellular immunology. Prior experience in Molecular or Cell Biology with at least 2 years of relevant experience is preferred. To qualify, you must have extensive knowledge of and experience with multi-color flow cytometry, basic immunological assays such as ELISAs and ELISAs, and in vitro culture of peripheral blood mononuclear cells. Experience with molecular biological techniques such as preparation of cellular DNA and RNA, PCR, and DNA/RNA hybridization-based assays would be an additional advantage. Candidates must be willing to work with cells obtained from HIV-infected subjects; the specific duties for these positions would be to develop novel assays to characterize cellular immune responses against HIV-1 gene products resulting from either natural infection or immunization against HIV.

We offer a comprehensive salary and benefits package, including tuition reimbursement and one of the best 401(k) plans in the nation, as well as opportunities for professional growth. To be considered, please submit your resume and cover letter, indicating salary requirements and PAF Code, to: **Merck Positions, PAF Code: XHXMRS MKH06230, PO Box 92164, Los Angeles, CA 90009-2164. E-mail: merck@isearch.com Fax: (310) 337-3393.** Candidates selected for interviews will be contacted. We are an Equal Opportunity Employer, M/F/D/V.



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We have the following position available at our Framingham, MA location:

Staff Scientist

Seeking qualified candidate for our research programs in lysosome biology. You will carry out research on the uptake, transportation and degradation of lysosomal proteins. Must interact productively in a challenging, rapidly evolving, multidisciplinary environment to design and evaluate novel second generation enzyme and gene therapeutics for in vivo applications.

Requires a Ph.D. with at least 3 years of postdoctoral training in cell biology or biochemistry and experience with receptor-mediated uptake studies, cellular binding and targeting of genes and proteins. An in-depth understanding of the cellular processes leading to uptake of proteins and gene transfer vectors and/or of lysosomal storage disorders is preferred.
Job Code: 00-1537

**Interested candidates should forward resume, including Job Code, to: Human Resources Department, Genzyme Corporation, One Kendall Square, Cambridge, MA 02139
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Opportunities



Endowed Chair in Developmental Biology of the Eye: Goldman Scholar Abrahamson Pediatric Eye Institute and Divisions of Developmental Biology and Ophthalmology

The Abrahamson Pediatric Eye Institute, in cooperation with the Divisions of Developmental Biology and Ophthalmology at Children's Hospital Medical Center in Cincinnati, OH, is recruiting an established scientist with a major research program in the development of the eye and visual pathways using animal models. The successful candidate will assume a generously endowed, named Chair with dual appointments in Ophthalmology and Developmental Biology. Package includes junior faculty recruitment, abundant laboratory space, and serious financial commitment commensurate to the position. The candidate will be expected to maintain externally funded programs, contribute to graduate education in the basic sciences, and mentor young clinician-scientists. A strong collaboration with clinicians is encouraged to facilitate transfer of research developments to patient care.

Applicants must have a PhD and/or MD, and have demonstrated scientific leadership and research expertise in basic eye research.

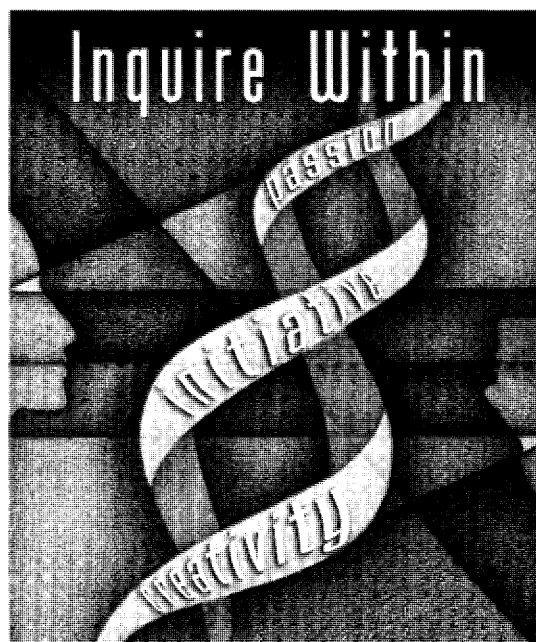
Please submit current curriculum vitae, a one-page summary of research accomplishments and plans, and three letters of support to Drs. West and Wylie, co-chairs, Goldman Scholar Search Committee.

Constance E. West, M.D.
Director, Pediatric Ophthalmology and the Abrahamson Pediatric Eye Institute
Children's Hospital Medical Center
3333 Burnet Avenue
Cincinnati, OH 45229

Christopher C. Wylie, Ph.D.
Director, Division of Developmental Biology
Associate Chair for Basic Sciences
Children's Hospital Research Foundation
Children's Hospital Medical Center
3333 Burnet Avenue
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POSTDOCTORAL OPPORTUNITIES

As one of the nation's most prolific scientific facilities, the Genentech Postdoctoral Program is a vibrant and intense environment for advanced scientific training. Bringing together more than 50 researchers publishing at a rate of approximately 250 papers a year, the program offers an exceptional range of postdoctoral opportunities. You will have the chance to conduct basic research in areas of our scientific interest, publish in scientific journals and present work at scientific meetings. And with close to 3,000 patients and another 2,000 pending, Genentech provides a proven pathway for your work to reach the true benefactor of your work. The following opportunities are available for candidates with a PhD or MD and a strong background in the appropriate field.

Protein NMR Group

You will apply NMR and other biophysical techniques to characterize structured peptides to be used as scaffolds for mimicking protein epitopes. You must be familiar with NMR spectroscopy and peptide structure determination; peptide synthesis and/or molecular modeling experience is advantageous. **Job Code SCI862**

Protein Engineering

We'll call on you to use phage-display and SPR biosensor techniques, as well as to collaborate with x-ray and NMR groups, to identify and optimize novel ligands having potential as therapeutics or as leads for small-molecule development. Experience in molecular biology, protein chemistry, or biophysical techniques is preferred. **Job Code SCI1988**

Protein Engineering

This position will be involved in the use and development of combinatorial biology methods to analyze protein structure and function. The research will mainly rely on the Protein Engineering Department's proven expertise in phage-displayed protein and peptide libraries, but other technologies may also be developed. The researcher will have wide access to Genentech's excellent facilities for high throughput screening and DNA sequencing, protein purification, and characterization and biocomputing. The Protein Engineering Department is a collaborative environment offering rich opportunities for interactions including biophysics, x-ray crystallography and high-field NMR groups. **Job Code SCI2218**

Molecular Biology

Apply genomic strategies to study the function of novel secreted proteins and receptors of potential therapeutic value. Your work will include establishing suitable models for the study of human disease, united with gene expression analysis using DNA micro arrays. Experience in molecular biology or genomics and cellular biology would be advantageous. **Job Code SCI200**

Cardiovascular Research

Join a group focused on angiogenesis by investigating known and novel regulators. You'll use genomic strategies to study the function of novel secreted proteins and receptors and develop methods to assess potential therapeutic value. **Job Code SCI1911**

Molecular Oncology Research

Your investigative work will advance the efforts of a research group focusing on the regulation of tumor angiogenesis, known and novel. A strong background in molecular biology and cell biology are advantageous. See *Nature*, 380, 439-42, (1996); *EMBO J.*, 15, 4919-27, (1996); *Development*, 126, 1149-59, (1999); *Nature Med.*, 5, 623-28, (1999); *Nature Med.*, 5, 1359-64, (1999). **Job Code SCI1733**

Molecular Oncology Research

A position is available in the department of Molecular Oncology to study the Hedgehog signaling pathway and its involvement in cancer. The successful candidate will have a strong publication record to document his/her expertise in the fields of molecular and cellular biology with emphasis on signal transduction. See *Nature*, 384, 129 (1996); *Nature*, 391, 90 (1998); *PNAS*, 9513630 (1998); *Curr Biol*, 976 (1999); *J. Cell Sci.*, 1124437-4448 (1999); *Nature Neuroscience*, 341-46 (2000); *Nature Cell Biology*, 2310-312 (2000). **Job Code SCI616**

Protein Chemistry

Perform research in quantitative, non-gel proteomics in the cardiovascular and oncology areas. You'll conduct experiments in the optimization of cell surface protein labeling and affinity purification, and use LC-MS/MS for detection and quantification. The candidate should have a strong background in protein purification, and experience with HPLC and mass spectrometry. **Job Code SCI2123**

Research Discovery—Endocrine Research

You'll help identify novel genes and proteins that control insulin production and action and determine the *in vivo* function of these using genetic and micro-array approaches. Expertise in cell and molecular biology is required and knowledge of animal physiology is an advantage. **Job Code SCI2128**

Research Discovery—Immunology

A postdoctoral position is available to study TNF family members and T cell co-stimulatory molecules to define their role in immune system and in disease process. This will include identification of novel molecules and their *in vitro* characterization by using molecular biology/immunologic techniques. Using gene knockout/transgenic approaches and disease models, the candidate will investigate the *in vivo* function of these molecules. **Job Code SCI2214**

NON-POSTDOCTORAL OPPORTUNITIES

Protein Chemistry—Scientist

We seek a protein chemist to join the Protein Chemistry group within our Research Department. The ideal candidate will have 3+ years extensive protein purification and characterization experience, isolating both native and recombinant proteins, as well as experience in refolding bacterial expressed recombinant proteins. Experience in micro-purification techniques is preferred. **Job Code SCI1037**

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Postdoctoral Position in Integrin Signaling

Position available for a recent Ph.D. recipient to examine the role of integrin signaling in cell survival, proliferation, and differentiation (*Science* 285:1028-1032, 1999). Potential areas of study include the plasma membrane or membrane proximal events, which confer specificity to integrin signaling, the mechanisms by which integrin signals regulate the cell cycle machinery, and the role of integrin signaling in tumor invasion and angiogenesis. Approaches range from cellular and molecular studies in cultured cells to the introduction of knock-in mutations in mice.

The candidate should have a strong background in cellular and molecular biology, biochemistry or developmental biology.

Letters of application, briefly describing research interests, a CV and two or three letters of reference should be sent to: Filippo G. Giancotti, M.D., Ph.D., Cellular Biochemistry and Biophysics Program, Memorial Sloan-Kettering Cancer Center, Box 216, 1275 York Avenue, New York, New York 10021. EOE/AA



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A Mayo Clinic postdoctoral position is available to study the molecular and physiological properties of interstitial cells of Cajal, the pacemaker of the gastrointestinal tract. Join an established and enthusiastic group using a combined approach with molecular identification of vital signaling proteins, intracellular recording and patch clamp recording of ionic currents, and laser scanning confocal microscopy to characterize dynamic changes in cell calcium. These efforts are expected to lead to a better understanding of the basis for rhythmic electrical activity in the small intestine, and translation of these findings to the clinical setting. Candidates with a background in calcium imaging are preferred. Candidates must be a U.S. citizen or permanent resident and have an M.D. or Ph.D. degree. Please send curriculum vitae and the names of three references to:

Gianrico Farrugia, M.D.

**Division of Gastroenterology and Hepatology
Mayo Clinic**

**200 First Street SW
Rochester, MN 55905**

e-mail: farrugia.gianrico@mayo.edu

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DEPARTMENT OF AGRICULTURE (USDA)
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**TWO VACANCIES: Germplasm and Gamete Physiology Laboratory,
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U.S. CITIZENSHIP REQUIRED

**SUPERVISORY RESEARCH PHYSIOLOGIST (ANIMAL), GS-14/15,
No. ARS-X0E-0313**

Salary Range: GS-14, \$71,954-93,537; GS-15, \$84,638-110,028

Applications must be submitted by July 17, 2000

This position is that of Research Leader of the Germplasm and Gamete Physiology Laboratory (GGPL), Beltsville Agricultural Research Center, Beltsville, MD. GGPL research includes: improving methods for the short term preservation and cryopreservation of swine and poultry spermatozoa; study of cellular, molecular, and hormonal mechanisms to improve egg production in turkeys; improving oocyte competence in swine; identification of factors that limit embryonic survival and fertility in poultry and swine and develop and improve culture and preservation of swine embryos; developing methods of effectively assessing sperm fertilizing capacity in vitro and develop methods of cryopreservation of poultry embryos. In addition to the scientific responsibilities in one of the above areas, the Research Leader supervises a staff of research and support scientists and a technical and clerical staff.

RESEARCH PHYSIOLOGIST (POULTRY), GS-12/13, No. ARS-D0E-0314

Salary Range: GS-12, \$51,204-66,564; GS-13, \$60,890-79,155 per annum

Applications must be submitted by July 31, 2000

The objectives of the research are to improve methods for preserving poultry semen in vitro by: 1) developing and optimizing methodologies for short term preservation of semen in the liquid state for up to 48 hours; 2) conducting fundamental research on the physiological factors affecting the preservation of sperm; 3) determining the factors which determine successful paternity in competing sperm from different males.

**For a copy of vacancy announcements and/or forms call 301-504-1484 or
view announcements on internet under <http://www.ars.usda.gov/afm/hrd/resjobs/D0E-0314.HTM> or <http://www.ars.usda.gov/afm/hrd/resjobs/X0E-0313.HTM>.**



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Job Code: 046-00.

Director / Instrument Development

You must have a strong track record developing instrumentation for DNA analysis. Expertise in liquid handling, optics and computer control, as well as familiarity with microfabrication methods is required. M.S./Ph.D. Engineering required.

Job Code: 047-00

Director/Molecular Biology Methods

We are looking for a Ph.D. Biochemistry/Biology with a 4+ year track record of DNA methods development. Encyclopedic knowledge of molecular biology protocols and methods, as well as multiple publications required. You must also have extensive knowledge of DNA hybridization field and strong quantitative skills.

Job Code: 048-00

Research Scientist / Advanced Engineering

Develop methods and instrumentation for DNA analysis. M.S. or Ph.D. in engineering, chemistry or related field required, as is familiarity with solid phase hybridization, optics and micro-fluidics. Programming experience on C++ or Perl desired.

Job Code: 106-00

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BIOANALYTICAL SCIENTISTS

We are seeking scientists to aid in the development and application of analytical methods to evaluate and characterize vaccine components and products. Efforts will focus on physico-chemical and immunological analyses of bacterial and live virus vaccines. These positions require close interactions with bioprocess engineers to support process development as well as technology transfer to and technical support for quality control laboratories. Strong experimental, leadership, and communication skills are essential. Effective written and oral communication skills required as well as demonstrated ability to function well as a member of a multidisciplinary team.

The qualified candidates must have the following credentials:

IMMUNOLOGIST. Ph.D. in immunology, biochemistry or a related field and 1-5 years' post-doctoral experience. Position focuses on immunological evaluation of polysaccharide antigens.

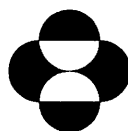
BIOCHEMIST. Ph.D. in analytical chemistry, biochemistry or related discipline and 1-5 years' post-doctoral experience. Position focuses on physico-chemical analysis of polysaccharides and proteins.

MASS SPECTROMETRIST. Ph.D. in analytical chemistry, biochemistry or related discipline and 1-5 years' experience. Position focuses on developing mass spectrometry applications for evaluation of small and large biological macromolecules in complex matrices. Experience with HPLC and electrospray ionization techniques is essential.

VIROLOGIST. Ph.D. in virology, molecular biology, cell biology or related discipline and 5-10 years' post-Ph.D. experience in viral vaccine development. Position focuses on directing a group of scientists in the analytical development and characterization of live virus vaccines. Supervisory experience essential.

ASSOCIATE SCIENTISTS. BS/MS in chemistry, biochemistry, biology or related field. Bioanalytical laboratory experience preferred.

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To participate in conducting preclinical in vivo and in vitro PK and ADME studies, in support of research and development of compounds with potential therapeutics. Applicants must possess a BS/MS degree in toxicology, biochemistry, pharmacology, biology or related sciences. Experience in any one or more of these techniques: HPLC, ELISA, RIA and Gel Electrophoresis techniques is a must. Knowledge in small animal handling, including dosing (IV, IM, SC, PO) and PK analyses is desirable.

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Current research includes investigations in the areas of AIDS and related diseases; viral and bacterial diseases and vaccines; mechanisms of pathogenesis; cytokines and growth factors; allergy and immunology; parasitic diseases; and developmental biology.

QUALIFICATIONS:

Physicians: Applicants should have a strong background in one or more of the following Medical Specialties: Allergy; Cardiology; Clinical Microbiology; Endocrinology; Epidemiology; Hematology; Immunology; Infectious Diseases; Internal Medicine; Nuclear Medicine; Oncology; or Pediatrics. **Scientists:** Applicants should have a strong background in one or more of the following disciplines: Biology; Biochemistry; Biostatistics; Chemistry; Genetics; Hematology; Immunology; Medical Technology; Microbiology; Molecular Biology; Pharmacology; Physiology; or Virology. **CANDIDATES FOR CIVIL SERVICE OR COMMISSIONED CORPS APPOINTMENTS MUST BE U.S. CITIZENS. NON-U.S. CITIZENS MAY BE ELIGIBLE FOR SERVICE FELLOWSHIP APPOINTMENTS.**

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For **PHYSICIANS**, salaries range from Selected Federal White-Collar Pay Schedules, GS-13 through GS-15. In addition, physicians may also be eligible for a physician's comparability allowance OR Physician Special Pay based on experience, qualifications and medical specialty. For **SCIENTISTS**, salaries range from Selected Federal White-Collar Pay Schedules GS-11 through GS-15. Salary and level of responsibility are commensurate with education and experience.

LOCATION:

Offices and laboratories are strategically located on the campus of the National Institutes of Health in Bethesda, Maryland, or in close proximity to the campus.

HOW TO APPLY:

Applications are accepted throughout the year, and candidates should indicate when they will be available for employment. Interested candidates should send a current Curriculum Vitae/Resume and cover letter to: **Food and Drug Administration Center for Biologics Evaluation & Research; 1401 Rockville Pike, HFM-123; Rockville, MD 20852-1448; Attention: Recruitment Coordinator Gen-00-01.**

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Though our merger is based on hard science, we're

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Changing the big picture of the pharma industry, the merger of industry leaders Monsanto and Pharmacia & Upjohn has resulted in the formation of a new first-tier organization known as Pharmacia Corporation. Uniting the ambitions and talents of 60,000 professionals under our \$17 billion company with an R&D pipeline of exceptional strength and depth allows us to have a positive effect upon countless lives. With breakthrough drugs including Detroil® for over-active bladder control and Celebrex® to treat arthritis, we feel that our work is truly special. Discover the unique effect your skills can have by joining our team in St. Louis, MO.

Research Scientist, Vascular Biology, Cardiovascular and Metabolic Diseases

An opportunity is currently available to join an interdisciplinary research team in the Cardiovascular & Metabolic Diseases division of the newly formed Pharmacia Corporation. We seek a Ph.D. scientist with 2-5 years of research experience specializing in the vascular biology of atherosclerosis. Expertise designing cellular or animal models which mimic the inflammatory or lipid disorders underlying human disease is desired. Familiarity with gene regulation, inflammatory mechanisms in atherosclerosis and lipid biochemistry are desirable. The individual should have excellent oral/written communication skills and should enjoy working collaboratively. The Cardiovascular & Metabolic Diseases group is one division of a highly successful discovery organization that employs state-of-the-art technologies to identify targets and design novel therapeutics. Commitment to innovative, team-based & collaborative approaches to complex problems, and providing opportunities for career development are unique characteristics of our work environment.

Pharmacia offers everything you could want in a career: outstanding compensation, excellent benefits and the realization that you've reached the height of the industry. Please send resume with salary history to: **Pharmacia Corporation, Attn: Staffing, Job Code: 00-0410, 700 Chesterfield Pkwy., Mail Zone BB4D, Chesterfield, MO 63198. EEO/AA Employer M/F/D/V**

PHARMACIA

www.pharmacia.com



CURAGEN'S rapid growth has created new career opportunities. We currently have openings for individuals with backgrounds in molecular biology, biochemistry, biology, engineering, bioinformatics, medicine and other related fields. Successful CuraGen employees are exceptionally organized, have an entrepreneurial spirit, a passion for their work, and thrive in a challenging, team oriented environment. We are currently seeking highly driven individuals for the following positions:

Vice President/Internal Discovery

CuraGen is looking for a world leader in applying functional genomics to the identification and validation of drug targets and the development of therapeutics. An encyclopedic knowledge of the genetic basis of human diseases with expertise in metabolic disease, oncology, inflammation, or central nervous systems disorders is required. M.D., Ph.D. with 8+ years of success in the pharmaceutical or biopharmaceutical industries. Job Code: 183-99

Director/CNS Disorders

Build and lead a team of scientists in the discovery of drug targets for neurological and neuropsychiatric diseases. Five or more years of experience leading efforts in the elucidation of pathways for CNS disorders and target validation required. Ph.D. or M.D. Job Code: 230-99

Senior Research Scientist/Internal Discovery

Must possess a substantial research and publication track record in the mechanisms contributing to tumor development, tumor progression and approaches to anti-cancer therapy development. Specific areas of expertise must include mechanisms of tumor cell growth, invasion and motility, adhesion, angiogenesis, metastasis, host responses and contributions to tumorigenesis and resistance to therapy. Ph.D. or M.D. required. Job Code: 092-00

Please send cover letter, resume / CV and 3 letters of recommendation. EOE

Computational Chemists

DuPont is seeking two computational chemists to help design safe and effective crop protection chemicals in our Crop Protection Products organization in Delaware. These chemists will work on multidisciplinary lead generation and optimization teams. The ideal candidates will possess strong communication skills and the ability to bridge theoretical models to practical business problems. The desired areas of expertise include virtual library design, data mining, knowledge extraction from high-throughput screening data, pharmacophore elucidation, and QSAR analysis. These positions require a good working knowledge of organic/medicinal chemistry and familiarity with the discovery process for bioactive molecules. Experience with MSI (Ceius2 and InsightII), or Tripos discovery tools, MDL ISIS chemoinformatics tools, and statistical analysis software tools is also necessary. Familiarity with PC, and UNIX operating systems is also expected, and programming skills are also desirable.

A Ph.D. in chemistry, or related field is required and postdoctoral and /or industrial experience is preferred. Qualified individuals are invited to forward their resumes and a list of three references to: DuPont Resume Processing Center, P.O. Box 540117, JOB #FAG1074S, Waltham, MA 02453-0177; FAX: 1-800-978-9774; email: jobs@dupont.com
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WE ARE A VITAL GLOBAL FORCE. A cogent synergy of science, technology and commercial minds focused on one thing—controlling disease. Our broad expertise with vaccines, blood testing and therapeutics enables us to target cancer, cardiovascular and infectious diseases and create powerful new opportunities for the future. Currently, we seek a scientific professional to join us at our San Francisco Bay Area location.

PRINCIPAL SCIENTIST, RESEARCH

Protein Biochemistry

This experienced protein chemist will be responsible for purification and characterization of natural and recombinant proteins for a wide range of projects, including drug screening, X-ray crystallography, and other pre-clinical activities. This is a "hands-on" position that requires working simultaneously on multiple projects.

The ideal candidate will have a PhD in Biochemistry or related field, plus 5+ years postdoctoral training, preferably in the biotech industry. Extensive experience with various forms of chromatography, protein refolding, process scale-up and optimization, and biophysical characterization techniques is essential. Effective communication and problem solving skills and the ability to work well independently and as part of a team are also necessary.

To join our global team, send your resume with salary requirements to: Chiron Corporation, Human Resources, Job Code 4406, 4560 Horton Street, Emeryville, CA 94608. Fax to (510) 923-3864 or email to jobs@cc.chiron.com. As an equal opportunity employer, Chiron honors diversity in every respect.

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CHIRON



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- The full 2000 Summer and Fall GRC schedule appeared in the February 11, 2000 issue of **SCIENCE**.

visit the *frontiers of science* at:

WWW.GRC.URI.EDU

Our web site contains the complete schedule of current and upcoming Conferences.
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Research Scientist Based in Tarrytown, NY

OSI Pharmaceuticals is a leading drug discovery company with a substantial pipeline of product opportunities for commercialization with the pharmaceutical industry. OSI's research programs are focused in the areas of cancer therapeutics, cosmeceuticals, diabetes, and GPCR-directed drug discovery. OSI utilizes a comprehensive drug discovery and development capability to facilitate the rapid and cost-effective discovery and development of novel, small molecule compounds in more than 40 research and development programs.

To enhance our efforts in this direction, we have a position available in the Diabetes group.

Working with a team of scientists addressing type II diabetes, you will be involved in the development of enzymatic and cellular binding, as well as functional assays that will be suitable for transfer to high throughput screening. To succeed, you must be a Ph.D. level scientist with experience in the field of diabetes and a background in enzymatic and cellular assay development. Demonstrated success with cloning, expressing and purifying proteins in bacteria or yeast is desirable.

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 to: Human Resources, OSI Pharmaceuticals, Inc., at Tarrytown, 777 Old Saw Mill River Road, Tarrytown, New York 10591-6705. Fax: (914) 345-3565; e-mail: employment@osip.com. Equal Opportunity Employer M/F/D/V.

 **OSI Pharmaceuticals**
www.osip.com

Opportunities



Postdoctoral Position Molecular/Developmental Biology

A postdoctoral position is available immediately for a NIH-funded project in the laboratory of Drs. Chris Wylie and Janet Heasman to investigate primordial germ cell migration in the mouse embryo. Candidates should have background in molecular and developmental biology.

Please send letter, curriculum vitae and three references to:

Christopher Wylie, Ph.D.
c/o Maureen Huschart, Division of
Developmental Biology
The Children's Hospital Research
Foundation
3333 Burnet Avenue
Cincinnati, OH 45229-3039

Visit our website at www.cincinnatichildrens.org
Children's Hospital Medical Center is an Affirmative Action/Equal
Opportunity Institution. Women and minorities are encouraged to
apply.

ARKANSAS CHILDREN'S NUTRITION CENTER

Cognitive Function/CNS Studies

Director and Two New Positions

The ACNC is a USDA funded center interested in the effects of diet and nutritional status on child development and health. Investigators are University of Arkansas for Medical Sciences faculty at Arkansas Children's Hospital. The well-funded neurophysiology program is expanding. Candidates must have a Ph.D. or equivalent degree in the area of neuroelectrophysiology, cognitive psychology, learning acquisition, behavior, attention and related areas. They must have skills in research in children that can be applied towards studies of dietary effects and nutritional status in infants and children. Excellent salary, long-term funding and new equipment and facilities await the successful candidates. Contact:

Thomas M. Badger, Director
ACNC
1120 Marshall,
Little Rock, AR 72202
badgerthomasm@exchange.uams.edu
FAX 501-320-2818



GeneTrace Systems is a privately held systems biology company focused on drug target discovery, validation and lead compound selection using an integrated platform of genomic, proteomic and bioinformatic systems.

Scientist – Oncology (0609-01)

Qual: MD or PhD in life science and 3+ years experience with molecular biology, genetics and oncology. Industry experience with a record of scientific publications and project management experience are essential.

Scientist – Gene Transcription Regulation (0609-02)

Qual: PhD in molecular biology or related field and 3+ years post-doc experience in gene transcription regulation. Must possess experience in RNA regulation in biological systems. Industry experience with a record of scientific publications and project management expertise are essential.

Sr Res Assoc/Staff Scientist – New Tech Dev (0609-03)

Development of novel proteomics assay platforms or novel high throughput assays. Qual: PhD in molecular/cell biology, biochemistry with 2+ years of industry experience or BS/MS degree and 6+ years. Expertise with high-throughput biochemical assays, molecular drug screens, antibody phage display, antibody engineering/expression and laboratory robotics desirable.

Research Associates – Target Discovery/Validation (0609-04)

Qual: BA/BS degree in Biological Science and 2+ years experience in cell or molecular biology and cell culture applications. Prior industry experience.

Technical Operations Manager I (0609-05)

Results oriented management position to lead a highly skilled team developing/supporting processes around high throughput expression analysis systems and other complex technologies. Qual: PhD in biochemistry, molecular biology or related field with 5+ years industry operations experience or MS and 15+ years experience. Previous supervisory experience required.

Resume: hr@genetrace.com or fax: (510)748-6180. www.genetrace.com

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RESEARCH SCIENTIST (Full-Time)

This exciting position will be responsible for designing and implementing new research projects in bone cell/molecular biology. Duties include staff mentoring, writing scientific papers, experimental design and grants.

In addition to a Doctorate degree and a minimum of 2 years experience as a post doctoral fellow, the candidate must have demonstrated experience with molecular techniques.

We offer an excellent salary and benefits package. For consideration, please send/fax your resume to: Dr. Ernesto Canalis, Director Department of Research, Saint Francis Hospital and Medical Center 114 Woodland Street, Hartford, CT 06105. Fax: 860-714-8053. TTY: 860-714-4447, E-mail: ecanalis@stfranciscare.org Visit our website at <http://www.stfranciscare.org>

If you do not have access to the Internet, please contact the Human Resource Call Center at its toll-free number: 1-877-250-9570 24 hours a day, 7 days a week.



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Principal Research Scientist II (Clinical Immunology)

We can offer you a dynamic opportunity to manage a clinical immunology laboratory engaged in both cellular and serological assays of clinical trial samples. You will write and review SOPs, qualify and validate all assays, and be responsible for data management and analysis. Key functions also consist of writing reports and sections of INDs and interfacing with outside laboratories to achieve objectives. Your qualification rests on a Ph.D. with 12 years of experience. A BS or MS plus 14 years' experience may be considered. Candidates' expertise must include an advanced knowledge of GLP and cellular immunology assays; we also insist on supervisory experience and well-developed oral and written communication skills.

Research Scientist II (Viral Immunology)

In this role, you will be familiar with methods of humoral and cellular immune assays. To qualify, you must possess a BS in Microbiology/Immunology with 10 years' Pharmaceutical experience or an MS with 8 years' experience. Training in processing and handling of human clinical specimens as well as familiarity with GLP laboratory operations are essential. A strong background in qualifying assays, writing SOPs and supervising others in these activities is also required.

Wyeth-Ayerst offers competitive compensation and benefits programs which include stock options, child-care subsidies, flex time, business casual Fridays, educational assistance and professional development programs. Please forward your resume with salary requirements to: **Attn: Human Resources KN, 401 North Middletown Road, Pearl River, NY, 10965. Fax: (914) 732-5375.** Principals only. Equal Opportunity Employer, M/F/D/V.

For more information,
visit us at:
www.wyethjobs.com



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POSTDOCTORAL POSITION IN HEMATOPOIETIC STEM CELL BIOLOGY

A postdoctoral position is available in the Division of Experimental Hematology at St. Jude Children's Research Hospital to study the role of ABC transporters in hematopoietic stem cells. This project will provide an opportunity to apply modern molecular techniques and state of the art murine genetic models to a basic problem in hematopoiesis. Our expanding campus provides a stimulating research environment, with ample core facilities for molecular biology, genomics, and transgenic/knockout technology. The candidate will work in the Thomas Research Tower, which presently houses about 300 doctoral level scientists.

Candidates who recently obtained a Ph.D. or M.D. degree and have experience in the biology of stem cells and in ABC transporters are encouraged to apply. Interested individuals should send their CV, a brief description of their research interests, and the names of three references to:

Brian Sorrentino, M.D.
Experimental Hematology
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, TN 38105

www.stjude.org
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APPLIED ENTOMOLOGIST

The Department of Biological Sciences, University of Maine, seeks applicants for a research and teaching position in Applied Entomology. The position is a tenure-track, academic-year position at the **Assistant Professor** level and includes a joint appointment with the Maine Agricultural and Forest Experiment Station. Research areas may include, but are not confined to, insects as vectors of plant disease, applied population genetics, insect/plant interactions, and applied toxicology. The appointee is expected to develop a vigorous research program on the applied biology of pest insects in the potato ecosystem that is competitive for extramural funding and offers training for students; and collaborate with Cooperative Extension and research colleagues within the Maine Agriculture Center to develop IPM strategies for economically important pests. Teaching responsibilities include an undergraduate course in agricultural entomology (lecture and laboratory); one upper level undergraduate/graduate level course to be offered in alternate years and periodic seminar offerings in the candidate's area of expertise to compliment current offerings in the Department of Biological Sciences graduate programs.

A Ph.D. in Entomology or a related biological science is required, as well as, research expertise in ecologically-based insect pest management, and undergraduate or graduate course work in entomology, insect pest management, and ecology. Review of completed applications will begin August 20, 2000. Applicants should submit *curriculum vitae*, statement of research and teaching interests, and representative published papers. Applicants should also request three references to send letters addressing the applicant's suitability and particular strengths for the advertised position, to arrive by August 20, 2000. Applications and supporting letters should be addressed to: **Dr. E. Groden, Chair, Applied Entomology Search, Department of Biological Sciences, University of Maine, 5751 Murray Hall, Orono, ME 04469-5751**. Information about the Department is available at www.umesci.maine.edu/biology/

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DIRECTOR RHODE ISLAND SEA GRANT PROGRAM

The University of Rhode Island, one of the original Sea Grant Colleges, seeks a dynamic leader for the Rhode Island Sea Grant Program. The Program has long been recognized for its high quality. It supports research, education and outreach efforts directed towards marine and coastal issues of importance to the state and nation.

Complete descriptions of the position and qualifications are available at: http://www.uri.edu/human_resources and at the Rhode Island Sea Grant website: <http://seagrants.gso.uri.edu/riseagrants/>.

Submit a resume, cover letter and names, addresses and phone numbers of at least three references to: **J. Stanley Cobb, Search Coordinator, Log #011260SC, URI, PO Box G, Kingston, RI 02881**. Review of applications will begin July 10, 2000 and continue until position is filled.

The University of Rhode Island is strongly committed to achieving excellence through increased diversity of its faculty, staff and students. Persons from under-represented groups are encouraged to apply.

Assistant Professor Department of Biochemistry and Molecular Biology Wright State University



The Department of Biochemistry and Molecular Biology at the Wright State University School of Medicine invites applications for a full-time 12 month faculty position at the assistant professor level. The initial appointment is for three years, with continuance reviews for up to five year periods thereafter. We seek an individual with research expertise in the broad area of eukaryotic signal transduction. A highly competitive package of salary, benefits and research startup support is offered.

The department currently consists of 10 full time faculty with research interests in the areas of macromolecular mechanisms, including protein and membrane structure/function relationships; molecular genetics, including the regulation of transcription, replication and repair of DNA; and the application of nuclear magnetic resonance to biomedical research.

A Ph.D. in biochemistry or a related field and two or more years of postdoctoral experience are required for appointment. The successful applicant will be expected to develop an extramurally funded, independent research program and to participate in one or more of the department's medical, graduate (M.S. and Ph.D.), or undergraduate teaching programs.

Interested applicants should submit a curriculum vitae, a focused research plan, and the names of three references to: **Dr. Michael Leffak, Chair, Faculty Search Committee, Department of Biochemistry and Molecular Biology, Wright State University, 3640 Col. Glenn Highway, Dayton, OH 45435**. Review of applications will begin on August 1, 2000 and continue until the position is filled.

Candidates from groups underrepresented in academic science are strongly encouraged to apply. Wright State University is an Affirmative Action/Equal Opportunity Employer.



**Postdoctoral Positions at NIH
Immunology: Natural and
Polyreactive Antibodies**

Postdoctoral position, for up to 5 years, available immediately. Polyreactive antibodies are natural antibodies encoded by germ-line or close to germ-line sequences that bind with low affinity to many different foreign and self antigens. Our laboratory studies the structure and function of these antibodies and the biological role of the B lymphocytes that make them. Current studies include work on transgenic animals that express polyreactive antibodies, experiments to elucidate the properties of polyreactive antigen-binding B (PAB) cells especially in immunological tolerance, and screening of peptide libraries with monoclonal polyreactive and monoreactive antibodies to determine the sequence of the antigens to which these antibodies bind. Applicants should have an M.D., Ph.D., D.D.S. or equivalent with a strong background in molecular and/or cellular biology. Previous post-doctoral experience would be helpful.

Send curriculum vitae, bibliography and names of three references to:

**Abner Louis Notkins, M.D., Chief
Experimental Medicine Section
Infection and Immunity Branch, NIDCR
Building 30, Room 121
30 Convent Drive, MSC 4322
Bethesda, MD 20892-4322
Voice: (301) 496-4535
Fax: (301) 402-4163**

E-mail: anotkins@dir.nidcr.nih.gov

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Biacore, Inc. (<http://www.biacore.com>), the global leader in the development, manufacture and marketing of unique and innovative products to detect and monitor biomolecular binding, is building its team. We are currently looking for the following dedicated professionals.

Biacore, Inc. is Growing and Looking for...

APPLICATION SCIENTISTS (2) Deadline: July 7, 2000

Responsibilities include: customer training and telephone support, product demonstrations and seminars, and the development of new applications for biomolecular characterization. B.S. to Ph.D., minimum five years laboratory experience in Biochemistry, Biophysics, Protein Characterization, and/or Assay Development. Strong written and verbal skills required. Must interact well with customers in the field. Instrument background and knowledge of kinetics would be a plus. Positions to be placed in: Baltimore or Washington, DC (A2DC) area representing the Mid Atlantic territory; one position in R.T.P., NC (A2RT) representing the Southeast territory. Travel required.

RESEARCH AND DEVELOPMENT SCIENTISTS (2) Deadline: July 21, 2000

Responsibilities include: support the development and validation of Biacore assays in a joint effort between Millennium and Biacore, Inc. Contribute to the development of application support material and training courses. Ph.D. in Biochemistry/Molecular Biology. Previous experience within Drug Discovery R&D is a plus. Strong written and verbal skills required. Must be a team player challenged by the cross-disciplinary environment of Biacore's product development program. Positions to be placed in the Boston, MA area (RDMA)

ASSOCIATE SALES SCIENTISTS (3) Deadline: July 28, 2000

Responsibilities include: selling capital equipment and supplies to scientists within academia. Qualify and process sales leads through the sales cycle to achieve and exceed sales budget. Develop customer contacts and support existing customers; conduct seminars and workshops; give demonstrations of hardware and software; develop knowledge of applications and products; and submit reports as necessary. Work in a team environment to satisfy customer needs. Looking for B.S. in Life Science or related field. One to two years experience in sales in the same or a related field. Positions to be placed in Los Angeles, CA (SILA), Houston or Dallas, TX (SITX), Boston, MA (SIMA)

Please refer to **proper position code(s)** and ability to relocate. Send resume with references and salary history to:

**Human Resources, Biacore, Inc.
200 Centennial Avenue, Suite 100
Piscataway, NJ 08854**

We are an equal opportunity employer m/f/d/v.

Targeted Genetics Corporation is a growing downtown Seattle-based biotechnology company developing integrated gene and cell therapies for the treatment and prophylaxis of acquired and inherited diseases, including cancer, HIV, arthritis, cystic fibrosis, and hemophilia.

Staff Scientist, Immunology

Initial focus will be on the development of large-scale antigen-specific T-Cell production using our proprietary REM technology. This individual will also play a key role in the development of multiple drug discovery approaches using T-Cells. Candidate will provide input to the management Team, perform internal research and interact with external collaborators. Requires Ph.D. and prior experience in the field of cellular immunology. Desired background includes cellular immunology, cell culture and/or antigen presentation by macrophages, or dendritic cells. This is an exciting, hands-on growth opportunity.

Formulations/In Vivo Biology Post-doctoral Scientist

Develop and characterize lipid and polymer based gene delivery systems through in vitro analysis followed by in vivo evaluation in appropriate therapeutic models, particularly cancer. Requires familiarity with lipid and/or polymer delivery systems and ability to characterize them with respect to in vivo suitability and efficacy. Also requires knowledge of histology, cell characterization and identification techniques, and deposition studies as well as assessment of gene expression in specific cell types.

Manufacturing Director

We are seeking an individual with a background in therapeutic and/or biologic manufacturing. Prior experience with pilot through commercial stage facilities required. GMP environment with 100L and larger scale processes. Prior supervisory experience required.

For consideration, please forward your C.V./resume to: **Targeted Genetics Corporation Human Resources, 1100 Olive Way, Suite 100, Seattle, WA 98101. Fax: (206) 521-4782; e-mail: careers@targen.com. Visit our Web Site at www.targen.com.**

MAKE A DIFFERENCE WITH THE NATIONAL CANCER INSTITUTE

Chief of Business Operations

The National Cancer Institute (NCI) is the nation's premier cancer research institution. The Institute operates with a staff of approximately 4,000 and an annual budget of approximately \$3.1 billion. We are seeking a highly energetic and creative Chief of Business Operations to:

- Lead the organization's efforts in developing innovative business practices and operations related to grants, contracts and technology-transfer programs, most of which are highly complex and national or international in scope.
- Provide leadership through dissemination and discussion of NCI business practices with research administrators and business officials of grantee and contractor organizations and with business representatives of industry and academia throughout the US and abroad.
- Candidates should be proactive leaders with the ability to facilitate organizational and operational change in a highly complex operation.
- An MBA degree is essential and a degree in the Life Sciences is a plus.

- 10 or more years of an established track record in technology-based business operations, business plan development or grant and contract management.

- Evidence of success in building and leveraging a network of partnerships, affiliations, and strategic business relationships.

- Strong interpersonal, speaking and negotiating skills.

NCI offers a competitive salary and benefits package and incentive compensation. Relocation expenses also available.

Please send resume with salary history and requirements to:

National Cancer Institute
Human Resources Management
and Consulting Branch
Attn: Sara Sutphin
9000 Rockville Pike
Building 31, Room 3A19
Bethesda, MD 20892

Fax: (301) 496-6168

E-mail: ncibod-r@mail.nih.gov

**The National Cancer Institute is
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For more than 90 years, Chemical Abstracts Service has been the world leader in providing chemical and related scientific information. Today, we offer the most comprehensive and timely access to chemical literature and patents through services in print and electronic form, including sophisticated Web resources. Our reputation for advanced search and retrieval software complements the quality of our databases, spanning a century of scientific innovation.



LIFE SCIENCE INFORMATION ANALYSTS

We have several full-time positions available in analysis of the world's life science literature, including patents, for building of the CAS databases. Responsibilities include analyzing documents for novel life science information as well as the indexing and evaluation of chemical and biological structures relevant to the life sciences. Candidates should be interested in organizing and building life science information databases to assist research scientists in their pursuit of scientific knowledge.

Candidates must have a BS, MS or PhD in the life sciences. Knowledge of general chemistry as well as the ability to read and translate technical documents and patents in Japanese, French, German, Russian or Korean would be helpful.

We offer a professional working environment in a convenient suburban area as well as competitive salaries, excellent insurance, retirement programs and generous vacations. For consideration, fax, mail or e-mail your resume, salary history, language expertise and a copy of your college transcripts to: **CHEMICAL ABSTRACTS SERVICE, Human Resources-SCI, P O Box 3012, Columbus, Ohio 43210 FAX (614) 447-3816. E-mail: jobs@cas.org.** An Equal Opportunity Employer. www.cas.org

MAXIA PHARMACEUTICALS, INC.

MAXIA PHARMACEUTICALS, INC., located in San Diego, seeks highly motivated candidates for the following positions:

Ph.D. CHEMISTS

MAXIA is seeking experienced medicinal or synthetic chemists to expand its drug synthesis programs. The candidates will be involved in lead synthesis/optimization and should have a solid background in organic synthesis or medicinal chemistry. Responsibilities include the design and conduct of multistep synthesis of target molecules. Candidates must have a strong capacity and enthusiasm for doing modern experimental synthetic chemistry.

POSTDOCTORAL SCIENTISTS

MAXIA is seeking Ph.D. molecular biologists to expand the drug discovery teams in type 2 diabetes and cancer. The candidates will be familiar with nuclear receptor signaling and/or signal transduction mechanisms. Expertise in molecular biology techniques especially with RT-PCR, Northern and Westerns is required. Candidates should be highly experienced and motivated to carry out experimental work. Candidates should have 2 years postgraduate experience in a relevant field.

RESEARCH ASSISTANT

MAXIA is seeking a Research Assistant (BS or MS degree) to participate in a basic research program. The candidate must have training in cell and molecular biology and biochemistry laboratory techniques. Experimental procedures the candidate will carry out are cell-based adhesion, ELISA, Western, and EM studies. Cell culture experience is required. Familiarity with basic computer programs such as Word and Excel is expected.

MAXIA offers a competitive salary and benefits package including a substantial stock option package. Please email or fax resume to **Ms. Siobhan Graham** at graham@maxia.com or 858-824-1967, respectively. EOE.



Director
of Research for
Department of
Neurosurgery

WEST VIRGINIA UNIVERSITY

The Department of Neurosurgery at West Virginia University is seeking a tenure-track faculty member to serve as director of research. The primary duties involve the design and conduction of research within the Department of Neurosurgery and coordinating resident research projects. Spinal cord regeneration and recovery is of great interest to the Department. This will also include collaborative projects with the new Blanchette Rockefeller Neuroscience Institute (BRNI). BRNI is the largest scientific venture in West Virginia's history, and WVU will become a world leader in research in Alzheimer's Disease and other degenerative brain and memory disorders. The position will be at the level of assistant or associate professor, depending upon the experience of the candidate. Requirements include a Ph.D. or M.D., research experience, and a potential for obtaining extramural grant support.

West Virginia University is located in Morgantown, West Virginia, a pleasant university community near many major urban centers. The environment is ideal for raising a family. West Virginia University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are strongly encouraged to apply. Send letters of interest, CV and three references to: **Julian E. Bailes, Jr., M.D., Professor and Chairman, Department of Neurosurgery, PO Box 9183 Health Sciences Center, West Virginia University, Morgantown, WV 26526.**



POSTDOCTORAL POSITIONS, IMMUNOLOGY RESEARCH LABORATORIES (IRLs)

Several postdoctoral positions are available in well-funded laboratories to investigate mechanisms of regulated hematopoiesis, signal transduction and immune function. The IRLs provide an interactive and dynamic environment plus state-of-the-art facilities and investigative approaches. Groups with available positions include: Avery August (axa45@psu.edu): T cell signaling with a focus on kinases in T cell responses; Pam Correll (pnc7@psu.edu): Receptor tyrosine kinases in inflammation and erythroleukemia; Eric Harvill (harvill@psu.edu): Molecular basis of host-bacteria interactions and pathogenesis; Andrew Henderson (ajh6@psu.edu): HIV transcription and pathogenesis; Robert Paulson (rpf5@psu.edu): Genetic and biochemical analysis of hematopoiesis; Don Wojchowski (dmw1@psu.edu): Cytokine signal signaling, erythropoiesis, leukemogenesis. Applicants with a Ph.D. and/or M.D. and a background in immunology, virology, biochemistry, molecular biology or related fields can submit curriculum vitae, description of research experience & interests and names of three references to one of the above individuals at: **Immunology Research Laboratories, Pos #: S-8042, 115 Henning Building, The Pennsylvania State University, University Park, PA 16802-3500, FAX: 814-863-6140.** Resumes accepted until August, 2000.

Penn State is committed to affirmative action, equal opportunity and the diversity of its work force.



Nortran is a drug discovery and development company, developing drugs for the treatment of medical conditions such as life-threatening arrhythmias of the heart and intractable cough. We are expanding our drug development team and have the following position open:

DIRECTOR OF PHARMACOLOGY

This individual will play a critical role in our pathology-targeted ion channel research. You will be accountable to the VP Research for project management within your department. You will be involved in the day-to-day management of the research projects and be expected to oversee the design, analysis and execution of experiments. Qualified candidates will have experience with ion channel pharmacology and have demonstrated competence in both *in vitro* and *in vivo* electrophysiology/pharmacology techniques. In addition a thorough knowledge and understanding of the principles of pharmacology and toxicology is essential. We are looking for creative, accomplished self-starters with excellent organizational, interpersonal and communication skills and the ability to motivate and direct a team of Research Scientists/Associates. Previous industry experience is desired with a clear record of setting and meeting milestones. Your background should include a Ph.D. in pharmacology and several years in a senior research position.

If you meet the above requirements, and would like a challenging career opportunity working with an energetic and highly motivated team, please submit your resume and cover letter to:

NORTRAN PHARMACEUTICALS INC.
Human Resources
3650 Wesbrook Mall
Vancouver, B.C. Canada V6S 2L2
Fax: (604) 222-6617. E-mail: admin@nortran.com



PRODIGENE™

A world leader in expression and purification of recombinant proteins in plants invites applicants for full-time positions. All candidates should be highly motivated, possess excellent communication skills, and desire to work in a high performance environment with multi-disciplinary teams. All candidates will need to have excellent skills in project management and in interactions with people.

Senior Research Associate, Process Development

The successful candidate will be responsible for developing extraction and purification methods for recombinant enzymes and therapeutic proteins expressed in transgenic plants. The candidate will participate in the process transfer and scale up optimization. A working knowledge of chromatographic purifications and their scale up is required. Understanding of other separation methods is desirable. A Master's degree in biochemistry or equivalent with a minimum of 2 years industrial experience in protein separations is required. ProdiGene offers competitive salaries and a dynamic work environment.

For consideration, please submit a resume and the names of three professional references to:

Human Resources Department
June Elliott-Hardy
ProdiGene
101 Gateway Blvd., Suite 100
College Station, TX 77845
Fax: 979/690-9527



**CENTER FOR INTERNATIONAL
FORESTRY RESEARCH**

DIRECTOR GENERAL

CIFOR is seeking a dynamic visionary leader who is committed to improving the scientific basis for the management of tropical forests and woodlands primarily for the benefit of the peoples of developing countries. Our international public goods research recognizes the fundamental link between human well being and the health of forests. CIFOR works with a global network of partners.

CIFOR is one of 16 research centers supported by the Consultative Group on International Agricultural Research and receives funding from 29 government and development assistance agencies. We employ 140 staff of 22 nationalities at our headquarters in Bogor, Indonesia and in regional offices located in Brazil, Costa Rica, Cameroon and Zimbabwe. CIFOR values scientific excellence, commitment, diversity, collegiality, and informality.

The new Director General will have:

- international scientific standing,
- recognition within the global forestry research community and the various international processes related to forests,
- experience in managing multidisciplinary policy relevant research in developing countries, including complex international partnerships,
- excellent skills in resource mobilization, management, and communication with scientific and policy communities.

The position is for a renewable five-year term with a negotiable starting date in 2001. An internationally competitive compensation package is provided. Nominations, or expressions of interest including the names of three referees and a curriculum vita, should be sent to the manager of the search process:

Professor Bo Bengtsson
Swedish University of Agricultural
Sciences
Department of Plant Breeding Research
Nybyvaegen 1304, SE-243 93
Nyby, Sweden
Fax: 46 413 254 76
Tel: 46 413 261 39
Email: bengtsson.bo.m.i@telia.com

All applications will be acknowledged. The Board of Trustees will begin considering applications on September 1, 2000 and will continue until the post is filled. To learn more about CIFOR, the position and living in Indonesia, visit our Web site at: <http://www.cgiar.org/cifor>

WE'VE GOT CAREERS

DOWN TO A SCIENCE.

With a new state-of-the-art facility in Research Triangle Park, NC, Covance Biotechnology Services, Inc. provides the biotechnology and pharmaceutical industry with world-class process development and cGMP manufacturing for recombinant products. Join us as we put our clients' products and your career onto the fast-track. We are currently recruiting for the following key position:

STABILITY MANAGER

As Stability Manager, you will be responsible for monitoring the stability of protein and peptide-based drugs according to ICH guidelines. You will also oversee the transfer and execution of assays to assess identity, purity, strength and potency. Additional responsibilities will include identifying and quantifying degradation impurities using a wide variety of analytical techniques such as chromatography, electrophoresis and mass spectrometry. Requirements for this position include an MS (or equivalent) and 5+ years of experience in characterizing recombinant proteins along with experience in the assessment of stability indicating assays. Effective communication and documentation skills as related to cGMP policies and regulatory testing requirements are a must. Supervisory experience is preferred.

Please send resume to: Covance Biotechnology Services, Inc., Vice President, Human Resources, 6501 Weston Parkway, Suite 200, Cary, NC 27513; FAX: (919) 678-4493; E-mail: biotechcareers@covancebio.com. Only those selected for further consideration will be contacted. PRINCIPALS ONLY. Covance is an equal opportunity employer.

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Postdoctoral Positions in Immunology

Four NIH-funded postdoctoral positions in immunology are available in The laboratory of Dr I. Nicholas Crispe in the Center for Vaccine Biology and Immunology, The Aab Institute, University of Rochester (see: <http://www.urmc.rochester.edu/Aab/vaccbio/>). Two positions are to study the role of the liver in T cell apoptosis and systemic immunity. The other two are to study the relationship between cell cycle control and apoptosis in T cells. The former positions require skills in cellular immunology, the latter skills in molecular immunology.

Please send curriculum vitae, bibliography and the names of three referees to:

Dr I. N. Crispe,
Center for Vaccine Biology and Immunology,
University of Rochester
Medical Center,
601 Elmwood Avenue,
Rochester NY 14642.

UNIVERSITY OF
ROCHESTER
MEDICAL CENTER

The University of Rochester is an Equal Opportunity/Affirmative Action Employer. Minority and female candidates are encouraged to apply.

MEETINGS

Gene Therapy

September 25-29, 2000



Organized by:

Jeffrey Leiden (Harvard U.)

Margaret Liu (Lafayette CA)

Gary Nabel (NIH)

James Wilson (U. Pennsylvania)

Session Topics:

- Viral Vector Development & Regulation of Gene Expression
- Disease Models I - Hematopoiesis, Hemophilia & Muscle Disorders
- Immunity and Gene Transfer
- Genetic Approaches & Immunotherapy for Cancer & Angiogenesis
- Gene Therapy for AIDS & Vaccination Approaches to Infectious Diseases
- Disease models II - Neurological, Metabolic & Cardiovascular
- New Technology, Stem Cells & Tissue Engineering

Special Panel Discussion: Clinical Trials Design, Data Safety Monitoring & Bioethics

Speakers: Michael Blaese, Malcolm Brenner, Jeffrey Bonadio, Hermann Bujard, Marina Cavazzana, Olivier Danos, Raphael Dolin, Judah Folkman, Theodore Friedmann, Fred Gage, Katherine High, Ronald Levy, Jay Siegel, Bruce Sullenger, Didier Trono, Inder Verma, Savio Woo, John Young, Kathryn Zoon

Oral and poster presentations will be selected on the basis of scientific merit. CSHL encourages junior scientists to present their data at the meeting. Please register and submit abstracts online.

Abstract Deadline: July 5

Other CSHL Fall Meetings

Cancer Genetics & Tumor Suppressor Genes	Aug 16 - 20
Molecular Genetics of Bacteria & Phages	Aug 22 - 27
Mouse Molecular Genetics	Aug 30 - Sep 3
Translational Control	Sep 6 - 10
Dynamic Organization of Nuclear Function	Sep 13 - 17
Axon Guidance & Neural Plasticity	Sep 20 - 24
Germ Cells	Oct 5 - 8
Human Origins	Oct 25 - 29

Cold Spring Harbor Laboratory

Meetings & Courses, 1 Bungtown Rd., Cold Spring Harbor, NY 11724

Email: meetings@cschl.org

Fax: 516-3678845 Phone: 516-3678346

www.cshl.org/meetings/

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At Vertex, we're a global leader in small molecule drug discovery. We work small. But we think big. From our Agenerase™ HIV protease inhibitor on the market since 1999, to our many products in Phase II trials, we've got big potential coming down the pipeline. And now we've entered into an \$800 million dollar alliance on Kinase Protein Family drug development with Novartis Pharma - pioneering a new model for drug discovery and early development. Now that's big thinking. Come think big with us. We have opportunities for exceptional scientists in the following areas:

Medicinal Chemistry

Investigator/Staff Investigator (Job Code: 200-1)
Associate Scientist (Job Code: 200-2)

Virology

Investigator/Associate Scientist (Job Code: 320-1)
Investigator/Associate Scientist (Job Code: 320-2)

Technical Development

Staff Investigator - Formulations Development (Job Code: 210-1)
Staff Investigator/Investigator - Analytical Development (Job Code: 210-2)

Biology

Assistant/Associate Scientist - Cell Biology (Job Code: 300-9)
Investigator/Staff Investigator - Cell Biology (Job Code: 300-10)

For a complete list of descriptions and other opportunities, please visit:

www.vpharm.com

Please indicate appropriate Job Code when applying.

Vertex Pharmaceuticals Inc., 130 Waverly Street, Cambridge, MA 02139

We are an equal opportunity employer who makes diversity the foundation of all success.



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RESEARCH

Genetic Therapy, Inc. (GTI), a Novartis company, is a leader in the research and development of human gene therapy products and technologies for the treatment of genetic and acquired diseases. Currently, we have the following opening for a highly motivated professional:

QC Manager/Senior Scientist Molecular and Cellular Biology

Ph.D. scientist will lead our QC activities in developing gene therapy products. Ideal candidate must have extensive expertise in analytical chemistry, molecular and cellular biology. Hands on experience in tissue culture, PCR and immunological assays is preferred. Previous experience in adenovirus and retrovirus is a plus. Must have excellent communication and computer skills and the ability to work in a fast-paced, team oriented environment. Minimum qualifications include a Ph.D. in a scientific discipline plus 3 to 5 years of industry experience or equivalent.

All of our positions encourage creative thinking! GTI offers a stimulating and innovative environment with competitive salaries and benefits. Please specify job code **GB002022** when applying. Fax or send curriculum vitae to:



GENETIC THERAPY, INC.
A NOVARTIS COMPANY

9 West Watkins Mill Road
Gaithersburg, MD 20878
Fax: (301) 258-4605.

Email: gti.jobs@pharma.novartis.com

Genetic Therapy is an Equal Opportunity Employer

Postdoctoral Position National Jewish Medical and Research Center Denver, Colorado, USA

A position(s) is available immediately to study the control of hematopoietic cell lineage commitment and differentiation using transgenic and knockout mice. Applicants with experience in cellular immunology or molecular biology are especially encouraged to apply. Send CV and three references to:

James Hagman, Ph.D.
Division of Basic Immunology
National Jewish Medical
and Research Center
1400 Jackson Street, B121
Denver, CO 80206
Fax (303) 398-1775
HR@njc.org

**NATIONAL
JEWISH**
Medical and Research Center

AA/EOE

Specialist in mass spectrometry and protein chemistry, University of California, Berkeley, USA. This position will staff a departmental core facility for protein chemistry. 80% time will involve independently conducting services for research groups, including some combination of mass spectrometry, proteolytic digestion, HPLC and amino acid sequence analysis. 20% time will involve maintaining the facility, discussing potential facility use with department members, and organizing user scheduling and recharge. Previous experience in mass spectrometry techniques is required, with particular emphasis on MALDI-TOF and MS-MS ion trap instruments. Additionally, facility management or participation experience is desired. Candidates should be interested in participation in a broad range of scientific research. Opportunities exist for independent research and scientific authorship. Salary range \$56,000-86,000, depending on experience. Send CV and list of three references to: **Donald Rio, Dept. of Molecular and Cell Biology, 401 Barker Hall, University of California, Berkeley, CA 94720-3202.** Fax 510-642-6062. E-mail: don_rio@uclink4.berkeley.edu. The deadline for receiving applications is August 1, 2000. *The University of California is an equal opportunity, affirmative action employer.*

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR PHARMACOLOGY

Department of Pharmaceutical Sciences
Campbell University School of Pharmacy

The Department of Pharmaceutical Sciences announces an immediate opening for a full-time faculty position at the Assistant or Associate Professor level. Applications will be accepted until the position is filled. The successful candidate should have a Ph.D. in pharmacology with expertise in cellular/molecular methodologies. Teaching and postdoctoral research experiences and background in pharmacy are desirable but not required. The candidate will serve as part of a multidisciplinary team with responsibilities for teaching in undergraduate, Pharm.D., and graduate-level pharmacology courses; areas of emphasis will be autonomic, cardiovascular, and endocrine pharmacology or microbial, neoplastic, and immunopharmacology. The successful candidate will establish an active independent research program, which incorporates undergraduate and graduate research training. The School of Pharmacy, a highly progressive and model program in pharmacy education, offers the entry-level Pharm.D. degree as well as a B.S. degree in pharmaceutical sciences and a B.S. and M.S. in clinical research. Campbell University is a private Christian university located approximately 35 miles south of Research Triangle Park in central North Carolina. Its student-oriented focus facilitates excellent academic and professional interactions. Applicants should include a letter of interest, curriculum vitae, statement of research interests, and the names and addresses of three references to: **Dr. Kathy D. Webster, Pharm.D., Ph.D., Associate Professor, Department of Pharmaceutical Sciences, Campbell University School of Pharmacy, P.O. Box 1090, Buies Creek, NC 27506. Telephone: 910-893-1704; FAX: 910-893-1697; e-mail: kwebster@camel.campbell.edu.** *Campbell University is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR

The Department of Adult Oncology of the Dana-Farber Cancer Institute; the Department of Medicine, Brigham and Women's Hospital; and the Department of Medicine, Harvard Medical School are inviting applications for a tenure-track position at the level of Assistant Professor. Candidates should have an interest in solid tumor biology. A focus on cancers of the genitourinary tract is particularly sought. Applicants should have an M.D./Ph.D. or M.D. degree and will be expected to develop an independent laboratory research program. Laboratory space and appropriate start-up funds are available.

Applicants should submit their curriculum vitae, a description of research plans, and two letters of recommendation to: **James D. Griffin, M.D., Chairman, Search Committee, Department of Adult Oncology, Dana-Farber Cancer Institute, 44 Binney Street, Boston, MA 02115.** *The Dana-Farber Cancer Institute is an Affirmative Action/Equal Opportunity Employer.*

TWO RESEARCH SCIENTIST POSITIONS IXION BIOTECHNOLOGY, INC.

Transplantation Biology/Endocrinology

Two Research Scientist positions are available immediately to join an ongoing stem cell-based islet generation research program at Ixion Biotechnology, Inc. (*Nat. Med.* 6(3), March 2000). While both positions require experience in tissue culture, one position requires experience in transplantation biology and the other requires experience in endocrine physiology. Candidates must have Ph.D. or M.D. with at least three to six years of postdoctoral experience. Background in diabetes field will be preferred. Salary and benefits will be commensurate with experience. Applications will be received until the positions are filled. Please submit curriculum vitae and names and addresses of three references to: **Vijay Ramiya, Ph.D., Director of Diabetes Division, Ixion Biotechnology, Inc., 13709 Progress Boulevard, Box 13, Alachua, FL 32615. Website: www.ixion-biotech.com.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



SMITHSONIAN TROPICAL RESEARCH INSTITUTE

The Smithsonian Tropical Research Institute (STRI) announces an international search for the position of **DEPUTY DIRECTOR**. The individual selected will help create and implement the policies necessary to fulfill the Institute's mission, which is primarily research but includes conservation biology and education outreach.

STRI operates a variety of terrestrial and marine laboratories throughout the Republic of Panama and maintains cooperative agreements with other research and educational institutions throughout the world's tropics. The Deputy Director will be involved in all aspects of STRI operations but with a focus on external policies and development. He/she will be expected to strengthen STRI's leadership in research on the world's tropics. We seek an individual with a combination of experience in one or more of the disciplines relevant to STRI's research programs and strong managerial skills. The candidate will be required to build cross-disciplinary programs in the areas of tropical science including environmental monitoring, climate change, forest dynamics, paleoecology, canopy biology, marine sciences, anthropology, ecology, and animal behavior. A knowledge of the Spanish language is desirable.

In addition to a scientific staff of 35, STRI hosts several hundred visiting scientists each year. Additional opportunities to work with North American and European universities are being developed through cooperative agreements to support graduate programs focused on the Tropics.

Applicants must have a Ph.D. in a field related to STRI research interests. Please submit a letter of interest; a résumé with publications, funding history, and administrative experience; and names and addresses with telephone numbers of at least three references to: **Luz Latorraca, Office of Human Resources, STRI, Unit 0948, A.P.O. AA 34002. Telephone: 507-212-8094; FAX: 507-212-8150; e-mail: latorrac@tivolis.edu.** STRI will make an appointment without regard to race, religion, gender, or handicap.

Review of applications will begin in July 2000 and will continue until vacancy is filled.

CHIEF, ECOSYSTEM SCIENCE AND TECHNOLOGY BRANCH

NASA Ames Research Center is currently soliciting letters of interest from potential candidates for the position of Chief, Ecosystem Science and Technology Branch. The Branch Chief will direct the research in ecosystem processes using remote sensing; predictive modeling and related field techniques; development of advanced airborne instrumentation; and application of science to practical problems of the public and private sectors, including public health. The Branch Chief will direct the activities of a multidisciplinary staff of scientists, engineers, and technicians. The Branch Chief leads research in response to NASA's Earth Science, Life Science, Astrobiology, and Information Technology programs. The Branch Chief will interact with NASA program managers, other NASA Centers, with other government agencies, and with various public and private groups. The Chief is expected to maintain own research while articulating the Branch's program. The successful candidate will have a graduate-level degree and a strong research and management background in the area of ecosystem modeling, simulation, and analysis. *U.S. citizenship is required.* Please submit a letter of interest and résumé by July 5, 2000, to: **NASA Ames Research Center, MS 241-9, Moffett Field, CA 94035-1000 (Attention: Joy Murphy).** All respondents will be notified of the formal application procedures. *NASA Ames is an Equal Opportunity Employer.*

POSITIONS OPEN

FACULTY POSITIONS UNIVERSITY OF NEBRASKA MEDICAL CENTER Eppley Cancer Institute/ UNMC Eppley Cancer Center

Seeking outstanding faculty to conduct research in: basic cancer research involving any area of molecular, cellular, or structural biology (e.g., signal transduction, apoptosis, gene expression, chromatin structure, angiogenesis, metastasis); cancer etiology, prevention, and/or chemoprevention using state-of-the-art molecular, genetics-based, and/or genomics-based approaches in their studies; tumor or transplant immunology having research interests in basic or clinical aspects of immunology, with translational potential to cancer and/or transplantation; and NMR spectroscopy and study of macromolecular structure. Experience or interest in the structural biology of proteins and oligosaccharides is especially desired.

Faculty appointments are tenure-track with an academic rank at the level of **ASSISTANT PROFESSOR** or above. Eppley Institute is an academic unit of UNMC and a key component of the UNMC Eppley Cancer Center, a National Cancer Institute (NCI)-designated cancer center in a dynamic growth phase. The Institute and Center have established research excellence in basic and translational cancer research in hematologic malignancies and gastrointestinal cancers, while breast and prostate cancer research programs are being developed. Applicants should possess a Ph.D., M.D., or other Doctoral-level degree and appropriate postdoctoral training. Successful applicants will be expected to develop extramurally funded laboratory research programs, collaborate with other faculty, and participate in the cancer research and breast cancer research training programs funded by NCI and the U.S. Army. Applicants should indicate which position(s) they are applying for and forward curriculum vitae, brief summary of future research plans (two to three pages), and a minimum of three letters of reference to: **Dr. Kenneth H. Cowan, Director, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, 986805 Nebraska Medical Center, Omaha, NE 68298-6805.** See website: <http://www.unmc.edu/Eppley/> for more information. *UNMC is an Equal Opportunity Employer.*

The College of Veterinary Medicine, University of Minnesota, is seeking an outstanding individual to fill the position of **DIRECTOR** of the University's Center for Animal Health and Food Safety. This will be a 12-month, 100% time annually renewable administrative appointment. The individual will also hold a faculty appointment in one of the academic departments of the College; rank and appointment type will be dependent on qualifications and experience consistent with collegiate and University policy. The Center has been newly created based on substantial continuing funding from the state of Minnesota and is dedicated to improving the safety of food from animals. The successful candidate will have the challenge of assembling a team of people (existing and new faculty with the College and greater University and collaborators from the private and government sectors) who will have a significant impact on safety and wholesomeness of food from animals. The Director will have budget authority for the Center with the advice of an advisory committee and will report to the Dean of the College. Please see complete position description at website: www.cvm.umn.edu. Applicants must submit a cover letter outlining qualifications and vision for the position; curriculum vitae; and names, addresses, and telephone numbers of three professional references. Applications will be reviewed beginning September 1, 2000, and continuing until the position is filled. Please send application materials to: **Dr. John Fetrow, Search Committee Chair, College of Veterinary Medicine, University of Minnesota, 1365 Gortner Avenue, St. Paul, MN 55108.** Inquiries are encouraged by contacting Dr. Fetrow at: e-mail: fetrow001@tc.umn.edu; Telephone: 612-625-3776.

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

NATIONAL CANCER INSTITUTE

THE NATIONAL CANCER
INSTITUTE IS AN EQUAL
OPPORTUNITY EMPLOYER.

Be an NCI Cancer Prevention Fellow

THE NATIONAL CANCER INSTITUTE (NCI) sponsors the Cancer Prevention Fellowship Program (CPFP). Its purpose is to train individuals from a multiplicity of health and biomedical science disciplines in the field of cancer prevention and control.

What will I get out of the program?

- Master of Public Health degree
- NCI Summer Curriculum in Cancer Prevention
- Mentored research at the NCI
- Brief field assignments at other institutions

Research opportunities include chemoprevention, clinical epidemiology, diet, nutrition and other lifestyle-factor studies, evidence-based decisionmaking, intervention studies, outcomes research, special populations, screening and early detection (including genetic and other biomarkers), smoking

cessation, social and behavioral research, statistical and epidemiological methodology, and translational research.

Am I eligible?

You must have a doctorate degree (M.D., D.D.S., D.O., Ph.D. or equivalent) from a U.S., territorial or Canadian institution. Foreign medical graduates must have current USMLE or ECFMG certification.

You must also be either a citizen or resident alien of the U.S. eligible for citizenship within 4 years.

How long is the program?

Fellows are accepted for up to 5 years of training beginning in July.

When are applications due?

Applications are due September 1, 2000 for entry into the program July 1, 2001.

How do I apply?

To receive a catalog*, contact:

Douglas L. Weed, M.D., M.P.H., Ph.D.
Director

Cancer Prevention Fellowship
Program

National Cancer Institute
Executive Plaza South, Suite T-41
6130 Executive Blvd MSC 7105
Bethesda MD 20892-7105

*Please provide home address and where you heard about the program.

Further inquiries:

Mrs. Barbara Redding

☎ (301) 496-8640

Fax (301) 402-4863

E-mail br24v@nih.gov

Visit our Web site at:

<http://dcp.nci.nih.gov/pob>



DUNEDIN NEW ZEALAND

DEPARTMENT OF CHEMISTRY

Senior Research Fellow (Fixed-Term) (Electroluminescent Polymer Materials)

(AG00/22SC)

Applications are invited for a Senior Research Fellow position in electroluminescent Polymer Materials in the Department of Chemistry. Applicants should have demonstrated experience in the synthesis of these types of polymers and characterisation of their optical properties.

This position is funded by the New Emerging Research Fund (NERF) and is for two years in the first instance with the expectation of funding for a further period.

The salary range for a Senior Research Fellow is NZ\$58,500 to NZ\$68,500 per annum. Appointment will be made at an appropriate step in these ranges depending on qualifications and experience. Relocation expenses will be provided under the University's Relocation Policy.

Specific enquiries may be directed to Dr Keith Gordon, or Professor Brian Robinson, broninson@alkali.otago.ac.nz, Fax 64 3 479 7906.

Reference Number: AG00/22SC. Closing Date: 21 July 2000.

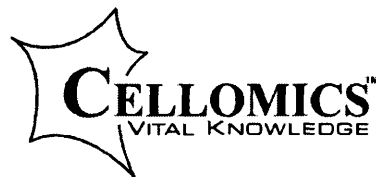
METHOD OF APPLICATION

Further details regarding this position, the University and the application procedure are available from the Deputy Director, Personnel Services, University of Otago, PO Box 56, Dunedin, New Zealand (Tel 64 3 479 8269, Fax 64 3 474 1607 or email shannon.oliver@stonebow.otago.ac.nz). Further information about the University of Otago can be found at our homepage at <http://www.otago.ac.nz>

Applicants should send two copies of their curriculum vitae together with the names, addresses and fax numbers of three referees, to the Deputy Director of Personnel Services by the specified closing date, quoting the appropriate reference number.

Equal opportunity in employment is University policy.

E tausoko ana Te Whare Wānanga o Otago i te kaupapa whakaorite whiwhinga mahi.



Cellomics, Inc. a high-growth biotech company, located in Pittsburgh, PA is committed to building innovative products to enhance the discovery of new pharmaceuticals, seeks to add the following professionals to our team.

Biology/Chemistry

CellChip Scientist (RK1)

Post Doctoral Research Associate (RK2)

Screen Automation Associate (JZ3)

Marketing

Field Application Specialist (CA based) (MN6)

Systems Service Engineer (MN5)

Bioinformatics

Data Visualization/GUI Developer (WB3)

Web Developer/Master (WB4)

Java Technical Lead (WB5)

Knowledge Mining Technical Lead (WB6)

Be a part of our success!!

For detailed information on skills and qualifications required and other positions available, please visit our website at www.cellomics.com. We offer competitive salary and complete benefit package. Please send resumes indicating

Job Code(s) to: Cellomics, Inc.,

635 William Pitt Way, Pittsburgh, PA 15238

FAX: (412)-826-3850. Email: hr@cellomics.com

POSITIONS OPEN

ASSOCIATE OR FULL PROFESSOR OF BIOCHEMISTRY University of Wisconsin-Madison

The Department of Biochemistry at the University of Wisconsin-Madison invites applications for a position at the Associate or Full Professor (tenured) level or nominations of individuals to fill this position. Applicants must be experienced in the structure and mechanism of action of bioactive small molecules, and their research interests should include Vitamin D. The University and Department provide an excellent environment for the continuation of an outstanding research program, and the laboratory of the appointed candidate will be housed in a new facility. In addition to continuing a vigorous independent research program, the successful candidate will be expected to participate in the undergraduate and graduate teaching programs of the Department. Applications, including curriculum vitae, list of publications, and a brief summary of accomplishments and direction of future research, should be sent to: **Professor H. F. DeLuca, Chair, Department of Biochemistry, University of Wisconsin-Madison, 433 Babcock Drive, Madison, WI 53706-1544.** Applications should be received by September 15, 2000, but the search will continue until a suitable applicant is identified. *The University of Wisconsin is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities. Under Wisconsin statutes, names, titles, and addresses of applicants may be subject to public release upon request.*

Wanted: **PARTNER/ASSOCIATE** to join a well-established Bay Area (Peninsula) venture capital management firm specializing in biotechnology/health care (including e-health) investments in early as well as late-stage companies. Candidates should have a Ph.D. in a relevant field and/or M.D. and a minimum of three years of experience in investment analysis/management or related industry experience (business development, project management, technology licensing, etc.). Candidates should be good team players with strong communication as well as analytical skills. Preclinical or clinical research experience in pharmaceutical, biotechnology, or medical device companies is desirable. Successful candidates will be given broad responsibilities ranging from performing technical and business due diligence to deal structuring and assisting the management of portfolio companies. Compensation will be commensurate with experience. Please send résumé and references to: **1200 New York Avenue, N.W., Room 914, Box 91, Washington, DC 20005.**

RESEARCH FELLOW

The Department of Diabetes, Endocrinology, and Metabolism at the Beckman Research Institute of the City of Hope has an opportunity for a Research Fellow. Position requires candidate with Ph.D. or equivalent postdoctoral experience working with laboratory animals, primarily rodents; a background in biology; and experience in laboratory techniques. Will supervise all methods used in the study as outlined by the protocol, including blood and urine testing. Submit curriculum vitae, summary of research experience, and contact information for three references to: **Ileana Abich, Needleman Building, Room 209, City of Hope, 1500 East Duarte Road, Duarte, CA 91010-3000. FAX: 626-930-5394; e-mail: iabich@coh.org.** *Equal Opportunity Employer.*

PH.D. AND B.S. MOLECULAR BIOLOGISTS

Gemini Technologies, Inc., a Cleveland-based start-up biotechnology company, is seeking highly motivated individuals to conduct research in developing antisense-based therapeutics. Interested candidates should have experience in cell culture and molecular biology techniques. To apply, send a résumé along with salary history to: **Gemini Technologies, Inc., 11000 Cedar Avenue, Suite 140, Cleveland, OH 44106-3052. FAX: 216-231-2931; e-mail: hagen@geminitech.com.** Visit Atlantic's home page for further information on Gemini at [website: www.atlan.com](http://www.atlan.com).

POSITIONS OPEN

ASSISTANT PROFESSOR MICROBIAL ECOLOGIST

Creighton University invites applicants for a tenure-track, nine-month appointment at the rank of Assistant Professor of Biology to begin in August 2001. Candidates should have completed a Ph.D. with a specialization in microbial ecology. Postdoctoral/teaching experience is desirable but not required. Position responsibilities include offering microbiology and microbial ecology courses with laboratories to upper-level undergraduate students, with additional courses to be developed according to the candidate's specialty. The successful candidate should possess a strong desire to teach in a liberal arts college. The opportunity exists to participate in the interdisciplinary Environmental Science degree program and collaborate with members of the Department of Medical Microbiology and Immunology. Mentoring of undergraduate research students is required. The individual must establish a research program that leads to peer-reviewed publications required for tenure and advancement. To apply, send (1) curriculum vitae; (2) statements on teaching philosophy, research interests, background training and special skills, and long-term goals; (3) documentation (if available) of teaching effectiveness; (4) undergraduate and graduate transcripts; and (5) three letters of reference to: **Microbial Ecology Search Committee Chair, Department of Biology, Creighton University, Omaha, NE 68178-0103.** Application review will begin on October 6, 2000, and will continue until the position is filled. *Creighton is a Jesuit Catholic institution that seeks qualified applicants from all backgrounds who believe they can contribute to the University's outstanding educational traditions. We encourage applications from women and minorities. Equal Opportunity Employer/Affirmative Action.*

TUMOR IMMUNOLOGY

The Laboratory of Transplantation Immunology, Department of Pathology/Microbiology, University of Nebraska Medical Center, Omaha, Nebraska, invites applications to fill a **POSTDOCTORAL/INSTRUCTOR POSITION.** This position will have responsibilities for projects on genetic tumor vaccines and adjuvants focused on dendritic cell mobilization either as monotherapy or in combination with stem cell therapy. Additional emphases are focused on formulations to heighten nonviral vector expression and prime-boost protocols in oncology and infectious disease. Experience in T cell biology, flow cytometry, immunoregulation, and molecular immunology is required.

Send current curriculum vitae, outline of research interests, and at least three references to: **James E. Talmadge, Ph.D., Director of Laboratory of Transplantation Immunology, Pathology/Microbiology, University of Nebraska Medical Center, 983135 Nebraska Medical Center, Omaha, NE 68198-3135.**

University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

Villanova University, Department of Biology, August 22, 2000: (1) a one-year **VISITING ASSISTANT PROFESSOR** to team-teach animal physiology and human anatomy and physiology and (2) a renewable **POSTDOCTORAL FELLOWSHIP** with half-time teaching (molecular/cellular methods and courses for nonmajors) and half-time research. Ph.D. required. Teaching experience expected for the faculty position. Send letter, graduate transcripts, curriculum vitae, statement of teaching philosophy (Assistant Professor) or research qualifications (Postdoctoral position), and have three reference letters sent to: **Dr. W. W. Baker, Department of Biology, Villanova University, Villanova, PA 19085. E-mail: Wilber.baker@villanova.edu.** Applications will be reviewed until the positions are filled. *A Roman Catholic University and Affirmative Action/Equal Employment Opportunity Employer, Villanova seeks a faculty committed to scholarship, service, and especially teaching, who can contribute to the University's mission and values.*

POSITIONS OPEN

MOLECULAR IMMUNOLOGIST/ MICROBIOLOGIST

The Department of Veterinary Pathology and the Animal Disease Diagnostic Laboratory at Purdue University are seeking a molecular immunologist or microbiologist for an **ASSISTANT/ASSOCIATE PROFESSOR** 12-month tenure-track faculty position. Qualified individuals must have a strong background in the application of molecular techniques to study host-pathogen interactions. A Ph.D., expertise in immunology or microbiology, and publications in high-quality peer-reviewed journals are required. Postdoctoral experience preferred. Responsibilities include development and application of PCR-based and other molecular diagnostic tests, development of an extramurally funded research program in the area of host-pathogen interactions, and involvement in teaching of courses in the professional and graduate curriculum. The Department of Veterinary Pathobiology has a strong research program in molecular virology and vaccine development, and the School of Veterinary Medicine is committed to infectious disease research as a primary research area. Collaborative research opportunities exist within the Department, the Animal Disease Diagnostic Laboratory, and other departments at Purdue University. A generous start-up package and technical support are available for this position. Salary is commensurate with qualifications and experience. Application review begins September 15, 2000. Submit letter with curriculum vitae, statement of research and career goals, and the names and addresses of three references to: **Dr. Harm HogenEsch, Molecular Immunologist/Microbiologist Search Committee, Department of Veterinary Pathobiology, Purdue University, 1243 VPTH, West Lafayette, IN 47907-1243.** *Purdue University is an Affirmative Action/Equal Opportunity Employer. Women and minority applicants are encouraged to apply.*

BIOLOGY ASSISTANT PROFESSORS

The Biology Department at the University of Southern Indiana invites applications for two one-year Assistant Professor positions beginning August 2000. Expected teaching assignment for Position One includes some combination of developmental biology, cell biology, endocrinology, and zoology. Expected teaching assignment for Position Two includes animal physiology and human anatomy and physiology. The successful applicants (Ph.D./A.B.D.) must be advocates of strong undergraduate teaching supported by involvement of students in their professional/research activities. The University is committed to excellence in teaching, scholarship, and professional activity and service to the University and community. Applications considered until positions filled. Please submit letter of application, curriculum vitae, and names/addresses/telephone numbers/e-mail addresses of three professional references to: **Dr. Jack Marr, Chair, Search Committee, Pott School of Science and Engineering Technology, University of Southern Indiana, 8600 University Boulevard, Evansville, IN 47712.**

University of Southern Indiana is an Affirmative Action/Equal Employment Opportunity Employer.

POSITION AVAILABLE to study xenogeneic pancreatic islet cell transplantation (NIH-funded). The successful candidate will have the opportunity to interact within an interdisciplinary group of scientists working at the interface of chemistry, biology, and bioengineering. (For related work, see *Annual Rev. Biomed. Eng.* 1:103-127, 1999; *J. Biomat. Sci. Polym. Ed.* 10:95-108, 1999). Applicants should have a Ph.D. degree with training in cell and molecular biology. Experience in islet cell transplantation and immunology desirable. Send curriculum vitae to: **Dr. Elliot L. Chaikof, M.D., Ph.D., Emory University School of Medicine, Department of Surgery, 1639 Pierce Drive, 5105 WMB, Atlanta, GA 30322. FAX: 404-727-3660; e-mail: echaiko@emory.edu.**

**Tenure-Track Investigator
Interventional Magnetic Resonance Program
National Heart, Lung and Blood Institute (NHLBI)
National Institute of Health (NIH)**

The Interventional Magnetic Resonance Program is a new initiative in the Division of Intramural Research, NHLBI. It is anticipated that this program will facilitate the development of MR technology as a clinical tool for interventional procedures. An emphasis will be placed on clinical research and clinical protocols. The program will include collaborations with other investigators interested in applications of MRI, vascular biology and cardiology.

The Interventional Magnetic Resonance Program is located in the Clinical Center (Building 10) on the NIH Campus in Bethesda, Maryland. A state-of-the-art MRI scanner will be co-located with a bi-plane fluoroscopy system for the development of novel interventional procedures. Compensation will be commensurate with education and experience. The successful candidate may be eligible for other incentive programs such as the loan repayment program.

All applications should include the following: a current curriculum vitae and bibliography, a one-page summary of research accomplishments and research plans, and the names, addresses, and telephone numbers of five professional references. Completed applications should be sent to:

**Ms. Lisa Nadzam, National Heart, Lung and Blood Institute
National Institutes of Health, Building 10, Room 8C103
Bethesda, Maryland 20892**

Applications must be received no later than **July 15, 2000**. Requests for additional information may be obtained by contacting Dr. Robert Balaban, the Search Committee chairman, at the above address.

Applications from women, minorities, and persons with disabilities are strongly encouraged. The NHLBI/NIH is a smoke-free workplace.

NIH is an Equal Opportunity Employer

Postdoctoral Positions in B-Cell Biology



**National Institute of Arthritis
and Musculoskeletal
and Skin Diseases**



Positions are currently available in the Autoimmunity Branch of NIAMS to study functional and molecular aspects of B-Cell biology and autoimmunity. The laboratory utilizes multi-parameter flow cytometry as well as functional and molecular approaches to explore the regulation of B-Cell function.

Candidates must have a Ph.D. or M.D. degree with course work/experience in immunology, signaling and/or molecular biology. Competitive salary and loan repayment programs available. Send your complete CV and arrange to have 3 letters of reference sent to:

**Dr. Peter E. Lipsky
c/o Scott Sigley, NIAMS, HRMB
Bldg. 31, Room 4C13
31 Center Drive, MSC 2350
Bethesda, MD 20892-2350
or email ss403p@nih.gov**

**Applications must be postmarked by 07-01-00
NIH is an Equal Opportunity Employer**

**Creating Tomorrow's
Technologies**

That's Corning Incorporated. Discovering what's next. Continually creating the innovations that affect change. Our Advanced Life Science division is seeking scientific professionals who want to help us change the world.

The Biochemistry Core Technology Group has several open positions for PhD level Biochemists, Molecular or Cell biologists, and Analytical Chemists with postdoctoral or industrial experience. A clear interest and proven ability in inventing novel materials, devices, and products is essential. Work projects are typically multidisciplinary team efforts requiring your ability to be a supportive team player.

Successful candidates will join a team of molecular & cell biologists, biochemists, analytical chemists and biomaterial scientists, working in exceptional research facilities that are located in the beautiful upstate New York area.

Senior Scientist - High Sensitivity Assays

This position requires a PhD in physical or analytical chemistry with post-doctoral experience in the development and evaluation of high-sensitivity labels such as quantum dots, up-converting phosphors, or 2-photon dyes for bioanalytical applications. The candidate will participate in the development of high sensitivity assays related to DNA, cell and protein arrays for Advanced Life Science products. Experience in the development of instrumentation and assay conditions for single molecule detection, the use of scanning probe microscopies, or other state-of-the art bioanalytical instrumentation would be helpful. Working knowledge in assay miniaturization and microfluidics for integrated detection systems is also expected. **Code #AD/Science Magazine/777**

Senior Scientist - Miniaturized Assay Systems

This position requires a PhD in physical or analytical chemistry with post-doctoral experience in the area of MEMS or micro-TAS. The successful candidate will take a leadership role in the development of assays and devices for miniaturized analysis systems. General biochemistry and analytical chemistry background in DNA, protein and whole cell assays, and experience in assay miniaturization and microfluidics are critical. **Code #AD/Science Magazine/993764**

Senior Scientist - Molecular Cell Biology

This position requires a PhD in Molecular and/or Cell Biology with post-doctoral or industrial experience in the development and use of functional whole cell assay systems with emphasis on HTS applications. In addition to experience in all aspects of traditional cell biology the candidate will have particular strength in molecular cell biology, signal transduction, and high sensitivity single cell assay systems. **Code #AD/Science Magazine/1542.**

Senior Scientist - Nucleic Acid Biochemistry

This position requires a PhD in Biochemistry with post-doctoral experience in nucleic acid biochemistry. The candidate will participate in the development of DNA based multiplex assays, such as high density microarrays and microplate based assays for HTS. Expertise in nucleic acid structure and related enzymology, and experience in DNA/RNA extraction, purification, reverse transcription, various enzymatic amplification schemes, fluorescent labeling, and hybridization is expected. Experience in the development of microarray based assays, including image analysis, data interpretation and statistical evaluation of results is highly desirable. **Code #Ad/Science Magazine/1543.**

To apply, visit our website: www.careers.corning.com or send your resume and cover letter, referencing position code to: Corning Incorporated, Recruiting, P.O. Box 1262, Findlay, OH 45840. Email: corning@aon-hros.com. Corning is an equal opportunity employer.



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POSITIONS OPEN

FULL-TIME LECTURER

A position is available in the Department of Chemistry at Washington University for a permanent full-time nontenure-track Lecturer to assist in the instruction of general chemistry. The successful candidate should have a Ph.D. in chemistry with a specialization in either physical, physical inorganic, or physical organic chemistry; postdoctoral experience in either instruction or research or both; and a past record of accomplishment in teaching as either a graduate teaching assistant or preferably as an instructor of chemistry lecture courses at the college level. Responsibilities will include presentation of recitation classes and help sessions, course administrative duties such as composing quizzes and test questions, training and assignment of teaching assistants, and grading. While the appointment is a nine-month academic-year position, the person will be expected to participate in raising funds for summer salary through grant writing with the objective of developing instructional methods for lecture and laboratory courses. Excellent benefits, a pleasant work environment among helpful and cooperative staff and faculty, opportunities for personal and professional development, and the chance to teach outstanding undergraduate students who possess a true interest in learning. Send curriculum vitae, a statement of career goals, and the names of three references who can provide recommendations concerning teaching skills by July 31, 2000, to:

Chemistry Lecturer Search Committee
Campus Box 1134
Department of Chemistry
Washington University
St. Louis, MO 63130

Washington University is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL SCIENTIST

The San Francisco Estuary Institute (SFEI) is seeking an Environmental Scientist to conduct research on the treatment of ships' ballast water to eliminate exotic organisms. This is a full-time position in the Institute's Biological Invasions Program, with salary starting at \$54,000 to \$60,000 depending on qualifications and experience. The candidate should have a strong background in methods of water/wastewater treatment or in laboratory work in plankton ecology including methods of culturing, identifying, and counting marine and freshwater plankton. More information on the position and the Institute is available at [website: www.sfei.org](http://www.sfei.org). To apply, send curriculum vitae, description of relevant work experience, one recent publication, contact information for three references, and information on when you could start work to: **San Francisco Estuary Institute, Attention: Ballast Treatment Scientist Position, 1325 South 46th Street, Richmond, CA 94804**. Review of applications will begin on July 28, 2000, and continue until the position is filled.

POSTDOCTORAL FELLOW, INSTRUCTOR, OR RESEARCH ASSISTANT PROFESSOR, Weis Center for Research: Multiple positions are available in **Dr. Janet D. Robishaw's** laboratory for highly motivated Ph.D. or M.D./Ph.D. holders to work on G protein-mediated signaling pathways that control cell growth and differentiation. These pathways will be studied in embryonic stem cell cultures and animal models. Level of appointment and salary will be commensurate with years of research experience. Special consideration will be given to applicants with experience in gene regulation, ribozyme, or gene "knockout" strategies; ES cell differentiation; and/or microarray analysis. The Weis Center for Research is located in a safe, family-oriented setting within three hours of Philadelphia, Baltimore, and New York. Send a description of your research interests, curriculum vitae, and three references to: **Janet D. Robishaw, Ph.D., Position # S-7869, c/o Julie Brosius, Weis Center for Research, Geisinger Clinic, Danville, PA 17822-2600**. Résumés accepted until positions are filled. *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



The Public Health Sciences Division at the Fred Hutchinson Cancer Research Center is recruiting a Board-certified Anatomical Pathologist with active laboratory research for a faculty position. We are seeking candidates with specialty experience in either prostate, gastrointestinal, or ovarian cancer and interest in joining strong interdisciplinary research teams in these areas. Candidates at **ASSISTANT, ASSOCIATE or FULL MEMBER** levels will be considered. The position offers the opportunity for participation in pathology shared resource development for solid tumor research. Interested individuals should forward their curriculum vitae including a research plan and the names of five references to: **Peggy L. Porter, M.D., Associate Member, Human Biology, Fred Hutchinson Cancer Research Center, CI-015, 1100 Fairview Avenue North, Seattle, WA 98109**. The closing date for applications is August 15, 2000. *The Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer and strongly encourages applications from female and minority individuals.*

FACULTY POSITION MOLECULAR PATHOGENESIS

Applications are invited for a tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** position in bacterial molecular pathogenesis. This position is part of a dynamic expansion program in the Department of Microbiology and Immunology. The University of Louisville offers a strong research environment and a commitment to increased excellence in research programs, including those in our Department. There are core facilities for DNA and protein analysis, including a robotic proteomics laboratory. Applicants should have a well-developed funded research program (Associate rank) or will be expected to establish and sustain a productive funded research program (Assistant rank). The successful candidate will bring strong teaching capability to our graduate and medical (or dental) education programs and will be expected to interact with Departmental faculty, develop collaborations with clinical faculty, and participate in relevant programs in one of the Centers of Excellence at the medical school. Information about the Departmental programs and existing faculty can be found on our [website: http://www.louisville.edu/medschool/microbiology/](http://www.louisville.edu/medschool/microbiology/). Please send complete curriculum vitae, a brief description of research interests, and arrange for four letters of reference to be sent to: **Dr. Udis N. Streips, Chair of Pathogenesis Search Committee, Department of Microbiology and Immunology, School of Medicine, University of Louisville, Health Sciences Center, Louisville, KY 40292**. *University of Louisville is an Equal Opportunity Employer.*

DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS Case Western Reserve University

Applications are invited for positions as **POSTDOCTORAL FELLOWS** for several projects in cardiovascular pulmonary research. Many opportunities exist with over 20 established faculty in an excellent environment with state-of-the-art facilities. Areas of research cover a broad spectrum ranging from signal transduction, molecular biology of membrane proteins, structural biology, channel regulation, cell motility, and systems-integrated physiology. Send curriculum vitae, a description of research accomplishments and future goals, and the names of three references to: **Administrative Manager, Department of Physiology and Biophysics, 10900 Euclid Avenue, Cleveland, OH 44106-4970**. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

INVESTIGATOR, SYNTHETIC CHEMISTRY SMITHKLINE BEECHAM PHARMACEUTICALS

SmithKline Beecham, an international producer of pharmaceuticals and consumer health care products, is seeking an individual with a background in process development and organic chemical research to serve as Investigator, Synthetic Chemistry, at its research and development facility in King of Prussia, Pennsylvania. Principal duties include conceiving, planning, and executing chemical development research involving the total synthesis and large-scale preparation of pharmacologically active complex organic molecules and developing procedures for large-scale processes which are safe, reliable, and economical; and resolving project-related chemical and process development problems including the formulation of viable synthetic routes.

Minimum requirements are a Ph.D. degree in organic chemistry and at least two years of experience in the job offered or two years of postdoctoral experience in synthetic organic chemistry research including experience in (1) process chemistry; (2) the use of enzymes both in the laboratory and in scale up to pilot plant scale (20-500 gallons); (3) use of chromatographic methods including FCC, TLC, and HPLC; (4) use of spectroscopic methods including one- and two-dimensional ¹H/¹³CFT-NMR, polarimetry, FT-IR, and MS; and (5) evaluation of the purity of complex organic compounds against reference standards using HPLC assay methodologies.

SmithKline Beecham is dedicated to an innovative workplace and supports you with careerlong opportunities and learning. We offer a competitive benefits and compensation package. For confidential consideration, please forward your résumé to: **SmithKline Beecham Pharmaceuticals, ad code: 00612K, 709 Swedeland Road, Mail Code: UW2820, King of Prussia, PA 19406-0939**. Indicating ad code is essential. Principals only; no agencies, please. *We are an Equal Opportunity Employer; Minorities/Females/Disabled/Veterans.*

POSTDOCTORAL/ASSOCIATE RESEARCH SCIENTIST Yale University School of Medicine

Applications are invited for two positions in cancer research; one position is to conduct research on anticancer multidrug resistance using gene knockout animals and overexpressing cell lines, and the other is to measure drug-activating enzymes in transfected overexpressing cell lines and repair of DNA lesions. Experience in molecular and cellular biology, biochemistry, drug transport, and/or murine animal models desirable. Applicants must have a Ph.D. or M.D./Ph.D. Send curriculum vitae and bibliography, a brief description of research experience, and the names of three references to: **Dr. Alan C. Sartorelli, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520-8066**. *Yale University is an Equal Opportunity/Affirmative Action Employer.*

CYTOSKELETAL SIGNALING AND PROTEIN PHOSPHORYLATION

RESEARCH ASSOCIATE or POSTDOCTORAL POSITION available immediately to participate in biochemical and cellular studies on protein kinases and phosphatases that regulate nonmuscle myosin function in *Dictyostelium*. The project will involve biochemical studies with myosin phosphatases and gene expression/knockout approaches to study regulation of these enzymes during chemotactic responses. Individuals with experience in protein biochemistry, signaling pathways, and/or molecular biology are particularly encouraged to apply. Interested individuals should supply curriculum vitae and names of three references to: **Tom Egelhoff, Department of Physiology and Biophysics, Case Western Reserve School of Medicine, Cleveland, OH 44106-4970**. FAX: 216-368-1693; e-mail: tte@po.cwru.edu.

BIO-TECHNOLOGY

Life Technologies, Inc. is the worldwide leader in the manufacturing of cell culture products. We have been honored as one of the "Top 100 Companies to Work For" by Working Mother magazine as well as Fortune magazine. We have the following immediate opportunity available at our Grand Island facility:

R&D Scientist Virologist/Vaccinologist

Scientist will be responsible for assignments in biological and cell culture product/process development that includes: planning and execution of laboratory experiments, generation of product applications, scientific presentations, customer support and preparation of technical documentation. Qualified candidates must possess MS or Ph.D. degree in life sciences and industrial experience in one or more of the following areas: cell culture, cell biology, molecular biology and immunology. Specific knowledge of virology, molecular virology, virus production, adjuvants and vaccine production is required. Experience in biotechnological manufacturing is helpful. Supervisory skills are desired.

LTI offers a competitive salary and flexible benefits program that includes a company-matched 401(k). Mail or fax resumes to: Life Technologies, Inc., Attn: Human Resources, PO Box 68, Grand Island, NY 14072. Fax: (716) 774-6756. No Phone Calls Please. EOE M/F/H/V. LTI supports a drug-free workplace.

For more detailed information about these and other opportunities please refer to www.lifetech.com.

LIFE TECHNOLOGIES
www.lifetech.com

Molecular Immunologist

The academic Department of Medicine wishes to recruit a full-time molecular immunologist to supervise the Platelet Immunology Research Group based at McMaster. The successful candidate will have a PhD in a relevant area and a proven track record of research in Molecular Immunology and/or Protein Chemistry. The Platelet Immunology Research Group at McMaster is composed of scientists and physicians who collaboratively study autoimmune platelet disorders, other immune thrombocytopenias, and transfusion medicine issues as they relate to patient care.

This is a full-time, University supported scientist position in a basic and clinical laboratory and provides a competitive salary and benefit package. Apply directly by **July 7, 2000**, to: **Dr. J. Kelton, Professor and Chair of Medicine, McMaster University, HSC-3W10, 1200 Main Street West, Hamilton, Ontario L8N 3Z5 Fax: (905) 521-4972**

We thank all applicants in advance and advise that only those to be interviewed will be contacted by telephone.

In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada.

McMaster University is committed to employment equity and encourages applications from all qualified candidates, including aboriginal peoples, persons with disabilities, members of visible minorities, and women.

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ING BARINGS

ING Barings is the corporate and investment banking arm of ING Group. With a network of eighty-nine offices in forty-nine countries we are able to provide an extensive range of financial products and services to corporate and institutional clients. A Research Analyst in the Specialty Pharmaceutical Sector is looking for a highly motivated associate. Eligible candidates must have excellent writing skills, experience creating and maintaining financial models, and strong people skills for contact with clients and companies. Proficiency in Excel is required. Associate will work with analyst to provide in-depth fundamental research and opinion on companies under coverage in the analyst's sector as well as research potential additions to coverage. Associate is responsible for keeping all spreadsheets and files current; staying in touch with industry professionals and management at each company; answering inquiries from sales and banking and broadly responsible for supporting the senior analyst in all possible ways.

Please send you resume and qualifications to:

Lia Montenegro

Fax: 212-409-5228

E-mail: Lia.Montenegro@ing-barings.com

THE ALLIANCE FOR CELLULAR SIGNALING

A MULTIDISCIPLINARY, MULTI-INSTITUTIONAL COLLABORATION TO UNDERSTAND FULLY HOW CELLS INTERPRET SIGNALS IN A CONTEXT-DEPENDENT MANNER

The Alliance for Cellular Signaling will be launched in September 2000. The organization of this Alliance has been catalyzed by an announcement by the National Institute of General Medical Sciences, NIH, of plans to fund large-scale collaborative projects to "enable the solution of major problems in biomedical research and to facilitate the next evolutionary stage of integrative biomedical science." The Alliance will identify proteins that comprise various signaling systems, quantify information flow through these systems *in vivo*, and reduce detailed data into a set of interacting theoretical models that describe cellular signaling.

Alfred G. Gilman will chair the Steering Committee that will oversee the Alliance. Experimental efforts will be focused on two mouse cells, the B lymphocyte and the cardiac myocyte, whose differentiated phenotypes are closely regulated by extracellular signals. Cell System Committees will direct the research of dedicated Alliance Laboratories.

Seven Alliance Laboratories will be located at UT Southwestern (Dallas), UC San Francisco, UC San Diego, Caltech (Pasadena), and Stanford (Palo Alto). The 50 Participating Alliance Investigators are located at 20 Universities and Research Institutes in the US, UK, and Canada.

The Alliance seeks members to act as scientific collaborators. Collaborators will act as consultants and create **molecule pages**. These pages, which will be published with attribution via the Internet, will summarize published data on individual signaling proteins; they will also form the core elements of a signaling database that will be disseminated via the Internet and linked to evolving maps of cellular signaling modules. **The Alliance also seeks Research Assistants and Ph.D. Research Scientists** as employees in its laboratories.

For information about Alliance plans and goals, membership, and employment:
<http://afcs.swmed.edu>

POSITIONS OPEN

RESEARCH POSITIONS DEPARTMENT OF BIOLOGY The Pennsylvania State University

Several positions are open to conduct research on the translational control of gene expression in higher eukaryotes including mice, *Drosophila*, and humans in the laboratory of **D. R. Cavener** at Penn State (see website: <http://www.bio.psu.edu/People/Faculty/Cavener/>). **RESEARCH ASSOCIATE**: Conduct research, design experiments, supervise and train other laboratory personnel, and write manuscripts and grant proposals. Applicants should have three to six years of postdoctoral research training and a strong background in molecular and cell biology. Research experience in one or more of the following areas is desirable: cell culture, transgenic analysis of *Drosophila* or mice, immunocytochemistry, and protein biochemistry. Candidates should have a strong record of research accomplishment. Competitive salary commensurate with research experience and accomplishments. **POSTDOCTORAL FELLOW**: Research experience in cell and molecular biology required. A strong background in genetics and biochemistry is highly desirable. **RESEARCH TECHNICIAN/PROJECT ASSISTANT**: Research experience in cell and molecular biology required. Background in mouse transgenic analysis, cell culture, and biochemistry highly desirable. **GRANT ADMINISTRATIVE ASSISTANT** in molecular/cell biology: Write and prepare grant proposals, research literature, and act as liaison with other university personnel to collaborate on grant preparation and submissions. Candidates should have a strong background in genetics, cell biology, and molecular biology; excellent writing skills; and the ability to work effectively with other people. **RESEARCH TECHNOLOGIST/TECHNICIAN**: Perform genetic crosses with *Drosophila* and perform various developmental, molecular, and biochemical experiments on *Drosophila*. Interested candidates for all positions should e-mail curriculum vitae and names of three references to: drc9@psu.edu. Applications accepted until positions are filled. *Affirmative Action/Equal Opportunity Employer*.

POSTDOCTORAL POSITION POLYMER CHEMIST

A position is available immediately in the Ophthalmology Department, Tulane University Medical School, for a Polymer Chemist to work in drug delivery and biomaterials. The candidate should have a Ph.D. and three years of experience; salary commensurate with experience and training. Submit letter of application, curriculum vitae, and three letters of recommendation to: **Delmar R. Caldwell, M.D., Chairman, Tulane Ophthalmology SL-69, 1430 Tulane Avenue, New Orleans, LA 70112-2699. E-mail: mchiass1@tulane.edu**. Applications will be accepted until the position is filled. *Tulane University Medical Center is an Equal Opportunity Employer*.

POSTDOCTORAL POSITIONS: Several Postdoctoral positions are available to join a dynamic group studying the molecular basis of human cancer. Particular interests are in the roles of protein/lipid phosphatases and forkhead-related transcription factors in tumor progression and normal development. Strong training required in molecular biology/biochemistry; experience with animal models a plus. Send curriculum vitae and names of three references to: **Dr. Webster K. Cavenee, Ludwig Institute for Cancer Research, University of California-San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0660. E-mail: wcavenee@ucsd.edu**.

POSTDOCTORAL POSITION available immediately to study cytokine signaling and gene regulation in T helper cells. Experience in molecular biology and signaling transduction is desired. Please send curriculum vitae and three references to:

Hua Huang, M.D., Ph.D.
Department of Cell Biology
Loyola University Medical Center
Maywood, IL 60153
E-mail: hhuang@lumc.edu

POSITIONS OPEN



The Agricultural Research Service, Henry A. Wallace-Beltsville Agricultural Research Center, Vegetable Laboratory, in Beltsville, Maryland, is seeking a permanent, full-time **RESEARCH PLANT PATHOLOGIST**. Salary: GS-12, \$51,204 to \$66,564 per annum; GS-13, \$60,890 to \$79,155 per annum plus benefits. *Candidates must be U.S. citizens.* Research focuses on designing and creating disease-resistant potato germplasm and developing the basic and applied knowledge needed to detect, identify, evaluate, and characterize bacterial, fungal, and viral pathogens of potato and other vegetables. Candidates must request a copy of the vacancy announcement ARS-XOE-4018 by either calling **Telephone: 301-504-1484** or by copying the full text announcement from website: www.ars.usda.gov in order to respond/submit specific information outlined in the announcement. Applications must be postmarked by August 11, 2000. *USDA/ARS is an Equal Opportunity Provider and Employer.*

MUCOSAL IMMUNOLOGY/ INFECTIOUS DISEASES

The University of Nebraska Medical Center, Department of Pathology and Microbiology, has an NIH-funded **POSTDOCTORAL FELLOWSHIP** available to study aspects of cell-mediated immune responses in the gastrointestinal tract. Emphasis will be on T cell-mediated immunity to bacteria and viruses to include innate and adaptive immune responses. Both CD4 and CF8 cell responses will be addressed with cellular and molecular techniques. Applicants should have a strong background in pathogenic microbiology, immunology, or inflammation. Please send résumé to: **Thomas R. Jerrells, Ph.D., University of Nebraska Medical Center, 983135 Nebraska Medical Center, Omaha, NE 68198-3135.**

University of Nebraska Medical Center is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

POSTDOCTORAL POSITION/ IMMUNOBIOLOGY Yale University School of Medicine

Ph.D. position(s) to study human T cell recognition of human and porcine endothelial cells. Studies will focus on both direct and indirect recognition of MHC and costimulatory pathways. Analysis of *in vitro* function will be complemented by studies of *in vivo* model systems using synthetic microvessels and vessel and skin grafts into Hu/SCID mice to study lymphocyte recruitment and vascular remodeling. Separate experiments will address T cell recognition, activation and signaling in murine antigen-specific T cell clones, and the role of Ly-6 antigens in hematopoietic differentiation. Send curriculum vitae, research interests, and list of three sources for reference letters to: **Dr. Al Bothwell, Section of Immunobiology, P.O. Box 208011, Yale Medical School, 310 Cedar Street, New Haven, CT 06520-8011. FAX: 203-737-1765; e-mail: alfred.bothwell@yale.edu**. *Affirmative Action/Equal Opportunity Employer.*

Two **POSTDOCTORAL POSITIONS** are available in the Boyer Center for Molecular Medicine at Yale University to study immune cell/endothelial cell interactions and adhesion biology in the context of allograft and xenograft rejection. Specific areas include leukocyte integrin regulation and function, T cell costimulation, endothelial MHC gene regulation, and NK cell biology. Candidates with a strong background in molecular immunology are encouraged to apply. Interested candidates should send curriculum vitae and direct inquiries to: **Jeffrey R. Bender, M.D., Boyer Center for Molecular Medicine, 454C, P.O. Box 9812, 295 Congress Avenue, New Haven, CT 06536-0812. E-mail: jeffrey.bender@yale.edu**.

POSITIONS OPEN

POSTDOCTORAL POSITIONS IN NEUROSCIENCE

Two Postdoctoral positions are available at Yale University School of Medicine. The first focuses on the early development and differentiation of dendritic processes. Of interest is the role of afferent input as well as intrinsic trophic factors that may influence dendritic phenotype. The second position focuses on mechanisms in the adult that may promote continuing axon growth and the specificity with which new synapses may be formed, as seen in the olfactory system and/or the regeneration that may occur following spinal cord injury. Both positions include the use of tissue culture, confocal microscopy, and molecular biology. Applicants with skills in one or more of these areas are preferred.

Send a brief description of research experience and interests, your curriculum vitae, and the names and telephone numbers or e-mail addresses of three references to:

Charles A. Greer, Ph.D.
Department of Neurosurgery and
Section of Neurobiology
Yale University School of Medicine
333 Cedar Street
P.O. Box 208082
New Haven, CT 06520-8082
E-mail: charles.greer@yale.edu

Yale University is an Affirmative Action/Equal Opportunity Employer.

A structural biology **POSTDOCTORAL POSITION** is available immediately in the laboratory of molecular biology, NIDDK, NIH, to apply X-ray crystallography to biological systems involved in gene transfer with potential applications to gene therapy. The laboratory provides an interdisciplinary environment with access to state-of-the-art facilities. Candidates must have obtained a Ph.D. degree within the past five years and have experience in a field such as biophysical chemistry, biochemistry, or molecular biology with a keen interest in macromolecular structures and structural methods. Please send a cover letter, curriculum vitae, and the names and addresses of three references to: **Dr. Fred Dyda, LMB, NIDDK, Building 5/Room 334, 5 Center Drive, MSC 0560, Bethesda, MD 20892-0560. E-mail: dyda@ulti.nidk.nih.gov**. *NIH is an Equal Opportunity Employer. NIH is dedicated to building a diverse community in its hiring and employment practices.*

FACULTY POSITIONS

Tenure-track faculty positions are available in the Physiology Division of the Department of Environmental Health Sciences at the Johns Hopkins University. Candidates should have research interests or experience in lung health and disease and the potential interactions with environmental pollutants. The Department of Environmental Health Sciences is a multidisciplinary department designed to investigate how intrinsic susceptibility interacts with environmental alterations. Interested candidates should send a letter and curriculum vitae to: **EHS Search Committee, e-mail: newfac@jhsph.edu**. Mail to: **Chair, Physiology Search Committee, Room W7006, Department of Environmental Health Sciences, The Johns Hopkins School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, MD 21205.** *Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately to study the gene regulation of bone development and the molecular genetics of bone and soft tissue tumors. We are seeking a creative and highly motivated individual with a strong background in molecular cell biology and cancer genetics. Experience in characterizing animal models is a plus. Interested individuals should provide their curriculum vitae and three letters of recommendation to: **T.-C. He, M.D., Ph.D., Molecular Oncology Laboratory, Department of Surgery, The University of Chicago Medical Center, 5841 South Maryland Avenue, MC 3079, Room J-611, Chicago, IL 60637. E-mail: tche@surgery.bsd.uchicago.edu**.

PH.D. F/M (FULL TIME)

AMC – IATEC

AMC – IATEC is a not-for-profit academic research organisation of the Academic Medical Center, University of Amsterdam that is strongly linked to the Department of Virology. The organisation is committed to advancing the global treatment and prevention of viral disorders through scientific excellence in innovative clinical research while adhering to the highest ethical standards.

THE FOLLOWING PROJECTS ARE AVAILABLE FOR PH.D. STUDENTS:

1. "Mitochondrial toxicity of nucleoside analogues."

Long-term treatment of HIV-infected patients with nucleoside analogues such as AZT, ddC, ddI, d4T, and 3TC has been shown to induce mitochondrial dysfunction, sometimes with a fatal outcome. Because the severity and presentation of the symptoms varies between patients, it is likely that there is a genetic predisposition to these drug-induced mitochondrial toxicities. Determination of the gene or genes involved in this predisposition, encoded either by the nuclear genome or by the mitochondrial genome itself, could then influence the selection of anti-retroviral therapy in patients. Vacancy number: 000082

2. "Dynamics of lamivudine resistance of HBV among HIV infected individuals."

Many HIV infected individuals are co-infected with HBV. This is the case among both homosexual men and IV drug users. Lamivudine has been shown to block the replication of both HIV and HBV. Resistance has been tightly linked to particular mutations in the polymerases of both viruses. We are planning to study the dynamics of lamivudine resistance, genotypical as well as phenotypical, and to develop new tests where needed. Vacancy number: 000083

3. "Determinants of effectively blocking mother-to-child transmission by anti-retroviral drugs."

Mother-to-child transmission of HIV is the major source of pediatric HIV-1 infection in developing countries. Anti-retroviral interventions may reduce this transmission considerably, but are affected by cost, compliance, the decision to breastfeed, the development of viral drug resistance and other factors. This project will focus on the

development of viral resistance to anti-retroviral agents, on the viral load in various body fluids, and on the influence of HIV-1 subtypes in relation to prevention of transmission. Vacancy number: 000084

You are a graduate in Biomedical Sciences, you have good communication skills and are fluent in English (both written and spoken). You will be appointed for a period of four years, which will lead to a Ph.D. thesis. Your salary will be in line with the salaries for Ph.D. students: in the first year you can expect to earn f 3.095,- gross per month. By the final year your gross salary should be f 4.279,- per month.

For further information you can contact Prof. Dr. J.M.A. Lange, Chief Scientific Advisor (telephone +31 20-566 3349, e-mail: j.lange@amc.uva.nl) or Dr. M. Charles, Chief Operating Officer (e-mail: m.charles@amc.uva.nl).

General employment conditions of AMC – IATEC apply to all above referenced positions. Applicants are requested to send their curriculum vitae together with a letter stating their motivation and the vacancy number within 10 days to:

Mrs. E.F. Rosenberg, Manager Human Resources
AMC-IATEC B.V., Room J1-113
P.O. Box 22660,
1100 DD Amsterdam
The Netherlands



AMC - IATEC B.V.
INTERNATIONAL ANTIVIRAL
THERAPY EVALUATION CENTER

POSITIONS OPEN

PHYSIOLOGIST

The Departments of Biophysics and Physiology at Boston University School of Medicine seek an experienced teacher and scientist to join our faculty at the **ASSOCIATE** or **ASSISTANT PROFESSOR** level. The appropriate individual is expected to have considerable experience in the teaching of human physiology at the medical or graduate level. The primary responsibility will be to assist in the teaching of a team-taught, organ system-based medical physiology course offered to our first-year medical class. The course is taught in a lecture and laboratory/discussion format, which runs from February to June and consists of four one-half sessions per week. Additional teaching assignments in dental physiology and a two-semester undergraduate course, which is equivalent to the medical course, may also be necessary. Applications, including a letter with a brief description of teaching experience and philosophy; curriculum vitae, and the names of three references, should be forwarded to: **Dr. Paul O'Bryan, Department of Physiology, Boston University School of Medicine, Boston, MA 02118.**

CLINICAL PHARMACOLOGY

The newly formed Division of Clinical Pharmacology in the Department of Medicine of New York University School of Medicine invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Candidates should have an M.D. or M.D./Ph.D. We are particularly interested in candidates with training and interest in molecular pharmacologic research in the areas of nephrology, infectious diseases, cardiology, and gastroenterology, although other areas of interest will also be considered. Appropriate start-up support is available. Areas of active research in the Division of Clinical Pharmacology include pharmacologic approaches to the treatment and prevention of atherosclerosis and inflammation and the promotion of wound healing. Please send curriculum vitae, research interest statement, and names of three references to:

Bruce Cronstein, M.D.
Director, Division of Clinical Pharmacology
New York University School of Medicine
550 First Avenue
New York, NY 10016

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for studies on eicosanoid biosynthetic enzymes. Biochemistry and/or molecular biology training required; experience with recombinant protein expression and characterization helpful. Send curriculum vitae and contact information for three references to: **Dr. Richard Kulmacz, Internal Medicine/Hematology, University of Texas Health Science Center at Houston, 6431 Fannin Street, Houston, TX 77030. E-mail: richard.j.kulmacz@uth.tmc.edu.**

POSTDOCTORAL POSITION IN MOLECULAR IMMUNOLOGY

Postdoctoral positions are available to study the molecular control of antigen receptor gene rearrangement and hematolymphoid development. Candidates with M.D. and/or Ph.D. should send curriculum vitae and three letters of recommendation to: **Dr. Ferenc Livák, Department of Microbiology and Immunology, University of Maryland School of Medicine, 655 West Baltimore Street, BRB 13-017, Baltimore, MD 21201. Telephone: 410-706-0747; e-mail: Almassy@rocketmail.com; website: <http://www.som1.umaryland.edu/microbiology/index.html>.**

POSITIONS OPEN

BIOINFORMATICIST (GENETICIST/MOLECULAR BIOLOGIST)

The U.S. Department of Agriculture (USDA), Agricultural Research Service, Plant Genetics Research Unit in Columbia, Missouri seeks a Bioinformaticist, GS-11/12/13; salary range \$41,834 to \$77,507 per annum (see Announcement Number ARS-XOW-0339 at website: <http://www.ars.usda.gov/afm/hrd/resjobs/index.html>). Comprehensive benefits package includes paid annual and sick leave, life insurance, health insurance, and a savings and an investment plan in addition to a federal retirement plan. *U.S. citizenship is required.* Objectives for this newly funded project are to (1) develop, enhance, and refine MaizeDB and associated software by using advanced concepts of automation and information processing display, control, and transfer; (2) accelerate genomic map construction and data analysis, integrate genomic maps, develop map representations, and automate these activities; (3) develop and apply software systems for genetic analyses and representation of quantitative traits; and (4) develop methods for and analyze and manipulate data associated with functionality of maize genes. Correlate phenotypes and traits with genes for defining the genetic and biochemical basis of agronomic traits. Cooperative efforts are expected with researchers from the University of Missouri and other ARS researchers. The successful applicant may be considered for adjunct professorial appointment in an appropriate Department at the University of Missouri. Basic requirements: Geneticist (Plants)—a degree in genetics or one of the basic biological sciences or computer sciences that includes at least nine semester hours in genetics; Molecular Biologist—degree in biological sciences, agriculture, natural resource management, chemistry, or related disciplines appropriate to the position. In addition to the basic education requirement, applicants must have specialized experience for GS-11: Master's or equivalent graduate degree in a field of study directly related to the position or one year of specialized experience equivalent to at least the next lower grade level. For GS-12: a Ph.D. or equivalent Doctoral degree or one year of specialized experience equivalent to at least a GS-11. For GS-13: one year of specialized experience equivalent to at least a GS-12. (Specialized experience at all levels is experience having worked with and having acquired a broad knowledge of the principles, mechanisms, and techniques used in the study of genetics, molecular genetics, molecular biology, biochemistry, and breeding; and in-depth knowledge of key, current-generation programming and relational databases (Sybase), including C/C++ and Web-based Java.) For information on the research program and/or position, contact: **Dr. L. L. Darrah, Research Leader; Telephone: 573-882-2349; e-mail: DarrahL@missouri.edu.** For general information on application procedures and forms, contact: **The Columbia Administrative Officer, J. L. Fernandez; Telephone: 573-875-5293; e-mail: FernandezJ@missouri.edu.** Applications must be postmarked by July 19, 2000. *USDA is an Equal Opportunity Provider and Employer.*

POSTDOCTORAL POSITION is available to study structural basis of autophagy (Cell 98:651, 1999) and protein-nucleic acid interactions using protein chemistry and X-ray crystallography. Candidates with a strong background in biochemistry and/or molecular biology are preferred. Send curriculum vitae and three references to: **Dr. Hwai-Chen Guo, Department of Biophysics, Boston University School of Medicine, Boston, MA 02118. FAX: 617-638-4041; e-mail: hguo@bu.edu; website: www.bumc.bu.edu/biophysics.**

A **POSTDOCTORAL POSITION** is available to study molecular mechanisms for drugs of abuse. Experience in cell culture and stem cell is preferred. Send curriculum vitae and names/addresses of three references to: **Dr. John Wang, Division of Pharmacology, School of Pharmacy, University of Missouri-Kansas City, 2411 Holmes Street, Kansas City, MO 64108. FAX: 816-235-1776; e-mail: wangjq@umkc.edu.** *Equal Opportunity Employer.*

POSITIONS OPEN

POSTDOCTORAL POSITIONS COLLEGE OF NATURAL AND SOCIAL SCIENCES

California State University, Los Angeles

Postdoctoral positions are available in NIGMS-funded laboratories within the MBRS-SCORE program at California State University, Los Angeles. Located only five miles from downtown Los Angeles, the College of Natural and Social Sciences houses a diverse faculty with active research programs in biology, microbiology, chemistry, biochemistry, physics, and psychology. Cooperative programs with nearby research institutions provide additional opportunities for scientific collaborations. The positions offer a stimulating research environment with an established team of investigators and state-of-the-art equipment. Further information is available at website: <http://nss.calstatela.edu>. Participating faculty include **Sonsoles de Lacalle** (hormone action in adult brain), **Phillip S. LaPolt** (mechanisms regulating ovarian and neuroendocrine functions), **Nancy L. McQueen** (pathogenesis of Sendai virus), **Jamil Momand** (effect of redox changes on DNA binding proteins), **Jean Pinney** (developmental psychology), **Mathias Selke** (oxygen activation by transition metals in enzymatic processes), **Linda M. Tunstad** (synthesis and physical studies of organic "container" molecules), and **Feimeng Zhou** (heterogeneous DNA sensor development and protein electron transfer reactions). Qualified applicants holding the Ph.D., M.D., or D.V.M. degrees should send statement of research interests, curriculum vitae, and contact information of three references to the attention of one of the investigators named above at: **MBRS Program, Department of Chemistry and Biochemistry, California State University Los Angeles, 5151 State University Drive, Los Angeles, CA 90032-8202.** Salary and benefits commensurate with experience. *Equal Opportunity Employer.*

FACULTY POSITIONS: virology/bacterial pathogenesis. The Department of Microbiology at the University of Texas Southwestern Medical Center is seeking new faculty (tenure track) at all levels. Faculty will be expected to develop and/or maintain front-rank, competitive, independent research programs in their chosen fields and contribute to the teaching of medical and graduate students. Attractive recruitment and/or start-up packages are available. For outstanding new **ASSISTANT PROFESSORS**, an Endowed Scholars Program offers a competitive salary, new laboratory space in an attractive and dynamic research environment, and start-up funds of \$600,000 over a four-year period; candidates should have a Ph.D. and/or M.D. degree with at least two years of postdoctoral experience and an exceptional publication record. Some preference may be given to virology candidates with interests in STDs (e.g., HSV, CMV, HPV) but all outstanding candidates are encouraged to apply. For bacterial pathogenesis, areas of particular interest include STDs, emerging/reemerging pathogens, cellular microbiology, and opportunistic infections. Established investigators should forward current curriculum vitae and a cover letter; junior candidates should forward curriculum vitae, three letters of recommendation, two or three representative publications, and a brief summary of future research to: **Dr. Michael V. Norgard, Chairman, Department of Microbiology, University of Texas Southwestern Medical Center, 6000 Harry Hines Boulevard, Dallas, TX 75235-9048. FAX: 214-648-5905.** *University of Texas Southwestern is an Equal Opportunity University.*

POSTDOCTORAL: University of Miami. Two NIH-funded Postdoctoral Fellow positions available at the University of Miami to study the role of mitochondrial dysfunction in neurological diseases. For more details, see website: <http://chroma.med.miami.edu/cellbio/Morales/Morales.html>. The applicant must have experience with cell and molecular biology techniques and be fluent in English. Curriculum vitae to: **Carlos Moraes, Ph.D., University of Miami, 1501 N.W. Ninth Avenue, Miami, FL 33136. E-mail: cmoraes@med.miami.edu.**



The USDA, Agricultural Research Service (ARS), Food Safety and Health Research Unit, Western Regional Research Center, Albany, California is accepting applications

for the position of Research Molecular Biologist or Geneticist (GS - 12/13, \$54,003 to \$83,481, plus benefits, depending upon experience). The incumbent will be a Permanent Scientist in a laboratory performing research within a broad project addressing the biology of human food-borne pathogens. Projects in the unit involve study of mechanisms of introduction, survival, detection, identification and virulence of human pathogens in food production and processing environments. The incumbent will be part of a project to apply genomics and proteomics information and technologies to ongoing group research related to pathogenic *Campylobacter*, *Listeria*, *E. coli* and *Salmonella* species, protozoa and viruses that contaminate food. The incumbent is responsible for planning and organizing research on genomics approaches to study global gene expression and characterization of gene systems that contribute to fitness and survival of pathogens in complex environments. The incumbent will work closely with microbiologists, molecular biologists and chemists on high-throughput sequencing of microbial genes, comparative genomics, application of MALDI-TOF data to genomics/proteomics, and application of current or new molecular biology methods to analyze microbial genes (e.g. microarrays). Degree required in Molecular Biology or Genetics PLUS a graduate degree - Ph.D. or equivalent doctoral degree preferred, OR 1 year of specialized experience in microbial genomics. Candidates must be U.S. citizens. A complete copy of the vacancy announcement and where to apply can be found at: <http://www.ars.usda.gov/afm/hrd/resjobs/index.html>; select announcement ARS-X01-0321; or contact Personnel at 510-559-6014. Closing date for applications is July 10, 2000. For information, contact Stacey R. Pascoe, USDA, ARS, WRRR, Albany, CA 94710; Tel: 510-559-5610; email: spascoe@pw.usda.gov. USDA/ARS is an Equal Opportunity Provider and Employer. Women and minorities are encouraged to apply.



Virginia Commonwealth University

MOLECULAR BIOLOGIST IN DNA REPAIR AND SIGNAL TRANSDUCTION

The Departments of Radiation Oncology (www.radonc.rdo.vcu.edu) Pharmacology, and Toxicology and the Massey Cancer Center at the Medical College of Virginia at Virginia Commonwealth University invite outstanding applications for a tenure-track faculty position as Assistant/Associate Professor. The successful applicant, with a Ph.D. and/or M.D. degree and several years of post-doctoral experience, is expected to develop an independent and extramurally funded research program, to develop research collaborations with other members of the program and to teach post docs, medical residents, and graduate students. The successful applicant is expected to complement a highly interactive, multidisciplinary program that investigates the molecular mechanisms of signal transduction, cell proliferation, and apoptosis underlying tumor radioresistance, and applies novel approaches to radiation treatment using drugs and gene therapeutic tools. Applicants with interests in DNA repair, signal transduction, and cellular redox effects are particularly encouraged to apply. Applications should include a CV, reprints of publications, a statement of research plans, and three letters of recommendation. This material should be sent to: **Kristoffer Valerie, Ph.D., Department of Radiation Oncology, Virginia Commonwealth University, P.O. Box 980058, Richmond, VA 23298-0058**

VCU is an Equal Opportunity / Affirmative Action Employer

NATIONAL INSTITUTES OF HEALTH

National Institute of Allergy and Infectious Diseases

Post-doctoral Fellow: Infectious Diseases Research in Virology

Position will be available in the Molecular Viral Biology Section of the Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases. The research activities involve:

- (1) elucidation of the molecular events that occur during replication and transcription of the genome of mosquito-borne flaviviruses;
- (2) detailed definition of the processing of the viral polyprotein into individual functional viral proteins;
- (3) the use of new "rescue" systems for these viruses to examine basic questions of viral genetics, molecular virology, viral pathogenesis, and the molecular basis of attenuation;
- (4) production of interesting and informative viral mutants that might prove useful in immunization of humans; and
- (5) evaluation of the immunologic determinants of resistance to infection and illness caused by these flaviviruses.

This full-time research position offers a unique opportunity to work on investigations that range from basic molecular virology to applied vaccinology, and provides excellent laboratory-based experiences for post-doctoral scientists within seven years of receiving the Ph.D. and for M.D.s at all levels of training who plan a career in research in infectious diseases. The project will be supervised by Drs. Robert Chanock and Ching-Juh Lai. Starting salary ranges from \$29,000 to \$40,000 commensurate with experience/present salary. Applicants must be U.S. citizens or permanent residents. Please send curriculum vitae and three references to:

Dr. Robert M. Chanock

Chief, Laboratory of Infectious Diseases, NIAID

Bldg. 7, Room 100

7 Center Drive, MSC 0720

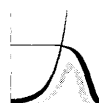
Bethesda, MD 20892

FAX: (301) 496-8312

E-mail: rchanock@niaid.nih.gov

NIH is an Equal Opportunity Employer

EUROPEAN OPPORTUNITIES



Max Planck Institute for Demographic Research

Directors: Prof. James W. Vaupel, Ph.D.
Prof. Dr. philos. Jan M. Hoem

The LABORATORY OF CONTEMPORARY EUROPEAN FERTILITY AND FAMILY DYNAMICS at the Max Planck Institute for Demographic Research, headed by Prof. Dr. Jan M. Hoem, offers a number of positions as

Doctoral students

Applicants should have completed a master's degree in demography or a related subject (e.g. quantitative sociology, family psychology, social anthropology or ethnology with an orientation toward demographic behaviour, economics, econometrics, computer science, or statistics). The successful applicant must be well acquainted with the quantitative methods of the social sciences, particularly methods to analyze event history and other longitudinal data. We expect all applicants to have a good command of English.

For further information, please access <http://www.demogr.mpg.de>. Applications from women and persons with disabilities are encouraged. Applications in English with the usual documents (CV and selected publications) should be sent by 31 July 2000 to

Prof. Jan M. Hoem

Max Planck Institute for Demographic Research

Doberaner Str. 114

D-18057 Rostock, Germany



POSITIONS OPEN

RESEARCH ENTOMOLOGIST/ MICROBIOLOGIST

The U.S. Department of Agriculture (USDA), Research, Education, and Extension (REE), Agricultural Research Service (ARS), NPA, Bee Biology and Systematics Laboratory accepting applications for a permanent full-time **RESEARCH ENTOMOLOGIST/MICROBIOLOGIST** to provide expertise that contributes directly to the USDA Alternatives to Methyl Bromide initiative and the USDA Small Farms initiative. Specific research objectives: (1) Develop novel approaches for management of chalkbrood (*Ascosphaera* spp.) in nesting materials of commercial-scale populations of the alfalfa leafcutting bee, blue orchard bee, and other bee pollinator species; (2) develop chemical and/or biological control (e.g., sanitation) control methods for commercial-scale bee pollinator species; (3) research the etiology of bee diseases using culture media and diagnostic kits for isolation, identification, and enumeration of specific microorganisms. *U.S. citizenship* and a Ph.D. or equivalent are desired. Salary (\$50,139 to \$91,589) commensurate with experience. Position information contact: **Dr. W. P. Kemp; Telephone: 435-797-2525; e-mail: wkemp@cc.usu.edu; website: www.ars.usda.gov/afm/hrd/resjobs.** Application procedures information contact: **John Watterson; Telephone: 435-797-3071.** Mark applications ARS-X0W-0342; mail to: **USDA, ARS, HRD, WOB, 5601 Sunnyside Avenue, Beltsville, MD 20705-5106.** Postmark applications by August 7, 2000. *USDA is an Equal Opportunity Provider and Employer.*

EVOLUTIONARY TRANSITIONS ORIGIN OF MULTICELLULARITY

POSTDOCTORAL POSITION available immediately to initiate and develop a model experimental system to study the origin of multicellularity. Possibilities include the myxobacteria, slime molds, algae, or choanoflagellates. The success of the project depends upon a deep understanding of the biology and culturing of the model organism as well as a clear grasp of evolutionary principles and logic. Visit **website: www.michod.com** for information. The appointment is for two years and is renewable after that. Yearly salary ranges from \$26,000 to \$35,000 plus benefits. Send short e-mail of introduction: (**michod@u.arizona.edu**) followed by a letter of application including a statement of your background and approach, relevant research publications, curriculum vitae, and three letters of reference. Position open until filled, with a first review of materials beginning July 17, 2000. Apply to: **Dr. Richard Michod, University of Arizona, Department of Ecology and Evolutionary Biology, Tucson, AZ 85821-0088.** *The University of Arizona is an Equal Employment Opportunity/Affirmative Action Employer; Minorities/Women/Disabled/Veterans.*

POSTDOCTORAL POSITION VASCULAR EMBRYOGENESIS

A Postdoctoral position is available in a dynamic group that uses a variety of state-of-the-art genetic, experimental, and molecular approaches to study blood vessel development in the accessible, optically clear zebrafish embryo. Research environment, resources, and stipend support are excellent. For more information, see **website: http://dir.nichd.nih.gov/lmg/uvu/WEINSLAB.html.** Interested applicants should have a Ph.D. or M.D. and less than five years of postdoctoral experience. Send curriculum vitae, bibliography, cover letter with a brief description of research experience and interests, and the names of three references (with telephone numbers) via e-mail: **bw96w@nih.gov.** Mail to: **Brant M. Weinstein, Ph.D., Laboratory of Molecular Genetics, NICHD, Building 6B, Room 309, National Institutes of Health, Bethesda, MD 20892.** *NIH is an Equal Opportunity Employer.*

POSITIONS OPEN

RESEARCH POSITION IN THE MARINE LIFE RESEARCH GROUP SCRIPPS INSTITUTION OF OCEANOGRAPHY University of California, San Diego La Jolla, California

The California Cooperative Oceanic Fisheries Investigations (CalCOFI) is a collaboration among Scripps Institution of Oceanography (SIO), University of California San Diego; the Southwest Fisheries Science Center, National Marine Fisheries Service, National Oceanic and Atmospheric Administration; and the Marine Division, California Department of Fish and Game to investigate the ecology of the California current and California's coastal waters with particular emphasis on the state's living resources and how they are affected by natural and anthropogenic agents of change. SIO's Marine Life Research Group seeks an innovative Scientist to initiate and conduct a program of independent research within the CalCOFI program; contribute to the understanding of the relations between a changing marine environment and the responses of living resources; and work in collaboration with researchers presently at MLRG, CalCOFI, and SIO. Applicants must hold a Ph.D. degree in oceanography, marine biology, or a related science. We intend to employ a Researcher at the **ASSISTANT** or **ASSOCIATE** rank depending on experience and qualifications, with salary based on University of California salary scales.

Three areas of research are of particular interest, with no priority among them: (1) development, calibration, and implementation into the ongoing CalCOFI program of reliable biochemical and/or morphometric measures of recent growth rates of pelagic animals, applicable on the mesoscale (1-100 km); (2) development and deployment of field instruments and/or techniques to determine the abundances of particular kinds of pelagic organisms semicontinuously, on small- to mesoscale, in concert with physical/chemical measurements, either shipboard or buoy-based; (3) innovative meso- to regional-scale physical oceanography of the California current system, with emphasis on transports and flux convergences of chemical/physical properties and their relation to variability in biological properties on seasonal to interannual scales.

MLRG intends to support the appointee for up to two initial years plus some start-up funds. Further, SIO currently provides base salary support of 25% on appointment/promotion to the Associate Research level and 50% on promotion to the Full Research level as a supplement to extramural support obtained by the scientist (subject to the availability of funds). We will begin to consider applications 1 September 2000 and continue until the search is completed.

Send a brief statement of proposed research, a detailed résumé including copies of recent publications, and names of five references, including their addresses and specific area of expertise, to:

**Chairman, Research Series Search
Marine Life Research Group 0227
Scripps Institution of Oceanography
University of California San Diego
9500 Gilman Drive
La Jolla, CA 92093-0227**

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

POSTDOCTORAL POSITION INDIANA UNIVERSITY MEDICAL CENTER

Applications are invited for two Postdoctoral positions available. Candidates with outstanding potential and dedication to a career in electrophysiological studies are sought to undertake challenging research into the cellular mechanisms involved in the physiological regulation of intercellular communication through cardiac gap junctions. Experience in whole cell voltage clamp is strongly desired. Send curriculum vitae and names of three references to: **Dr. Alonso P. Moreno, Krannert Institute of Cardiology, 1111 West 10th Street, Indianapolis, IN 46202.** E-mail: **amoreno@iupui.edu.** *An Equal Opportunity/Affirmative Action Employer; Minorities/Females/Disabled.*

POSITIONS OPEN

ASSISTANT CHAIR/SENIOR SCIENCE EDUCATOR for diverse education department in prestigious natural history museum, planetarium, and aquarium about to embark on exciting changes. Helps develop educational programming; plans and implements training for docents; and supervises managers of teacher services, outreach, field services, volunteer services, and docent programs. Qualifications: Ph.D. in a biological science or comparable experience preferred; Master's required. Minimum of three years of management/supervisory experience. Teaching experience required; college level preferred. Curriculum and program development experience desirable. Full-time; excellent benefits. Please send letter of interest, résumé, and list of three references with contact information to: **California Academy of Sciences, Human Resources Department #SSE, Golden Gate Park, San Francisco, CA 94118.** No calls, please. Screening of applicants will begin July 1, 2000. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION

University of Virginia Health Sciences Center

A Postdoctoral position is available immediately to study the molecular mechanism of drug transport by human P-glycoprotein. In this NIH-funded project, mutational analyses performed in conjunction with advanced spectroscopic and biophysical approaches are used to study structural, dynamic, and functional interactions within the P-glycoprotein molecule. Experience in molecular biology, biochemistry, and/or biophysics is required. Send curriculum vitae, a brief description of research experience, and a list of three references to: **Dr. Marwan K. Al-Shawi, University of Virginia, Department of Molecular Physiology and Biological Physics, P.O. Box 800736, Charlottesville, VA 22908-0736.** FAX: 804-982-1616; e-mail: **ma9a@virginia.edu.**

POSTDOCTORAL POSITION available to participate in an NIH-funded project aimed at developing a mechanistic understanding of novel kidney channel function at molecular, cellular, and organ systems levels. The project will examine how associated proteins regulate channel trafficking and channel gating. Experience with patch clamping is required. Experience with molecular techniques is highly desirable. Candidates must have a Ph.D. or M.D. or equivalent. Send curriculum vitae, description of research experience, and names of three references to: **Dr. Paul A. Welling, University of Maryland, School of Medicine, Department of Physiology, 655 West Baltimore Street, Baltimore, MD 21201.** E-mail: **pwelling@umaryland.edu.**

POSTDOCTORAL POSITION IN AIRWAY INFLAMMATION

A Postdoctoral position is available immediately to study cellular and molecular mechanisms of airway inflammation. Projects include (1) the role of CD40 in lung immunity and (2) the role of CFTR in CF-associated airway inflammation. Applicants should have a background in physiology, biochemistry, microbiology, or a related field. Send curriculum vitae and three letters of reference to: **L. M. Schwiebert, Ph.D., Department of Physiology and Biophysics, MCLM, Room 966, 1918 University Boulevard, Birmingham, AL 35294-0005.** E-mail: **lschwieb@uab.edu.**

POSTDOCTORAL POSITION

A Postdoctoral position is available immediately to study cytokine gene expression. Candidates should be experienced in molecular and cell biology, genetics, and physiology. The salary will be commensurate with experience, and the appointment is for two years. Send curriculum vitae to: **Dr. Salomon Amar, Boston University Medical Campus, 715 Albany Street (G 05), Boston, MA 02118.** Telephone: 617-638-4983; FAX: 617-638-8549; e-mail: **Samar@bu.edu.** *Boston University is an Affirmative Action/Equal Opportunity Employer.*

VaxGen, Inc. is dedicated to the development of an AIDS vaccine.

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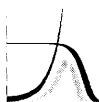
ELISA RA Skills in antibody ELISA, SDS-PAGE/Western blotting, affinity chromatography, automated liquid handling or ELISA robotics, FPLC/HPLC, familiarity with GLP/GCP/GMP, expertise in Excel/Deltagraph are required. BS + min 4 years.

Sequencing RA in Molecular Biology PCR cloning, plasmid construction automated sequencing of HIV-1 env glycoproteins from clinical specimens, molecular analysis of sequence data, archiving/organization of data for regulatory submission. BS + 3-5 years.

Research Associate in Molecular Biology Cloning/characterizing HIV envelope glycoprotein for the development of new vaccines and evaluating HIV-1 viral antigens. BS/MS + 3-5 years.

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EUROPEAN OPPORTUNITIES



Max Planck Institute for Demographic Research

Directors: Prof. James W. Vaupel, Ph.D.
Prof. Dr. philos. Jan M. Hoem

The Max Planck Institute for Demographic Research, Rostock, seeks a

Post-doc/Research Scientist for bio-demographic experiments

to act as an overall co-ordinator for a yeast (*Saccharomyces cerevisiae*) laboratory focusing on the genetic basis of aging and genetic influences on age-specific patterns of mortality. We are investigating the effects of individual genes on the replicative and stationary phase lifespan of yeast. The laboratory is under the supervision of the executive director of the Institute, Prof. Dr. J. W. Vaupel.

We are seeking an individual with a Ph.D. and research experience, ideally in areas related to one or more of the following: (I) the biology of aging, (II) the genetic characterization of complicated traits, (III) the molecular biology of yeast, (IV) modern molecular biology techniques. Familiarity with computers and mathematics (as employed in statistics and demography) is required.

The successful applicant will play a prominent role in managing and co-ordinating scientific projects and in collaborating with Professor Vaupel and others at the Institute. The applicant will also be responsible for co-ordinating the day-to-day activities of the laboratory to ensure high-quality scientific results and for directing the work of several laboratory employees. Applicants must be fluent in spoken and written English. For non-Germans, a basic knowledge of German would be desirable.

Remuneration will be in accordance with the rules of the Max Planck Society for post-docs/research scientists. For the time being, the appointment is limited to a maximum of 3 years.

Applications from qualified women are encouraged. Disabled candidates will receive preference, all else being equal.

Applicants should send a copy of their CV and letters of reference by July 15, 2000 to:

Max Planck Institute for Demographic Research
Att. Mrs. A. Paetrow
Doberaner Str. 114
D-18057 Rostock, Germany



GLOBAL OPPORTUNITIES

NATIONAL CENTRE FOR CELL SCIENCE, PUNE

(An autonomous Institution of the
Department of Biotechnology,
Government of India)

NCCS is devoted to research and development in Modern Biology and Biotechnology. The Centre is looking for various outstanding Scientists in areas of cell biology, neurobiology and tissue culture. Candidates should have published work of high quality. Applicant must possess a doctoral degree or equivalent and should be an Indian citizen. For position designation, salary & age limit the applicants are requested to contact the Centre at the address given below before applying. Applicant should send a CV along with a summary of research interests and goals as well as arrange to have at least three letters of reference sent to :

Director
National Centre for Cell Science
Ganeshkhind, Pune - 411 007
Maharashtra, India
Fax No. 92 (020) 5672259
E-mail : infonccs@giaspn01.vsnl.net.in

Application should reach us within two months of appearance of this advertisement.



United Nations Educational, Scientific and Cultural Organization



HEAD OF THE IOCARIBE PROGRAMME OFFICE OF THE INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (IOC) of UNESCO

The IOC of UNESCO has established a regional programme office in Cartagena, Colombia to serve the Secretariat of the IOCARIBE, the IOC Subcommission for the Caribbean and adjacent regions. The Office will facilitate the balanced development and enhancement of the IOC activities in the Caribbean and adjacent regions, and the building of capacity of countries in ocean sciences, operational observations, and ocean services. We are now seeking to recruit for the above position.

Qualifications and experience required:

- MSc and/or PhD and six years or more experience at a professional level in a marine science or relevant environmental discipline;
- Familiarity with the functioning of international programmes in marine or related environmental science;
- Broad experience in developing and managing scientific programmes and/or ocean observation and service activities, including the related logistic and administrative aspects;
- Demonstrated ability to organize conferences, workshops and training courses; including the preparation of relevant background documentation and final reports;
- Extensive experience in the use of computer-based communication and data-handling;
- Proven managerial skills including evidence of entrepreneurial and fund-raising skills;
- Excellent command of the Spanish and English language. Knowledge of French or another UNESCO working language of the General Conference would be an asset.
- Skill and effectiveness in written and oral communication and presentation.

Salary and allowances:

Appointment will be as a consultant, initially for two years, with an annual salary of \$US80,000 without normal UNESCO benefits. Information on applying for the position is available from Dr. Umit Unluata. Tel. +(33.1)45.68.40.08 or u.unluata@unesco.org, or at <http://ioc.unesco.org/iocweb/>. Written applications, in English, which should also include date of birth, gender, nationality, should be addressed to: **Chief, Recruitment Section, Office of Human Resources Management, UNESCO, 7, Place de Fontenoy, 75732 Paris 07 SP (France), no later than 1st September 2000.** Only candidates being seriously considered will receive an acknowledgement. Please mark envelope "Head of IOCARIBE Programme"

POSITIONS OPEN

POSTDOCTORAL POSITIONS AVAILABLE IN THE L. SILBERSTEIN AND J. J. CAMPBELL LABORATORIES Joint Program in Transfusion Biology and Medicine Harvard Medical School

We seek scientists with strong backgrounds in immunology to study mechanisms of selective lymphocyte homing to (and within) tissues. The Silberstein laboratory's main interest is the role of chemokines in human B cell bone marrow development. The Campbell laboratory's main interest is lymphocyte homing from blood to specific organs, with a particular focus on the role of chemokines in T cell homing to inflamed skin. Experience with *in vivo* animal models of disease and/or basic molecular biology techniques is preferred. Please send curriculum vitae to:

Ms. Jan Norris
The Children's Hospital
Bader 410
300 Longwood Avenue
Boston, MA 02115
FAX: 617-713-4290
E-mail: norris_j@hub.tch.harvard.edu

POSTDOCTORAL POSITION

Postdoctoral position available to study mechanisms of gene delivery and expression in hematopoietic cells in culture as well as following *in vivo* gene delivery into fetal and adult rodents, with potential applications to gene therapy. (See Chang, J.C. et al., *Proc. Natl. Acad. Sci. U.S.A.* 95:14886-14890; Lipshutz, G.S. et al., *Proc. Natl. Acad. Sci. U.S.A.* 96:13324-13329; and Gaensler, K.M. et al., *Nat. Biotechnol.* 17(12):1188-1192, 1999). Applicant should have strong background in molecular biology and/or in hematopoiesis. Please send curriculum vitae and names of three references to: Dr. Karin Gaensler, Department of Medicine, Box 0724, University of California San Francisco Medical Center, Third and Parnassus, San Francisco, CA 94143-0724. FAX: 415-566-4969.

POSTDOCTORAL RESEARCH FELLOW NCI/NIH FREDERICK, MARYLAND

Position available to study modulation of the malignant phenotype by environmental and metabolic factors in the face of susceptibility genotypes. Ph.D. and/or M.D. with strong background in molecular biology or cellular biochemistry required. Some postdoctoral experience preferred. Applicant must be U.S. citizen or permanent resident. Send curriculum vitae and names of three references to: Dr. James Phang, Chief, Metabolism and Cancer Susceptibility Section, BRL, NCI, Building 560, Room 12-90, Frederick, MD 21702. FAX: 301-846-6093; website: <http://rex.nci.nih.gov/RESEARCH/basic/bri/phang.htm>. NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately at the Magnetoencephalography Center of the University of Texas-Houston for a person with interest in cognitive neuroscience and background in electrophysiology or functional imaging. Contact: Dr. A. C. Papanicolaou at:

Department of Neurosurgery
6431 Fannin, Suite 7.152
Houston, TX 77030
e-mail: Andrew.C.Papanicolaou@uth.tmc.edu

Computational neuroscience: **POSTDOCTORAL FELLOW** to investigate the dynamical properties of nonlinear systems with a particular emphasis on information processing and storage in gene networks and molecular pathways. Applicants should send a letter of application, curriculum vitae, and names of three references to: Dr. John H. Byrne, Department of Neurobiology and Anatomy, The University of Texas-Houston Medical School, Houston, TX 77030. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

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www.training.nih.gov

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POSTDOCTORAL POSITION IMMUNOLOGY OF TICK/HOST/ PATHOGEN INTERACTIONS

A Postdoctoral position is available to study tick modulation of host innate and specific acquired immunity and to develop novel strategies to control tick infestation and pathogen transmission. Proficiency is required in protein purification and molecular biology, including low- and high-pressure column chromatography, two-dimensional gel electrophoresis, PCR, RT-PCR, Northern blot analysis, gene cloning, and *Escherichia coli* and baculovirus expression vector systems. Knowledge of assays to assess antibody, cytokine, and cell-mediated immune responses is desirable. Position includes salary (negotiable), fringe benefits, and the opportunity to be a member of a multidisciplinary microbial pathogenesis research group focusing on tick-borne infectious agents in a stimulating scientific environment and state-of-the-art facility. Send curriculum vitae along with the names, addresses, telephone numbers, and e-mail addresses of three references to: Dr. Stephen Wikel, Center for Microbial Pathogenesis, School of Medicine, University of Connecticut Health Center, 263 Farmington Avenue, MC 3710, Farmington, CT 06030.

Two NIH-funded **POSTDOCTORAL POSITIONS** are available to study (1) immunological mechanisms of airway remodeling in asthma (includes cytokine signaling pathways and cell cycle control of airway fibroblasts), and (2) role of fibronectin in nocturnal asthma (fibronectin-mediated stabilization of cytokine mRNA in airway eosinophils). Candidates will take a substantial role in developing molecular approaches to study signaling pathways and transcriptional regulation of cytokines. Work will be done in collaboration with James S. Malter (transcriptional regulation) and Paul J. Bertics (signal transduction). Candidates should have experience in molecular biology/cellular immunology as demonstrated by publications in peer-reviewed English-language journals. Send curriculum vitae with three references to: Nizar N. Jarjour, M.D., University of Wisconsin, 600 Highland Avenue, Room H6/380, Madison, WI 53792.

POSTDOCTORAL POSITIONS in computational biophysics are available in a joint group at Baylor College of Medicine and Rice University. Research will focus on computer simulation of super molecular complexes, X-ray structural refinement, and computer-aided drug design. Applicants should have a strong background in statistical mechanics and computational chemistry/physics. Experience in MD simulation would be highly desired but not mandatory. Contact (before September 1, 2000): Dr. Jianpeng Ma, 12 Oxford Street #249, Cambridge, MA 02138 U.S.A. Website: <http://yuri.harvard.edu/~jma>.

POSTDOCTORAL RESEARCH FELLOWSHIP available for studies on bone cell regulatory proteins. Experience in protein purification, basic biochemistry, molecular biology techniques, and signal transduction mechanisms desirable. Ph.D. required. Two to three years of previous postdoctoral experience desirable. Open to U.S. citizens and permanent residents only due to NRSA grant. Salary and benefits competitive; possibility exists for long-term position. Send résumé, cover letter, and names of three references to: Dr. S. Mohan, P.O. Box 7210, Loma Linda, CA 92354.

POSITIONS OPEN

METABOLISM BRANCH NCI

The Metabolism Branch, National Cancer Institute, is offering a three-year **POSTDOCTORAL RESEARCH TRAINING FELLOWSHIP** position in the laboratory of Dr. Yutaka Tagaya/Dr. Thomas Waldmann for an individual who would investigate cytokine signaling during activation of T and mast cells. Interests of the laboratory focus on the cellular and molecular analysis of cytokine-induced activation of T cells and mast cells and the understanding of the specific roles of IL-15 during the immune response. Candidate would be involved in several areas of concentration which include the study of IL-15 signaling and the analysis and comparison of cytokine signal transduction in mast cells. This research uses a private strain of genetically engineered mice and a mast cell-based microarray system, as well as *in vivo* and *in vitro* assay systems. Interested candidates should have a strong background in molecular and cellular biology, and those without previous postdoctoral experience are encouraged to apply. Interested candidates should submit statement of interest, curriculum vitae, bibliography, and list of three references to: Ms. Jean Decker, Building 10, Room 4N115, NIH, Bethesda, MD 20892-1374. The National Cancer Institute is an Equal Employment Opportunity and Affirmative Action Employer that values and fosters diversity throughout the entire organization.

A **POSTDOCTORAL POSITION** in microbial pathogenesis is available to investigate virulence mechanisms of *Haemophilus ducreyi*, the etiologic agent of chancroid and a cofactor in transmission of HIV infection. Emphasis will be placed on characterization of *H. ducreyi* gene products involved in the regulation of expression of virulence factors. Experience with recombinant DNA techniques is required; this project makes extensive use of mutant analysis in conjunction with a relevant animal model. Position includes salary, fringe benefits, and the opportunity to work in a dynamic research environment. Position available after July 1, 2000. Send curriculum vitae and the names and telephone numbers of three references to: Dr. Eric J. Hansen, Department of Microbiology, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75390-9048. FAX: 214-648-5905. E-mail: hansen01@utsw.swmed.edu. University of Texas Southwestern is an Equal Opportunity/Affirmative Action Employer.

A **POSTDOCTORAL POSITION** is available to study protein RNA interactions in gene expression and regulation. There are three ongoing projects to understand mechanisms for (1) an RNA helicase, (2) an RNA transporter protein, and (3) a tRNA splicing endonuclease. X-ray crystallography is the primary tool used in these studies. Other biochemical and biophysical techniques are also employed. Interested candidates should have a Ph.D. in biochemistry, biophysics, molecular biology, or other related fields. Please send curriculum vitae and three names of references to:

Dr. Hong Li
Institute of Molecular Biophysics
Florida State University
Tallahassee, FL 32306
E-mail: hongli@sb.fsu.edu

A **POSTDOCTORAL POSITION** is available immediately for an NIH-funded project to identify homocysteine-binding proteins in the cardiovascular system and to characterize their role in atherosclerosis. A Ph.D. in molecular biology, genetics, pharmacology, or a related discipline is required. Experience with relevant laboratory methods is a plus. Send curriculum vitae, a brief summary of your research interest and experience, and names of two references (one should be your Ph.D. mentor). Electronic submission preferred. Contact: Dr. Greg Bennett, University of Nebraska Medical Center, UNMC 986395, Omaha, NE 68198-6395. E-mail: gbennett@unmc.edu.

An Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

POSITIONS OPEN

POSTDOCTORAL FELLOW EMORY

The NIAID Tetramer Core Facility division of Yerkes Regional Primate Research Center and Emory University has immediate opportunity for Postdoctoral Fellow to explore the generation and developing applications for MHC Class II tetramers. Experience with recombinant protein expression, especially in eukaryotic or insect cells, is preferred. Position offers dynamic opportunities for collaboration on current problems in viral immunology and autoimmunity with several investigators within Emory's immunology program (see website: <http://www.biomed.emory.edu/IMP/IMP.html>) and the Emory Vaccine Research Center (website: <http://www/emory.edu/WHSC/YERKES/VRC>) and outside of Emory. Applicants must be eligible to work in the United States. Salary commensurate with experience and full benefits. Please forward curriculum vitae, a letter describing research interests, and names of three references to: Dr. John Altman, NIAID Tetramer Core Facility at Emory University, 954 North Gatewood Road, Atlanta, GA 30329. E-mail: altman@microbio.emory.edu; website: www.emory.edu. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS MOLECULAR BIOLOGY University of Washington

Employ a combination of biochemistry and genetics to elucidate structure-function relationships in human topoisomerase I or retroviral reverse transcriptases. Emphasis will be on understanding the structural basis for catalysis, DNA binding, and the mechanisms of drug inhibition for these interesting classes of enzymes. Strongest consideration will be given to applicants with experience in site-directed mutagenesis, standard cloning techniques, and nucleic acid and protein biochemistry. Positions available July 1, 2000, but applications will be considered until the positions are filled. Please send curriculum vitae, a brief statement of prior research experience, and names of three references to: Dr. James J. Champoux, Department of Microbiology, Box 357242, University of Washington, Seattle, WA 98195. E-mail: champoux@u.washington.edu. The University of Washington is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITIONS IN MICROBIOLOGY American Society for Microbiology/ National Center for Infectious Diseases

Positions are available for Postdoctoral Scientists to conduct novel research with the overall objective of developing practical applications of microbiology, immunology, and epidemiology for diagnosis and prevention of infectious diseases. Associates will perform research in residence at the National Center for Infectious Diseases, which is headquartered at the Centers for Diseases Control and Prevention in Atlanta, Georgia.

Deadline for applications is November 15, 2000. Website: <http://www.asmsusa.org/edusrc/edu23c.htm>; e-mail: fellowships-careerinformation@asmsusa.org or ihulede@asmsusa.org.

POSTDOCTORAL POSITION PROTEIN DYNAMICS

Postdoctoral position is currently available to investigate protein motions using NMR, mass spectrometry, and hydrogen exchange (*J. Mol. Biol.* **285**:1265, 1999; *J. Mol. Biol.* **296**:1307, 2000). The applicant must have a Ph.D. and a strong background in biochemistry or chemistry. Expertise in multidimensional NMR or mass spectrometry of proteins is preferred. Applicants should send curriculum vitae, statement of research interests, and three letters of recommendation to: Dr. Andrew D. Robertson, Department of Biochemistry, University of Iowa, Iowa City, IA 52242. FAX: 319-335-9570; e-mail: andy-robertson@uiowa.edu. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION available to study signaling pathways responsible for the control of platelet function and thrombosis. Candidates should have a Ph.D. or M.D. degree and must have a significant background in molecular biology. Send curriculum vitae and names of three references to: Dr. Jane Freedman, Departments of Pharmacology and Medicine, Georgetown University Medical Center, Medicine-Dentistry N.E. 403, 3900 Reservoir Road, N.W., Washington, DC 20007. FAX: 202-687-7894; e-mail: freedmaj@gunet.georgetown.edu.

CONFERENCES

UNDERSTANDING PHAGE DISPLAY: STRUCTURE

Biology and Applications Conference
Simon Fraser University, Harbour Centre Campus, Vancouver, B. C., Canada; 21-24 September 2000. Organizers: J. K. Scott, S. J. Opella, L. Makouski. For registration details and conference schedule, e-mail: Conference_Services@sfu.ca; FAX: 604-291-3420; website: www.sfu.ca/phagedisplay2000.

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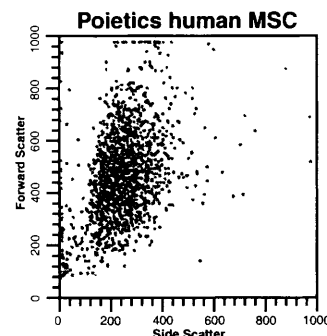
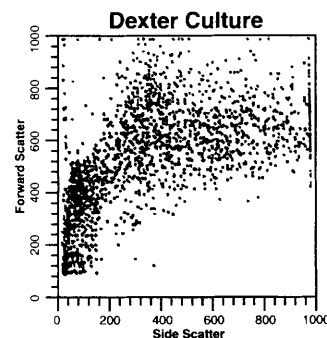


QC Tested for:

**Adipogenic
Lineage**
as indicated by
Neutral Lipid

**Chondrogenic
Lineage**
as indicated by
Collagen Type II

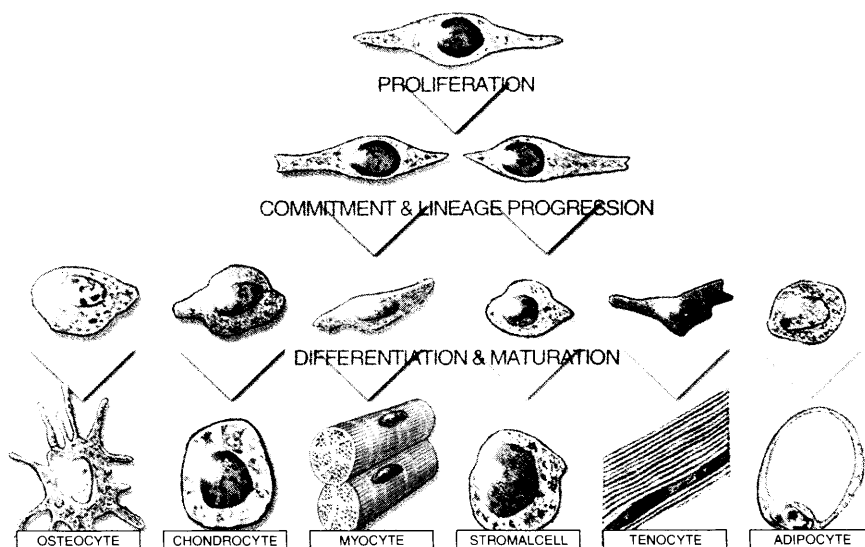
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Lineage**
as indicated by
Calcium Mineral



**Poietics human MSCs are more
homogeneous than a Dexter Culture**

Specifications and Characterization:

- Cells cryopreserved in passage two
- Recover 750,000 cells/amp
- Flow cytometric analysis of surface antigens:
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 - Negative for: CD14; CD34
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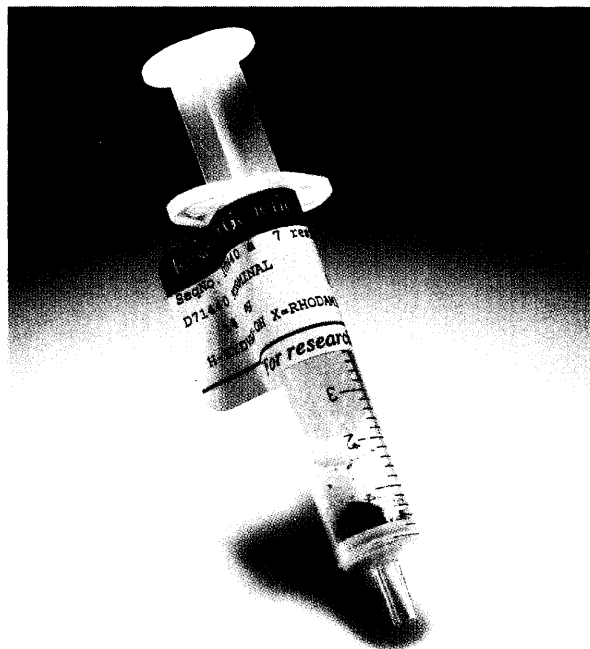
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Multiple Antigen Peptide (MAP). Yields average 15-40 mg

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